

**COMPARING STRATEGIC PROCESSES IN THE iBT SPEAKING TEST
AND IN THE ACADEMIC CLASSROOM**

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Comparing strategic processes in the TOEFL iBT speaking test and in the academic classroom

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Abstract

The study developed from realisation that there is no information available about strategies or processes in the iBT speaking scoring rubrics, although ETS (Educational Testing Service) claims that the iBT speaking test is designed to measure strategic processes, which is one constructs of academic proficiency. Therefore, the study investigates which strategic processes are used to complete given speaking tasks. This would provide evidence to help in the evaluation of the validity claims proposed by the test designers.

Six Korean participants, studying at English-medium universities, completed 2 independent tasks and 2 integrated tasks both in a test and in their class. Participants' speech samples were collected during the performances and stimulated recall verbalisation was conducted after they had completed the tasks. Speech samples were coded into five categories: approach, compensation, cognitive, metacognitive strategies and feelings. Consequently, the study examined how strategies reported through stimulated recalls were present in actual speech.

The findings showed that metacognitive strategies were used most frequently under both conditions. Fair-level speakers employed more strategies in the test, while good-level speakers used more strategies in the class. Moreover, integrated task types elicited more strategy use for both conditions. Speakers reported that they felt significantly more negative under test conditions than in the class. More importantly, two conditions shared 67.74% of the strategy types, and 84% of the strategy types used in the test were also used in the classroom, which may strengthen the validity of the iBT speaking test in terms of strategy use. Finally, evidences of strategy use were identified in actual speech, which can open the way to operationalised strategy use assessment in speaking test. However, the figure of evidenced strategy use was very low: 5.28% and 2.66% respectively in the test and in the class.

It is recommended that future research be carried out with a large number of participants in order to generalise strategy use in speaking performance. Moreover, further studies might be conducted to examine the significance of observable strategic evidence in speech, to inform decisions to include strategies in the scoring rubrics.

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I stepped in to the area of applied linguistics after encountering a stranger on the bus at home in Korea, 16 years ago. He was smoking, but I could not ask him to stop (he was from an English-speaking country) as my spoken English was limited. Afterwards, I asked myself what I had gained from 8 years of learning English at school. Shortly after, I started again to study the English language, focusing on communication rather than learning grammar rules. Despite switching from working as a medical scientist to working as an English lecturer, which was a big jump, I have never regretted leaving the medical field for Applied Linguistics. A negative experience was turned into a career change which tells me that bad things can sometimes have positive consequences.

My doctoral friends and I consider undertaking a doctorate in the UK a lonely business, as we do almost everything by ourselves. Therefore, to complete the long journey I have needed not only academic support but also emotional support. I have been lucky to have the support of my supervisor, Prof. Glenn Fulcher who has helped me throughout the journey by encouraging and inspiring me to be the best academic I can be. I would like to say “a million thanks” to him.

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1. Introduction

1-1.The focus and aims of the study

ETS (Educational Testing Service) explicitly claims that scores on the iBT speaking test provide information on candidates' strategies or processes in academic classroom settings. However, there is no reference to strategy use in the scoring rubrics. This means that the concept of strategies or processes, while important to validity claims, has not been operationalised in the assessment. Nor has it been empirically investigated. This study was therefore designed to consider whether strategic competence is evidenced under the iBT test conditions, and whether strategy use is similar to that in academic classrooms. This would provide evidence to assist the evaluation of the validity claims made by the test designers.

The study was conducted to examine what strategic processes are involved in completing given speaking tasks by task types (independent and integrated tasks) and proficiency levels ("Good" and "Fair") under two conditions: the test and the academic classroom. Six Korean participants (2 male and 4 female students) who were studying at a British University in various disciplines took part in the study. Their speech samples and stimulated recall verbalisation were collected under both test and academic classroom conditions, in order to investigate the extent to which the iBT speaking test reflects academic English in terms of strategy use. For the test-taking situation, the practice version of the iBT speaking test provided by ETS was used and the academic classrooms were simulated with four iBT speaking test tasks (2 independent and 2 academic topic integrated tasks) based on the iBT speaking test specification and the framework of speaking. However, two campus-based tasks were excluded from the comparison as they are based on situations beyond the academic classroom, such as discussions about school trips with friends or professors, which leads to difficulties for the replication of tasks in the academic classroom. Consequently, how strategies affect actual speech has been examined. This is because we can only assess observable variables in speaking tests and we need to develop the operational definition of strategies to assess the ability of strategy use to complete

given speaking tasks. The study acknowledges that some other strategies could have been employed, but they were either not verbalised or they were used automatically and therefore they are not reported from stimulated recall verbalisation. The study has only focused on strategic processes consciously employed, and detected by stimulated verbalisation. Consequently, the study has attempted to find observable evidence of strategy use by investigating how strategies reported from stimulated recalls are presented in actual speech. This is because the aim of the study is not only to find strategies used to complete speaking tasks but also to make a strategy measurable if we can find observable evidence of strategy use. Therefore, the study does not only rely on discourse-based data, a situation which might lead to the speakers' real intentions being missed, but also examines speakers' mental processes. The observable evidence may enable us to develop an operational definition of speaking strategies, and we could suggest that speaking strategies should be implemented into the iBT speaking test scoring rubrics. Furthermore, we can recommend speaking strategy instructions in English language learning and teaching.

1-2. Introduction to the iBT (internet-Based TOEFL) speaking test

The TOEFL[®] Test has proven the most widely accepted academic English proficiency test, administered by 8,000 institutions in over 130 countries. It is designed to be used to assess academic English readiness for those who would like to study at English-medium universities (ETS, 2009: 1). The TOEFL test is provided with two formats: PBT (Paper-based test) and iBT (Internet-based test). The PBT assesses Listening, Structure & Written Expression, and Reading Comprehension, and also includes a TWE (Test of Written English). The new version of the Internet-based TOEFL (iBT) test was introduced in 2005 and it is a computer-mediated test assessing listening, reading, speaking and writing skills. While the PBT does not offer a speaking test, the iBT includes a speaking test comprising two independent tasks for test takers, giving opinions on familiar topics and four integrated tasks for test takers completing tasks based on what they have read and heard (see Appendix 1-1 and Appendix 1-2). It is

claimed that TOEFL has been changed to “measure the ability to communicate successfully in an academic setting”, “reflect how language is really used” and “keep up with the best practices in language learning and teaching” (ETS, 2007: 4). This change has increased the need for research to study the validity claims associated with the new task types and the computer delivery format used for the English speaking tests. In particular, we should investigate what the iBT speaking test is really measuring and to what extent the iBT speaking test reflects real academic English in order to provide information to test users to interpret the test scores clearly and use the test properly.

1-3. The theoretical background of the study and its significance: strategies as one construct of speaking and one construct of academic proficiency

1-3-1. Strategies as one construct of speaking

Prior to measuring speaking ability we should determine what constitutes “speaking” and also decide what abilities we intend to measure to meet the purpose of the test in the proposed context. Moreover, we should clearly define what constitutes “speaking ability” in any language test. Bachman (1990: 81) points out that any test must be based on a clear definition of the abilities that are to be measured if one is to ensure suitable test development. In second and foreign language testing, the framework of communicative competency by Canale and Swain (1980) and the model of communicative language ability by Bachman and Palmer (1996) have been crucial bases for language testing development. Both studies suggest that strategic competence should be included as an aspect of language ability. However, the term strategic competence has been defined differently. For example, whilst strategic competence was included in Canale and Swain’s (1980) model of communicative competence as a “compensatory function”, in Bachman and Palmer’s model (1996 and 2010), it is dealt with as a metacognitive process. Therefore, a definition upon which all can agree has not emerged. Furthermore, the term strategic competence seems to

apply to all four skills of language use (reading, writing, listening, and speaking). Thus, a clear definition of strategies which can apply to speaking performance for the main study is needed. In particular, strategies used for speaking performance are commonly used as communication strategies. Overall, communication strategies have been viewed mainly from two perspectives: psycholinguistic and interactional. While the psycholinguistic view focuses on communication strategies as compensatory functions for overcoming a linguistic or discourse related deficiency, the interactional view of communication strategies is not only that they are problem-solving tools but also that there is an effect of message enhancement in interactive communication. These two different perspectives were used as a basis to set up a working definition for the main study.

Fulcher (2003: 33) states that, “learners who may appear fluent in their speech could be using a strategy such as circumlocution to communicate more efficiently. If the use of such strategies is related to greater communicative ability, it may be appropriate to try to test the use of strategies.” He also points out that the field of strategy assessment is one of the most difficult parts of Language Testing (LT) research. However, there is a growing need to study the effect of test takers’ strategies as used in speaking tests, and how these strategies are used to interact over a range of tasks (Swain, et al 2009), taking into account concerns of construct validity in speaking tests if strategic competence is considered as one of the speaking constructs (Fulcher, 2003). Thus, it is crucial to identify observable evidence of strategy use and to create an operational definition of the construct in speaking tests and academic settings in order to measure strategy use.

1-3-2. Strategies as one construct of academic proficiency

Language testing design and development should be based on a theoretical framework of language proficiency (Bachman, 1990). Consequently, language proficiency theory can be the basis for the interpretation of test scores and test use (Chapelle *et al*, 2008).

Chapelle *et al* (2008: 2) explain proficiency for the TOEFL as follows: “proficiency typically needs to be conceptualized more broadly as the ability to use a complex of knowledge and processes to achieve particular goals rather than narrowly as knowledge of linguistic form or a skill. Such abilities would include a combination of linguistic knowledge (e.g., grammar and vocabulary) and strategies required to accomplish communication goals”. Chapelle *et al* go on to state that, “the specific linguistic knowledge (e.g., grammar and vocabulary) and the strategies required to accomplish goals depend on the context in which language performance takes place”. Although the definition of proficiency includes strategies as one of the proficiency constructs needed to achieve communicative goals, the iBT speaking test scoring rubrics which enables us to understand the meaning of scores do not contain operational information about strategy use. Moreover, although strategies were taken into account when the iBT test was designed (Chapelle, 2008), little information is available regarding how strategies have been conceptualised. It can be understood that strategies are likely to be considered as a universal construct used by all language users. However, Chapelle *et al* (2008: 20) argue that “Expected scores are attributed to a construct of academic language proficiency”. That is, when we interpret the scores obtained from the iBT speaking test we should be able to make inferences about academic English readiness in terms of strategy use, which has been considered one of the academic proficiency constructs. Therefore, we need to investigate strategy use, which may be an indicator of language proficiency and may allow us to predict the ability to successfully communicate in an academic speaking context (Chapelle, 2008). Accordingly, the main study has been conducted to compare strategy use both in tests and in academic classrooms in relation to different proficiency levels and different task types. The findings are intended to show the extent to which the iBT speaking test reflects classroom speaking activities in terms of strategy use. Moreover, it may also provide information about how strategy use is related to proficiency level, and to the tackling of different tasks. Consequently, the findings can be implemented in the teaching and learning of English for the benefit of both teachers and learners. Furthermore, we may argue that strategy use is an ability that can and should be measured in oral language testing, and the study may in addition provide operational

guidelines for strategy use that could be included in the scoring rubrics for the iBT speaking test.

1-4. Validity research for the iBT

TOEFL iBT Research Series have investigated the validity issues of the iBT. Validity is defined as “the degree to which evidence and theory support the interpretations of test scores entailed by proposed use of test (American Educational Research Association, American Psychological Association, and National Council on Measurement in Education, 1999: 9). The scores obtained from the iBT can be used to interpret the test taker’s academic English readiness. The current study is a part of the validation process to examine the proposition made by TOEFL iBT that “Academic language proficiency is revealed by the linguistic knowledge, processes, and strategies test takers use to respond to test takers” (Enright and Tyson, 2010: 3). That is, we need to investigate whether test tasks really measure the skills which test takers need for their academic success. There have been two empirical studies conducted to examine evidence about whether strategies and processes were used to complete the iBT, and these were undertaken by Swain *et al* (2009) and Cohen & Upton (2007). The latter investigated strategies used in new TOEFL reading tasks, and the former investigated strategies used to complete the iBT speaking test, on which the coding scheme for the present study was based (see Appendix 3-5). Swain *et al* (*ibid*) only explored strategy use under test conditions, and did not include information about the extend to which the iBT speaking test reflects strategy use in classrooms when test takers perform speaking tasks. Thus, the current study has expanded on the research of Swain *et al* by comparing strategy use under the two conditions of the test and the academic classroom. Furthermore, the current study compares strategies with speech, to examine whether strategies are observable in speech, and this is important in order to operationalise strategy assessment.

1-5. Research questions

Investigation of stimulated recall verbalisation

- What speaking strategies do participants use to complete the iBT speaking tasks (2 independent and 2 integrated tasks) under the computer-mediated delivery speaking test?
- What speaking strategies do participants use to complete the given speaking tasks (designed to be similar to the iBT speaking tasks) in an academic classroom?
- What are the differences in strategy use in the above two conditions?
- What is the relationship between strategy use and proficiency levels under those two conditions?
- What is the relationship between strategy use and tasks under those two conditions?
- What is the relationship between strategy use and the scores obtained by an individual?

Investigation of speech sample with stimulated recall verbalisation

- How are speaking strategies reported from stimulated recall presented in the actual output of speaking performance in the iBT speaking test and the academic classroom?

1-6. Methodological approach: mixed methods

In language testing research, there has been a shift from the tripartite validities (content, criterion-related, and construct validity) considering the properties of tests, to one single validity which is construct validity. This notion of validity has focused not only on theoretical grounds but also on empirical evidence used to judge the inferences made from test scores with regard to test use and the social consequences and values of test use in specific contexts (Messick, 1989). In other words,

investigating what tests actually measure has been underlined to support theories and the use of tests. Strategies have been considered in relation to speaking constructs and academic proficiency constructs. However, very little research has investigated whether a computer-mediated speaking test can measure strategy use. Thus, the research has focused on what speaking strategies are used to complete given speaking tasks in a computer-mediated test and in academic classrooms, which has led to a qualitative approach to collecting evidence regarding “what strategy is used”. Simultaneously, it has focused on how strategy use differs over the range of task types, different proficiency levels and obtained scores, and the data has been analysed by means of a quantitative approach such as categorising.

The research started with a working definition of speaking strategies: “mental processes or thoughts which are consciously employed to overcome difficulties speakers face and to complete given speaking tasks effectively”. That is, any thoughts which emerged from the process of task completion have been taken into account, but the study has only focused on strategies that were consciously employed. In order to trace strategic processes the study has adopted a stimulated recall. It can be said that methods depending on speakers’ perceptions, such as interviews or self-report questionnaires and quantitative approaches, will not allow access to mental processes. Gass and Mackey (2000: 1) state that it can be assumed that we can access our internal mental processes and can verbalise them. Therefore, the study had to adopt stimulated recalls, allowing us to recall thoughts we have had while performing given speaking tasks. Stimulated recall is one type of verbal report, and speakers are provided with stimuli to enhance their memory of the mental process engaged in while performing tasks. For the study, speaking performance was videotaped to be used as stimulus. The collected data from stimulated recall verbalisation was analysed based on the working definition of strategies, which has in turn been based on the previous studies. Furthermore, such strategies reported from stimulated recall do not allow us to measure, as we can only assess observable outputs in actual speech. Thus, the actual speech made from test-taking and academic classrooms were also collected to see how strategies reported from stimulated recalls affect actual speech production.

This has enabled us to find an intended strategy use, which resulted in actual speech and some strategies associated with the process of speech only, but not presented in actual speech. The former strategies were analysed to highlight the relationship between task types and proficiency levels and obtained scores.

1-7. Organisation of the thesis

The thesis consists of 5 chapters. The first chapter gives an overview of the thesis by highlighting the focus and aims of the study, introducing the iBT test, and supporting the theoretical basis of the study. Finally, research questions are given and the methodological approach employed is explained.

The second chapter takes an in-depth look at theoretical perspectives of strategic competence. First, issues regarding how to define “strategy”, as well as the relevant terminology, are elaborated. Then, the chapter focuses on strategies as one construct of speaking and academic proficiency. This is followed by an explanation of how communication strategies have been defined and identified. Secondly, taxonomies of communication strategies are introduced. The next section describes language learning strategies and test-taking strategies. The chapter continues to look at previous empirical studies investigating the relationship between strategy use and proficiency and tasks types. Finally the last section provides a working definition of “strategic processes”.

The third chapter revisits the aim of the research and the research questions prior to explaining the epistemological issues of the research; how the study concerns validity and reliability and the ethical issues surrounding the study. The data collection procedure is described after introducing the methods employed. The chapter ends by describing the data analysis.

The fourth chapter presents strategy use in the test followed by strategy use in the classroom. The findings from both settings are compared in order to investigate the

extent to which the test replicates the academic classroom in terms of strategy use. Strategy use is also compared across contexts by levels and task types. Next, strategy use at the individual level is described, together with how strategy use is evidenced in actual speech. Finally, a summary of findings is provided and the significance of the finding is explained.

The fifth chapter summarises the study. Then, the original contribution of the study and the limitations of the study are addressed. Finally some recommendations are made for future study and directions for further strategy research.

2. Literature Review

This chapter first describes how language proficiency has been conceptualised from trait theory to interactionalistic theory and the role of strategies or processes within paradigm changes. This enables us to comprehend the rationale for the strategies as a construct to be measured, and to ascertain how the notion of strategies plays a role in language testing under different paradigms. Secondly, it explains the major issues of strategy research in terms of definitions and the terms with a brief history of the birth of strategy research. Thirdly, communication strategies are scrutinised in terms of how they are defined, the ways in which they are identified, and the different approaches to developing strategy taxonomies. Communication strategies have been widely discussed in the literature on second language speaking, but there is no clear difference between communication strategies and language learning strategies. Furthermore, the current research involves two contexts, tests and the academic classroom, and these two domains may generate context-specific strategic processes. Therefore, language learning strategies and test-taking strategies are also looked at. Two major moderator variables in the research are task types and proficiency levels, so a number of empirical studies dealing with these moderators are also explored. Finally, a working definition of “strategic processes” is introduced, which will be a basis for the research.

2-1. Strategic competence as one construct of speaking ability (proficiency)

Prior to measuring speaking ability, we should define what constitutes it and also decide what abilities we intend to measure to meet the purpose of the test in the proposed context. We should also clearly define what speaking ability is in any language test. Bachman (2007: 41) underlines that it is crucial to understand “the roles of abilities and contexts and these two interactions as they affect performance on language testing tasks”. These are so-called construct matters and there have been

several approaches to define constructs: trait or ability-centred, task or context-centred, and the interactional view (Chapelle, 1998 and Bachman, 2007).

In language testing, the term “proficiency tests” is used to describe a test which is designed to measure language ability. For example, TOEFL is considered an academic English proficiency test. It has been claimed that the theory of language proficiency should be based on test score interpretation (Chapelle *et al*, 2008), which means it provides us with information about what scores obtained from the test actually mean. It is important, then, to answer the questions: “what is proficiency?” and “How do we know someone is proficient in such language?” In this section, explanations are given for how “proficiency” has been viewed in different paradigms and how each paradigm accounts for proficiency constructs. This enables us to consider strategies or processes as one of the proficiency constructs to be measured under the current paradigm adopted into the iBT test design.

First, in a positivistic paradigm, there is a “trait” theory. “Traits” are considered “real” psychological properties existing in test-takers’ minds; tests should therefore be designed to reveal these. In positivistic trait theory, language proficiency is limited only to the test-takers’ linguistic knowledge, regarding issues such as grammatical knowledge or vocabulary. In contrast to trait theory, behaviourism argues that the context is focused and a score can be meaningful when it corresponds with real-world contexts. That is, it is assumed that test-takers’ performances can be generalised only to contexts when test settings are closely modelled on real contexts (Chapelle, 1998). Bachman (1990) names this as a “real-life approach”. From this point of view, traits do not constantly exist, and therefore they are not meaningful in themselves. Rather, they are useful fictions that serve the utilitarian purpose of evaluating the usefulness of score interpretations for a specific decision. In other words, tests can be valid only when the context used for them reflects real-world contexts. However, it remains questionable how testing situations can replicate the real world on every occasion. As Fulcher and Davidson (2007: 16) state, “Trait theory and behaviourism are therefore very different in how they understand score meaning, and we can understand this in terms of the concept of ‘generalizability’”. Fulcher (1995: 29) argues that it would not

be possible to generalize from one task to another within the paradigm of behaviourism. Therefore, it can be argued that it would not be possible to apply the concept of behaviourism to language testing as we cannot design a test to include every task that a learner may encounter in the real world. We cannot draw any inferences related to strategies from the meaning of proficiency in these two paradigms.

Therefore, the interactionalist point of view has emerged between trait theory and behaviourism. It includes the concept of metacognitive strategies to shape the theory of proficiency. The view of an interactionalist includes language knowledge and the fundamental processes of trait theory as well as the contextual factors of behaviourism. Chapelle (1998: 47) explains the role of the researcher in interactionalist theory as follows: “the researcher must specify ... the knowledge and fundamental processes that are required within a particular context as well as the metacognitive strategies controlling performance in that context”. While behaviourism focuses on similarities between test contents and real world contexts, Chapelle (1998) explains that performance or ability can be influenced by contextual factors and we should only generalise test scores when performance is elicited in relevant contexts and can predict real world contexts. The language proficiency theory upon which the TOEFL iBT was designed appears to adopt an interactional view of language proficiency since Chapelle *et al* (2008: 2) explain proficiency for the TOEFL as follows: “proficiency typically needs to be conceptualized more broadly as the ability to use a complex of knowledge and processes to achieve particular goals rather than narrowly as knowledge of linguistic form or a skill. Such abilities would include a combination of linguistic knowledge (e.g., grammar and vocabulary) and strategies required to accomplish communication goals”. Chapelle *et al* go on to state that, “the specific linguistic knowledge (e.g., grammar and vocabulary) and the strategies required to accomplish goals depend on the context in which language performance takes place”. However, the iBT test includes “strategies or processes” instead of “metacognitive strategies” to define language proficiency. Although the iBT design was based on the proficiency theory mentioned above, including strategies, little information is available

about how the design team conceptualised “strategies” or “strategy use”. Chapelle *et al* (2008: 12) argue that “a theoretical language proficiency construct is relevant to score interpretation and score use, and therefore is included in the interpretive argument so that assumptions associated with the construct can be identified and investigated”. Furthermore, Chapelle (2008: 347) suggests that the examination of the task completion process and discourse may enable us to investigate strategies used for the iBT speaking test, and the findings concerning strategies can be seen as indicators of academic proficiency. Academic proficiency theory has not provided a clear concept of strategies; thus, how the notion of strategy (with regard to communication strategies, language learning strategies and test-taking strategies) has been defined is considered in the following sections.

2-2. The major issues in strategy research: definitions and terms

In strategy literature there is good deal of confusion not only over terminology, but in the definition of precisely what a strategy is. Therefore, in this section I will explore the birth of strategy research from two different perspectives: language learning and second language acquisition. This is important because different contexts may generate a different categorisation of strategy, and there may be overlaps between these two contexts, which bring about difficulties in setting up agreed definitions as well as confusion in choosing terminologies. Then I will explain the scope of strategies I have examined for the study, before exploring the various definitions and categorisations that have been attempted in order to arrive at a definition of “strategic processes” that is suitable for use in the later sections of the current study.

Strategy research first began to appear when there was a shift from teacher-centred to learner-centred approaches in language teaching and learning in the 1970s. Rubin (1972) focused on what made good language learners, and proposed strategies that good language learners may adopt to enhance their language skills. This change was also reflected in the communicative approach to language learning and teaching, in

which the dimension of language learning expanded to include social contexts and its proper use from only linguistic knowledge. This attempt has been continued by many scholars, such as Oxford (1990) who uses the term “language learning strategies”. The second important development of strategy research occurred when SLA researchers ceased to view linguistic errors as something to be corrected, and began to treat them as part of the learning process (Poulisse, 1990). “Errors” became evidence of language acquisition, and learners were seen to engage with strategies to deal not only with communication breakdown as a result of their imperfect command of the language, but also to enhance effective communication. It was in this context that Selinker (1972) first introduced the term “communication strategies (CSs)” to refer to the range of resources that learners brought to the task of getting their meaning across. The notion of communication strategies has been developed into two main approaches: product-oriented and process-oriented (see Section 2-3).

Cohen (2007) states that “Language Learner Strategies” (LLS), a term not used before June 2004, seems acceptable to refer to strategies in the strategy research field. The term encompasses language learning strategies and language use strategies. Strategies involved in the current study can be included in the category of language use strategies. However, it is problematic to distinguish language learning strategies from language use strategies. Oxford and Lee (2007: 117) claim that “it is difficult to classify those strategies that are only for learning or only for communication, because any opportunity for communication demonstrably provides further opportunity for learning, and any instance of learning could theoretically lead to communication (except in some instances of purely rule-oriented learning)”. Corder (1983) also points out that learning strategies and communication strategies are confused as the data collected may be similar in terms of utterances in the interlanguage of the speaker. Bearing in mind this ambiguity, Swain *et al* (2009) (see more in Section 2-6) assume that second language test-takers, language learners and language users may rely on a common set of strategies, and they developed the coding scheme based on taxonomies of strategies classified into “language learning strategies” and “communication strategies”. Swain *et al* (*ibid*) adopt the term “strategic behaviours”

to describe “the conscious, goal-oriented thoughts and behaviours test-takers use to regulate cognitive processes, with the goal of improving their language use or test performance”. For the main study I employ the term, “strategic processes”, which includes not only conscious thoughts affecting task performance but also reported thoughts not directly affecting performance. The former is called “strategies” and the latter is included under the term “processes”. According to Cohen (1998: 4), “the element of consciousness is what distinguishes strategies from those processes”. Therefore, the subsequent sections will look at communication strategies, test-taking strategies, and language learning strategies in order to arrive at a working definition of “strategic process” which can be interpreted as overarching strategies as well as processes involved in accomplishing the iBT speaking tasks in both test and classroom settings.

2-3. Communication strategies (CSs)

Since the term “communication strategies” was first introduced by Selinker (1972) to encompass a range of vital learning processes for second language learners, second and foreign language education has focused on the processes of language learning. Accordingly, language testing fields reflected this notion, and Bachman (1990) points out that processes as well as contents should be represented in the test. However, there has been little agreement about the definition of communication strategies. As a result, manifold definitions have been discussed and this has generated different taxonomies. Hence, it is important to investigate how communication strategies are viewed from different perspectives in order to apply these to the working definition of strategies, which will be a base for the main study.

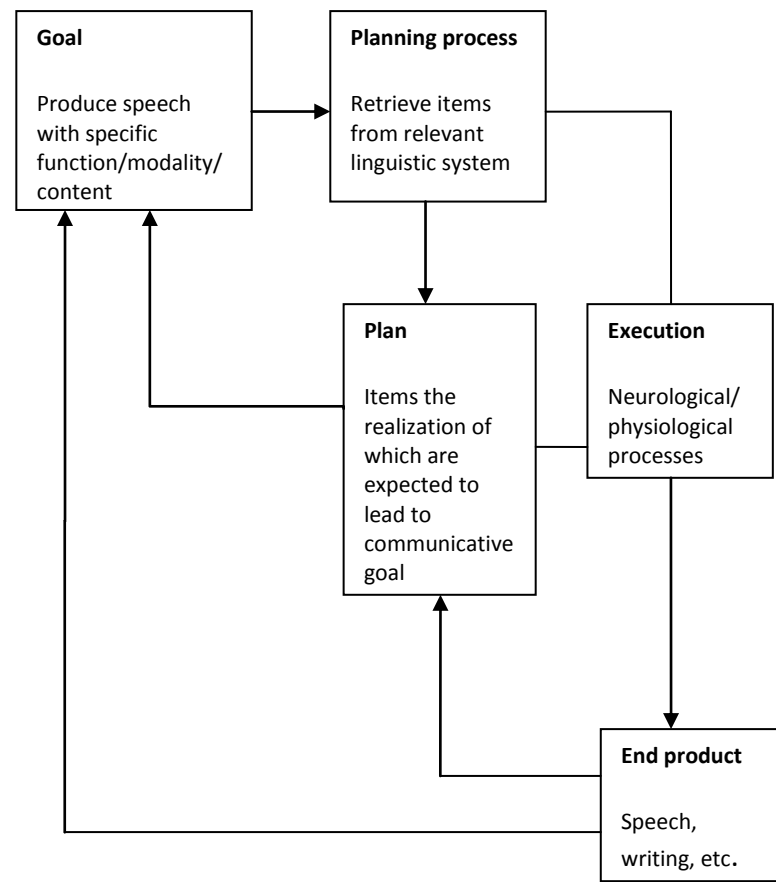
2-3-1. Definition of communication strategies (CSs)

Tarone (1977: 195) noted that “conscious communication strategies are used by an individual to overcome the crisis which occurs when language structure are inadequate to convey the individual’s thought”, which may be the cornerstone of conceptualising CSs in the field. Tarone also posited that the use of CSs could be found in both L1 and L2. Later, Tarone (1980: 420) used an interactional view to define CSs as “mutual attempts of two interlocutors to agree on a meaning in situations where the requisite meaning structures do not seem to be shared.” However, the taxonomy generated from these different definitions is the same (see Section 2-3-3-1).

One of the most influential theoretical articles in second and foreign language education, published by Canale and Swain (1980: 30), explains strategic competence as: “Strategies that speakers employ to handle breakdowns in communication: for example, how to deal with false starts, hesitations, and other performance factors, how to avoid grammatical forms that have not been mastered fully, how to address strangers when unsure of their social status-in short, how to cope in an authentic communicative situation and how to keep the communicative channel open”. In other words, strategic competence provides compensatory functions if there is a deficiency in linguistic or sociolinguistic competence when a speaker communicates. However, as Bachman (1990) points out, there are limitations in this definition of strategic competence because how these strategies operate is not fully explained. Three years after the initial study, Canale (1983) modified the definition of strategic competence to include compensatory strategies and enhancement strategies. Canale (1983: 339) defines strategic competence as “mastery of verbal and nonverbal strategies both (a) to compensate for breakdowns in communication due to insufficient competence or to performance limitations and (b) to enhance the rhetorical effect of utterances”. Canale’s expanded view is one of the broadest definitions of CSs as it covers not only psycholinguistic tools but also the effective management of utterances in interactional communication. Later, Dörnyei and Scott propose specific problems in the broadest sense in order to conceptualise CSs (Kormos, 2006) (see Section 2-3-3-3).

Alongside Canale and Swain, Færch and Kasper (1983) have had a major influence on strategy research. They established a general model of speech production to describe communication strategies in interlanguage communication (see Figure 2-1). The term “interlanguage”, introduced by Selinker (1972), refers to a linguistic system entailing the process of learning the second or foreign language. The model includes two phases: planning and execution. The planning phase consists of a goal, planning process and plan, while the execution phase consists of a plan, execution process and action. Communication strategies can be placed in a model of speech production where their function can be characterised through their relationships with processes and plans. They suggest that “communication strategies can best be placed within the planning phase, more precisely, within the area of the planning process and the resulting plan” (1983: 30), and they define communication strategies as “potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal” (1983: 36). If we rely on speech production we cannot examine these planning phases, but these processes are allowed to be examined by using stimulated recalls. Finally, the end products will provide us with evidence of strategies which will make strategy assessment feasible.

Figure 2-1. *A model of speech production (Færch and Kasper, 1983: 25)*



Corder (1983: 16) gives a working definition of communication strategies: “a systematic technique employed by a speaker to express his meaning when faced with some difficulty. Difficulty in this definition is taken to refer uniquely to the speaker’s inadequate command of the language used in the interaction.” Corder points out that an interlocutor’s linguistic knowledge and their knowledge of the topic of discourse will affect strategy use.

Bachman (1990) expands Færch and Kasper’s (1983) psycholinguistic model of speech production to provide a more general description of strategic competence, underlining its importance in all communicative language use, not limited only to interlanguage use. Bachman (1990: 84) proposes language competence, strategic competence, and psychophysiological mechanisms as three components of communicative language ability (CLA). Bachman (1990: 84) sees strategic competence as the means “to

characterize the mental capacity for implementing the components of language competence in contextualized communicative language". Strategic competence includes assessment, planning, and execution stages, and these serve general ability, which enables an individual to make the most effective use of available skills in carrying out a given task in communicative language tasks and non-verbal tasks such as painting. That is, strategic competence is considered to be a generally applicable ability rather than a specific language-related ability. Bachman raises questions about the effect of strategy use which may affect test performance, suggesting that some types of test tasks, and types of scoring, may be used to measure strategic competence or may influence test performance. Thus, he concludes that empirical studies must be undertaken to find evidence of the effects of various abilities on test performance in terms of construct validation.

Later, Bachman and Palmer (1996: 70) modified the definition of strategic competence: "metacognitive components provide an essential basis both for designing and developing potentially interactive test tasks and for evaluating the interactiveness of the test tasks we use." The three components they propose are goal-setting, assessment and planning, and they argue that strategic competence may or may not be included in the construct definition depending on the language testing situations. For example, when we do not need to make inferences about strategic competence, it should not be included in a construct definition, and vice versa. In the former case, the test is used to measure language knowledge only, while in the latter it is used to measure not only language knowledge but also strategic competence. Purpura (1999) argues that the discussion of strategic competence in Bachman and Palmer's model is not based on empirical studies; thus it needs to be validated with empirical data, including observable variables of strategy use.

In their most recent work, Bachman and Palmer (2010: 34) slightly change the components of language ability so that it comprises two components: language knowledge and strategic competence. They also propose attributes to be considered, such as personal attributes, topical knowledge, affective schemata, and cognitive strategies. However, they still see strategic competence as a set of metacognitive

strategies, such as goal setting, appraising, and planning. In this case, they seem to prefer the term, “appraising” to “assessment”. The following describes what each level involves (ibid, p. 48-52):

Goal setting: deciding what one is going to do

Goal setting involves:

- Identifying language use tasks or assessment tasks;
- Choosing, where given a choice, one or more tasks from a set of possible tasks;
- Deciding whether or not to attempt to complete the task(s).

Appraising: taking stock of what is needed, what one has to work with, and how well one has done.

Appraising involves:

- Appraising the characteristics of the language use or assessment task;
- Appraising one’s own topical knowledge and language knowledge;
- Appraising the extent to which the communicative goal of the task has been successfully accomplished.

Planning: deciding how to use what one has.

Planning involves:

- Identifying a set of specific elements from topical knowledge and language knowledge that could be used;
- Formulating one or more mental plan the realisation of which will be a response (interpretation, utterance) to the task;
- Mentally selecting one plan for execution as a response to the task.

To summarise: on one hand, communication strategies are more likely to be seen as psycholinguistic tools for problem-solving, used when second language learners face

difficulties in achieving communicative goals. On the other hand, communication strategies are interactional processes used to enhance the effectiveness of messages and negotiations with interlocutors during interaction. It is important to understand that communication strategies involve both cognitive and metacognitive processes. Bachman and Palmer (2010: 52) summarise that “strategic competence, or the metacognitive strategies, along with language knowledge and topical knowledge, are involved in arriving at a plan for accomplishing the communicative goal, or for completing a language use or assessment task. Execution, or the implementation of this plan in language use, involves cognitive strategies”. However, notions of cognitive and metacognitive processes are still plagued by ambiguity. In the study by Purpura (1999), cognitive processing is seen as a multidimensional construct including comprehending, memory and retrieval strategies. These cognitive strategies elaborate on one another and affect language performance; while a metacognitive strategy is found to be a one-dimensional construct, such as an assessment process (for example: goal-setting, planning, monitoring, self-evaluating, and self-testing). Phakiti (2008) finds that metacognitive strategies affect cognitive strategies and cognitive strategies affect test performance. Purpura (1999) points out that Bachman and Palmer’s (1996) concept of strategic competence should be broadened to encompass the other cognitive, affective and social strategies which may be used by test-takers’. More importantly, there is still a lack of evidence for how this mechanism operates in terms of test-takers’ performances; thus, more research should be undertaken to explain this complex phenomenon.

2-3-2. Identification of communication strategies (CSs)

Færch and Kasper (1983) propose two criteria to identify communication strategies: problem-orientedness and consciousness on the basis of a general model of speech production. The primary criterion, problem-orientedness, presupposes “a distinction between goals which the individual experiences no difficulty in reaching and goals which present themselves to the individual as ‘problems’: only plans that relate to the

latter type of goals will be considered strategies” (1983: 32). This view prompts another question: how do we define a ‘problem’? The way we define problems might be a major cause of various definitions of CSs. Færch and Kasper (1983) cite Klaus and Bhur (1976) to explain a problem as the result of insufficient existing knowledge recognised by individuals to approach goals, and the resulting need for increasing this knowledge. Bialystok (1990: 3-4) claims that there should be sufficient support to include “problematicity” into the definition of communication strategies. By this, she means that we should define the different features between strategic and non-strategic communication. She also underlines that “problematicity is not criterial to a definition is to assert that this feature is not defining of communication strategies” (p4) since communication strategies may take place when there is no problematicity. However, most definitions include problematicity (Corder, 1978: 16; Færch and Kasper, 1983: 36; Stern, 1983: 411; Færch *et al*, 1984: 154; Poulisse, 1990: 22) and these views are limited to communication problems suggested by Dörnyei and Scott (1997: 183), regarding “resource deficits-gaps in speakers’ knowledge preventing them from verbalizing messages”. Dörnyei and Scott expand to consider more types of communication problems based on previous studies and propose three more types of problems as well as “resource deficits” (ibid: 183):

- Own-performance problems: the realization that something one has said is incorrect or only partly correct; associated with various types of self-repair, self-rephrasing and self-editing mechanisms
- Other-performance problems: something perceived as problematic in the interlocutor’s speech, either because it is thought to be incorrect (or highly unexpected), or because of a lack (or uncertainty) of understanding something fully; associated with various meaning negotiation strategies
- Processing time pressure: the L2 speaker’s frequent need for more time to process and plan L2 speech than would be naturally available in fluent communication; associated with strategies such as the use of fillers, hesitation devices, and self-repetitions.

Dörnyei and Scott (1997: 183) acknowledge that “A ‘strategy’ being a conscious technique used to achieve a goal, consciousness, therefore, has been the second major defining criterion for CSs”. Færch and Kasper (1983: 36) refer to the definition of CSs within the degree of what is “potentially conscious”. They see consciousness as the level of degree rather than a clear spectrum. This is because the identification of consciousness can be problematic, as each individual has a different awareness of their mental processes and consciousness can be raised to different degrees depending on the individual. Dörnyei and Scott (1995a and 1995b) explain consciousness adopting four aspects from Schmidt’s (1994) classification of consciousness: intentionality, attention, awareness, and control. However, consciousness as control is not taken into consideration to identify CSs. Intentionality is separated from consciousness by Bialystok (1990) and is considered as one more criteria to identify CSs. Finally, Dörnyei and Scott propose three consciousnesses involved in communication, as below:

- Consciousness as awareness of the problem
- Consciousness as intentionality
- Consciousness as awareness of strategic language use

It can be said that the criterion of problem-orientedness derives from consciousness. That is, speakers may not be able to indicate problems without being conscious of them. Again, how do we know whether speakers are aware of problems when we only analyse speech production? Therefore, Yoshida-Morise (1998) excluded the criterion of “consciousness” to investigate communication strategy use in oral proficiency tests, as she assumed that it cannot be observed in language behaviour. It can be argued that some communication strategies may not be specified by learners or test-takers because they are used subconsciously, or the use of strategies has become so automatic that no consciousness is needed to employ strategies (Cohen, 1998; Færch and Kasper, 1983; Ellis, 1985). If we only rely on studies underlying speech production, the investigating of consciousness cannot occur. Therefore, the tracing of a speaker’s mental process needs to be examined and this can be done through techniques such as “stimulated recalls”, which the main study has adopted (see Section 3-5-1). The use

of stimulated recall will provide us with knowledge about speaker's consciousness involved in strategy use, and it may also reveal whether or how a speaker realises 'problematicity'.

Kasper and Kellerman (1997: 3) state that "identification of CS depends to a great extent on what one considers a CS to be, and in this respect, it matters very much whether one conceives of CS intraindividual or interindividual events". In other words, communication strategies are conceived as the internal mental processes of learners, or processes elicited in interaction towards an external impetus. Moreover Kasper and Kellerman point out that it would be difficult to trace the evidence of strategy use in speech if we consider strategies only as mental processes. This is a crucial issue in speaking tests as we only measure what we can observe directly. They continue to claim (1997:3) that "Its existence may be a matter of inference rather than direct observation". This is because when speakers use metacognitive strategies, such as planning, it is impossible to find the use of strategy if we only rely on discourse-based data. Therefore, Poulisse (1987) suggests that research should employ different methods to identify communication strategies, as depending on only one method might be risky. Consequently, Kasper and Kellerman (1997: 3) propose two sources of evidence to identify communication strategies: "markers in the discourse" and "retrospective protocols". These two approaches are employed for the current study to triangulate the data in order to investigate strategies involved in cognitive and metacognitive processes and the explicit uses of strategies in speech (see more details in Section 3-5).

2-3-3. Taxonomies of communication strategies (CSs)

Communication strategies have been defined in several ways and these various perspectives have generated various taxonomies of CSs. The following sections show types of taxonomies developed with product-oriented (traditional view) vs. process-

oriented (compensatory strategies) and will continue to be examine the extensive view of CSs developed by Dörnyei and Scott (1997).

2-3-3-1. Traditional taxonomies: Product-oriented

The earliest approach to communication strategies can be found in Tarone (1977), who compared speech production elicited from a picture description task both in participants' L1 and L2 (English). The use of L1 enabled the examination of the speakers' intended meaning. Finally, she categorised output differences as follows:

- Avoidance (topic avoidance and message abandonment)
- Paraphrase (approximation, word coinage and circumlocution)
- Conscious transfer (literal translation and language switch)
- Appeal for assistance
- Mime

She assumed that learners showed "conscious communication strategy preference" (202) with the pattern shown in the research. Moreover, she hypothesised that personality and proficiency levels may be more closely related to strategy preference than learners' L1. She added that learner with a higher proficiency level may use more paraphrasing. However, her arguments needed to be tested by empirical studies. Tarone's work in turn influenced the work of Corder (1983) and Færch and Kasper (1983). Corder (1983) presents communication strategies by dividing them into message adjustment and resource expansion:

- Message adjustment (risk avoidance): topic avoidance, message abandonment, semantic avoidance and message reduction
- Resource expansion (risk running): borrowing, paraphrasing, circumlocution, paralinguistic and appeal for help

Færch and Kasper (1983) propose the taxonomy of communication strategies based on a model of speech production including reduction and achievement strategies:

- a. Formal reduction strategies: learners use a reduced system in order to avoid making errors, or increase their proficiency with regard to the phonological, morphological, syntactic, and lexical problems they have.
- b. Functional reduction strategies: learners reduce their communicative goals to avoid problems caused by insufficient linguistic sources and retrieval problems which include actional and modal reduction. Topic avoidance, message abandonment and meaning replacement are also included.
- c. Achievement strategies: learners expand their communicative resources rather than reducing their communicative goals, such as code switching, interlingual transfer, inter-/intralingual transfer, IL-based strategies (generalisation, paraphrase, word coinage, restructuring), cooperative and non-linguistic strategies.

Early works of communication strategy taxonomies (Corder, 1983; Færch and Kasper, 1983) are categorised into two types by Bialystok (1990:34), as follows:

Table 2-1. *Comparing classification between Corder and Færch and Kasper*

	Strategies to manipulate meaning goal	Strategies to manipulate form
Corder	Message adjustment	Resource expansion
Færch and Kasper	Reduction (functional and formal)	Achievement

Bialystok (1990) assumed that the second category, strategies to manipulate form, can be identified in speech, while for the first category, strategies to manipulate meaning

goal, it seems difficult to judge how the speakers' original intentions are modified by avoidance, deletion, or alteration (Bialystok, 1990). However, even though those strategies resulting from manipulating forms can be evidenced in speech, it is still problematic when we limit the definition of strategies within conscious levels. That is, we still rely on speech production and some strategies might be employed automatically.

Furthermore, it is understood that both categories may interact with each other. For example, when a speaker reduces lexical problems, he or she might use L1-based strategies to achieve the goal. If so, all that is needed is to find a clear relationship between two categories with such evidence. Bialystok and Kellerman (1987) point out that the role of the task and the context are not considered in those strategies mentioned above. Again, these general approaches of communication strategy study have unsettled the development of terms and taxonomies of communication strategies. Therefore, the current study may add strategies into the studies so far as the study is task-specific (independent vs. integrated) and context-specific (test vs. academic classroom).

2-3-3-2. Taxonomy of compensatory strategies: process-oriented

Kasper and Kellerman (1997) argue that early taxonomies of communication strategies largely rely on speech production. Poulishie (1994: 620) therefore claims that "they are insufficiently related to theories of language use or development, so that studies which adopt them cannot provide much insight into the cognitive processes underlying CS use". If we only rely on product-oriented strategies, we may miss an important generalization of communication strategies because strategies can be involved prior to speaking. For example, one of the strategies, circumlocution used to describe a "fridge", can be divided into description of form or location and a description of function. In the latter, a speaker may note that "it keeps things cold",

and in the former, he or she might explain that “it’s in the kitchen”, which can give information about the early stages of a speaker’s planning processes.

In opposition to taxonomies focusing on the description of language production, Yule and Tarone (1997) explain that the other taxonomic approach depends on a description of the psychological processes used by L2 learners, and this approach only focuses on achievement strategies (compensatory strategies). In their description of psychological processes, two types of communication strategies are presented: conceptual and code strategies (see Table 2-2) (Poulisse, 1987 and 1990: Kasper and Kellerman, 1997). Conceptual strategies again divide into holistic and analytic strategies. Poulisse (1990: 60) explains that “the speaker who uses a conceptual strategy may refer to the intended concept by listing (some of) its properties or by substituting the word for a related concept which shares some of the criterial properties”. The former is referred to as analytic, and the latter as holistic.

Table 2-2. *The taxonomy of achievement strategies (Yule and Tarone, 1997:20)*

Achievement (compensatory) strategies			
Conceptual		Code (linguistic)	
Holistic	Analytic	Morphological Creativity	Transfer
Approximation Semantic contiguity Analogy Antonymy Metonymy Synonymy Superordinate Subdordinate	Circumlocution Explication Overexplicitness Repetition Exemplification Restructuring	Borrowing Word coinage	Foreignising Literal translation

To compare product-oriented and process-oriented approaches briefly (Yule and Tarone, 1997: 19), the former is “a description of observed forms in L2 output, with

implicit inferences being made about the differences in the psychological processing that produced them”, while the latter is “a description of cognitive processing, with implicit inferences being made about the inherent similarity of linguistically different forms observed in the L2 output”. The former uses real-world subjects, and the latter uses abstract subjects to investigate strategies; the former focuses on the external and interactive, whereas the latter concentrates on the internal and cognitive.

These two different views of communication strategies (in terms of interactiveness with different L1 listener involvement) should be taken into consideration in this study, as the iBT speaking test is not involved in interaction with any interlocutors. According to Yule and Tarone (1997), the latter approach focuses on cognitive processes, and results in allowing no role for interlocutors. However, they point out that the presence of an interlocutor may affect the cognitive processes that are fundamental for performance. Thus, there might be such differences, depending on the presence of interlocutors.

2-3-3-3. The extended taxonomy by Dörnyei and Scott (1997)

Dörnyei and Scott (1997) consider communication strategies as “every potentially intentional attempt to cope with any language related problems of which the speaker is aware during the course of communication” (179). They specify problem coping strategies into not only resource deficits which are “gaps in speakers’ knowledge preventing them from verbalizing their messages” (183), but also into own-performance related strategies such as self-repair and other-performance problem-related strategies such as meaning negotiation strategies and time processing pressure strategies. They put these three problem-related strategies into three categories: direct, interactional, and indirect strategies (197):

Direct strategies

- Resource deficit-related strategies: message abandonment, message reduction, message replacement, circumlocution, approximation, use of all-purposes words, word-coinage, restructuring, literal translation, foreignizing, code-switching, use of similar-sounding words, mumbling, omission, retrieval mime.
- Own-performance problem-related strategies: self-rephrasing, self-repair.
- Other-performance problem-related strategies: other-repair.

Interactional strategies

- Resource deficit-related strategies: appeal for help.
- Own-performance problem-related strategies: comprehension check, own-accuracy check.
- Other-performance problem-related strategies: asking for repetition, asking for clarification, asking for confirmation, guessing, expressing non-understanding, interpretive summary, responses.

Indirect strategies

- Processing time pressure-related strategies: use of fillers, repetition.
- Own-performance problem-related strategies: verbal strategy markers.
- Other-performance problem-related strategies: feigning understanding.

2-4. Language learning strategies

In second language learning and teaching, researchers and teachers have shown an increasing interest in determining what differentiates successful and less successful students. This has led to studies of language learning strategies, since these have been considered one of the most important factors accounting for individual differences in language learning. As Oxford (1990: 1) points out, “strategies are especially important

for language learning because they are tools for active, self-directed involvement, which is essential for developing communicative competence". She continues: "All appropriate language learning strategies are oriented toward the broad goal of communicative competence" (ibid, 1990: 8). The communicative competence approach aims at teaching and learning how to use second and foreign languages authentically. Thus, it seems difficult to separate learning and the use of strategies. Corder (1983) claims that learning strategies and communication strategies are confused, as the data collected may be similar in terms of utterances in the interlanguage of the speaker. Furthermore, Oxford and Lee (2007: 117) claim that it is not an easy task to divide those strategies into a purely learning category or communication category given that there is an intertwined relationship between learning strategies and communication strategies, and that they are mutually informing.

However, Tarone (1980) distinguishes language learning strategies from strategies of language use, including communication strategies and production strategy. She sees language learning strategies as "an attempt to develop linguistic and sociolinguistic competence in the target language" (419), and proposes some examples of language learning strategies, such as memorisation, repetition with the purpose of remembering and the initiation of conversation with native speakers. Furthermore, Ellis (1985: 181) states, "communication strategies differ from learning strategies in that the problem arises as a result of attempts to perform in the L2, and the strategies are needed to meet a pressing communicative need." Ellis categorises learning strategies as techniques for long-term solutions to a problem, while communication strategies are more suited to short-term answers. It can be assumed that Ellis treats communication strategies within the psycholinguistic aspect as a tool for overcoming difficulties speakers face while communicating. From my point of view, strategies used for completing speaking tasks are language use strategies rather than language learning strategies, but it can be pointed out that language learning contains not only learning occasions but also language use, particularly when speaking skills are taught and learnt. This has been proven by Swain *et al* (see Section 2-5) as well as the main

study. Thus the taxonomy of learning strategies (Oxford, 1990) have been taken into consideration in order to develop a working definition of speaking strategies and the coding scheme for the main study.

Oxford (1990) develops six categories of language learning strategies, and Oxford's 50-item Strategy Inventory for Language Learning (SILL) has been widely used to identify language learners' strategy uses. Language learning strategies are divided into two categories: direct and indirect. These two major categories are further divided into six subcategories, as follows (Oxford, 1990: 14-21):

Direct strategies- working with language itself in a variety of specific tasks and situations

- ✧ Memory strategies: remembering and retrieving new information.
- ✧ Cognitive strategies: understanding and producing new language.
- ✧ Compensation strategies: using the language despite knowledge gaps.

Indirect strategies- general management of learning

- ✧ Metacognitive strategies: coordinating the learning process.
- ✧ Affective strategies: regulating emotions.
- ✧ Social strategies: learning with others.

Oxford (1990) defines compensation strategies as behaviour used to compensate for missing knowledge of some kind, e.g. guessing while listening or reading, or using synonyms or circumlocution when speaking or writing. However, O'Malley and Chamot (1990) state that compensation strategies are really communication strategies and should be distinguished from learning strategies. This is because communication strategies are intended only for language use, not for language learning, and should be included in language use strategies as suggested by Cohen (1998).

The SILL is a student-completed strategy questionnaire which can assess students' general strategy use over a variety of tasks, but it has a limitation in that it cannot describe students' learning strategies for any specific language tasks (Oxford, 1996). Dornyei (2005) claims that the SILL is psychometrically imperfect as the scales in the SILL should not be considered cumulative.

2-5. Test-taking strategies

Strategies used only for the purpose of taking tests can be named test-taking strategies. Cohen and Upton (2007: 211) define a test-taking strategy as a "test-taking process which the respondents have selected and which they are conscious of, at least to some degree". They claim that although many testing situations do not lead test-takers to use strategies such as opting out and shortcuts, some do. In such situations, some test-takers might use test-wiseness to complete test tasks, and they might use some strategies which are not used in non-test situations. Cohen (1998: 92) points out that "the notion of strategy implies an element of selection. Otherwise, the processes would not be considered as strategies". The concerns of strategies as test-taking processes started in the late 1970s and this concern was further accepted as a variable of test reliability and validity in the 1990s (Cohen, 1998: 90).

It can be understood that test-takers might be under more pressure than those in a learning situation or most academic situations, due to the fact that they are given limited time, or because of the consequences of the test result, which may elicit some strategies only used for test purposes. The iBT is designed to reflect the actual use of English in academic contexts. Consequently, the iBT speaking test should be designed to measure strategic processes in those contexts, if strategic competence is considered a part of the speaking construct. Furthermore, if the main study were able to discover strategies only used for the test purpose, but not used in non-test situations, it would be beneficial for the development of speaking tests.

2-6. Swain *et al* study

The current study was initially inspired by Swain *et al* (2009), who conducted a study to identify strategies used in the TOEFL iBT speaking test. Therefore, in this section, the study of Swain *et al* will be explained in more detail. 30 Chinese students (16 undergraduates and 14 postgraduates) took part in the study. The participants reported strategic behaviours they used during the iBT speaking test completion. The study investigated how strategy use differed between task types (independent vs. integrated tasks), proficiency levels (intermediate vs. advanced levels) and educational levels (undergraduate vs. postgraduate), as well as the relationship between strategy use and the score the participants gained from the iBT speaking test. They adopted the term strategic behaviours, referring to “test-takers’ conscious thoughts and actions that they take to acquire or manipulate information, such as attending, predicting, translating, planning, monitoring, linking, and inferencing, ... directly related to the test-taking process”. The coding scheme for the study was invented after considering language learning strategies, communication strategies, and test-taking strategies. The study revealed 49 different strategies included in 5 categories (approach, communication, cognitive, metacognitive, and affective strategies; see in Appendix 3-5), by means of stimulated recall sessions reported by test-takers after completing a new version of the iBT speaking test on six different tasks. The result showed that metacognitive strategies were most frequently used, and undergraduates used significantly more communication strategies while postgraduates used cognitive and affective strategies significantly more. Moreover, integrated task types elicited more strategy use than did independent tasks. However, there was no relationship detected between proficiency levels and strategy use or gained scores and strategy use.

2-7. Strategy use and proficiency

2-7-1. Previous empirical strategy studies in proficiency levels

L2 proficiency has been considered as a crucial learner variable in strategy research (Nakatani and Goh, 2007). Canale and Swain (1980) assumed that beginners are likely to use more strategies, as they might face more difficulties when they communicate. This has led to a number of empirical studies, such as Paribakht (1985), Poulishse (1990), Yoshida-Morise (1998), and Swain *et al* (2009). Paribakht's (1985) study showed different strategy use in different proficiency levels. For example, advanced learners used more approximation strategies than lower-level learners, while paralinguistic knowledge was more favoured by lower level learners than advanced learners. In Poulishse (1990), the lower proficiency learners used more achievement strategies than the higher proficiency learners. Moreover, Yoshida-Morise's study started with the assumption that less competent L2 speakers may use more communication strategies than more competent speakers. Moreover, more competent speakers use fewer strategies because once speakers acquire L2 knowledge, the use of L2 becomes automatised (Færch and Kasper, 1983). Her findings partly proved the assumption that the lowest level (1+) learners used more strategies than the three higher level learners (3, 2+, and 2) on average, while there was no great difference between the frequency of strategy use among the three higher levels. However, according to Swain *et al* (2009) there was no significant difference in the use of strategy between intermediate and advanced Chinese learners of English who studied at English-medium universities. If we only defined "communication strategies" within the tools for overcoming a deficiency in linguistic knowledge we would expect lower proficiency speakers to use more strategies, as Canale and Swain (1980) assumed. However, as some findings of the studies mentioned above have shown, different levels of learners have a different capacity of strategy use. Thus, examining how different proficiency speakers use strategies in specific tasks will give us more insight into strategy use patterns and this will be looked at in Section, 2-7.

2-7-2. Strategies implemented in other rating scales

The main study has been initiated because the iBT speaking test scoring rubrics do not include information about strategy use, even though strategies are included in academic proficiency theory (see Section 2-1), which is a base for the test. However, unlike the iBT speaking test, some well-known language tests include strategies in their scoring rubrics. That is, test users are able to interpret the ability of speakers with regard to the use of strategies. For example, we can infer that advanced level speakers use communication strategies such as paraphrasing according to the ACTFL (American Council on the Teaching of Foreign Languages) speaking ability description. Thus, it is worth looking at what strategies are implemented in the description of speaking levels by proficiency levels. First, according to ACTFL proficiency guidelines for speaking, the features of strategies are divided into 10 levels from superior to novice low level. Those at more advanced levels may use communication strategies such as circumlocution and paraphrasing. Except for the novice-low level, all levels are assumed to use a range of strategies (see more details in Table 2-3).

Table 2-3. *ACTFL speaking ability description: strategies used in each level*

Levels	The features of strategies included.
Superior	Interactive and discourse strategies, such as turn-taking.
Advanced High	Communicative strategies, such as paraphrasing, circumlocution, and illustration.
Advanced Mid	Communicative strategies such as circumlocution or rephrasing are often employed for this purpose. Advanced -Mid speakers may use a number of delaying strategies.
Advanced Low	Communicative strategies such as rephrasing and circumlocution may be employed. Use of false cognate and literal translation. Noticeable self-correction.
Intermediate High	Use of code-switching, false cognates, literal translations.
Intermediate Mid	Have difficulty using communicative strategies, such as circumlocution. Their speech may contain pauses, reformulations

	and self-corrections (as they search for adequate vocabulary and appropriate language forms to express themselves).
Intermediate Low	Their speech is characterized by frequent pauses, ineffective reformulations and self-corrections.
Novice High	Able to express personal meaning by relying heavily on learned phrases or recombination of these, and what they hear from their interlocutor.
Novice Mid	Pause frequently as they search for simple vocabulary or attempt to recycle their own and their interlocutors' words. Frequently resort to repetition, words from their native language, or silence.
Novice Low	none

Secondly, IELTS (International English Language Testing System) describes speaking ability using 10 bands. The use of paraphrasing is included from band 8 to band 4, but different degrees of frequency and success are present: the lower the level, the less its use and the less its success.

Lastly, the CEFR's (Common European Framework of Reference for Languages: Learning, Teaching, Assessment) global oral assessment scale includes strategies for planning and repairing in lower proficiency levels such as B1, A1 and A2. Furthermore, according to the can-do statement for speaking developed by ALTE (the Association of Language Testers of Europe), the highest proficiency speakers (Level C2) use strategies in order to repair misunderstandings (in social and travel contexts) or compensate for unknown words (in the work place). However, the iBT speaking test can be compatible from A1 to C1 levels in CEFR. It seems that strategies are only seen as compensatory functions in the can-do statement while the CEFR scale includes metacognitive functions as well as compensatory ones in strategies. These different assumptions highlight an interesting issue concerning the relationship between strategy use and proficiency levels, as insufficient empirical evidence exists to prove any assumptions

with certainty. The main study involves two different proficiency levels, good and fair, which can be situated from B1 to C1 in the CEFR scale.

2-8. Strategy use and task types

Although there has been a debate concerning how strategies should be defined – i.e. whether they should be specifically targeted to aid the completion of given tasks or should be more general – many researchers have agreed that language users, tasks and contexts may affect strategy use (Cohen, 2007: 43). A general approach to defining strategy has caused the mass-production of various definitions and these various definitions have produced manifold taxonomies. For the main study, the iBT speaking test constitutes different types of tasks (independent and integrated) and how these affect strategy use is one of the main focuses of the study. Different task types may lead naturally to different strategy use. Long (1985) pointed out that language tasks are crucial as language learners face some language problems when they complete the tasks. Consequently, it is assumed that the problems learners face should be solved by adopting strategies, and this may apply to the situation in which language is used to complete given tasks. Oxford *et al* (2004) argued that more successful language learners are likely to use strategies in order to complete specific tasks appropriately, but her study was limited to language learning strategies. Some other previous studies used different tasks, but they often failed to show how the tasks they used elicited speakers' performances differently in terms of strategy use. For example, Tarone (1970) used picture description tasks, Paribakht (1985) used concept identification tasks and Yosida-Morise (1998) used interviews, but they only showed the relationships between strategy use and proficiency levels. However, Poullisse (1990) used the concrete picture description task (task 1), the abstract picture description task (task 2), the story retell task (task 3) and the oral interview (task 4) in order to investigate compensatory strategies, and she found that the types of compensatory strategies were highly task-specific. For example, analytic strategies (see Section 2-3-3-2) were primarily used to complete Task 1, and a high percentage of

analytic strategy uses were shown in accomplishing task 4. Swain *et al* (2009) looked into the strategy use by independent and integrated task types and the result showed that approach strategies and communications strategies (see Appendix 3-5) were elicited more by group B: integrated tasks (requiring reading, listening, and speaking skills) than group A: independent tasks (requiring only speaking skill) and group C integrated tasks (requiring listening and speaking skills). Group B also elicited the most strategy use overall. Swain *et al*'s study would be a good comparison with the main study as the same types of tasks are involved. In particular, if more successful language speakers use specific strategies to perform certain provided tasks these should be taken into consideration for test development and test use. Finally, the scoring rubric should provide test users with more specific information about strategy use related to independent and integrated tasks in the iBT speaking test.

2-9. The working definition of “strategic processes” for the study

The working definition of “strategic processes” has been determined after close consideration of some previous studies and theories. “Strategic processes” are defined broadly as “mental processes including cognitive and metacognitive processes which are consciously employed to overcome difficulties speakers face and to complete given speaking tasks effectively”. For the main study, only consciously employed strategies have been dealt with since the study has relied on the data reported through stimulated recall verbalisation. The study will be conducted on the basis of this definition.

2-10. Summary of the chapter

This chapter has given a theoretical background to strategies as one construct of academic proficiency to be measured in academic English proficiency tests. It has explained the major issues of strategy research in terms of definitions and

terminologies, and introduced the term “strategic processes”, which is used for the current study. It has also pointed out that the scope of strategies or processes involved in language use is not linear or straightforward. Therefore, several sections have explored communication strategies, learning strategies and test-taking strategies which may overarch strategic processes involved in completing given speaking tasks in both test and academic classroom conditions. In Particular, communication strategies have been observed closely from two perspectives, product-oriented and process-oriented, as these two approaches have developed major taxonomies of communication strategies, on which the final coding scheme of the study has been based. Moreover, the relationship between strategy use and proficiency levels was explained with previous empirical studies, as was the implementation of strategy use in some language testing rating scales, as well as the relationship between strategy use and task types. Finally, based on the literature review, a working definition of “strategic processes” was provided.

The following chapter will deal with the methodological approach, and methods and whole processes that the current study employed in order to collect and analyse the data.

3. Research Design and Methodology

3-1. Research aims and the key research questions revisited

This research aims to examine what the iBT speaking tests are really measuring and how this reflects the academic classroom in terms of speaking strategy use. Since ETS claims that the iBT test is designed to reflect real academic English, it is important to investigate whether the computer delivery format of the iBT speaking test may elicit the same speaking performance as an academic classroom. Furthermore, processes or strategies have been considered as crucial to communication in second or foreign languages, and these abilities have been included in the definition of academic proficiency upon which the iBT test design is based. Thus, strategies and processes should be measured to judge a speaker's academic English proficiency. However, insufficient research has been done to consider how these strategies should be measured in language testing. Therefore, the first research question is: what speaking strategies are used to complete given speaking tasks in the iBT speaking test and academic classrooms by task types (independent and integrated), different proficiency levels (Good and Fair), and scores gained from the test? Consequently, it is acknowledged that we need to find observable evidence of strategy use in actual speech to operationalise strategy assessment. This has raised the subsequent research question of how the strategic processes engaged in completing speaking tasks can be identified in actual speech. This is important as we can only measure strategy in speaking tests if we can link strategy use to observable evidence in speech. The findings of the study may very well provide insights into the nature of computer-mediated speaking tests, and the extent to which they are capable of reflecting processes that are used in academic classroom settings. Moreover, they have the potential to provide data upon which the scoring rubrics might be expanded to include criteria regarding strategy use.

3-2. A view of epistemological issues of the study

The epistemological question of language testing proficiency may start with “What is proficiency?” or “How do we know someone is proficient in a language?” It has been claimed that a theory of language proficiency should be based on test score interpretation (Chapelle *et al*, 2008), which means it provides us with information about what scores obtained from the test actually mean. How “proficiency” has been viewed in different paradigms and how each paradigm accounts for proficiency constructs is explained in the Section 2-2.

Justification for the inferences we make from the scores is a process of validation. Approaches to language testing validity have also changed and this has led to the adoption of different research methods in order to collect evidence to support inferences we made from test scores. For example, in the positivistic era, tests can be valid or meaningful if content, criterion, and construct validities are proven to be sufficient, with expert judgment of content or correlational relationships of test scores and criterion measures. It has been acknowledged that proficiency theory has evolved with new evidence and the concept of validity has broadened to embody a unified concept of construct validity which embraces not only theoretical and evidential bases but also consequences of test use (Messick, 1989). In this case, the “truth” we pursue in language testing can be constructed by investigating empirical evidence in order to support not only the theoretical proficiency theory used for test design, but also the consequences of test use. However, what we have learned in paradigm shifts is that “there is no such thing as an ‘absolute’ answer to the validity question” (Fulcher and Davidson, 2007: 18), which is a pragmatic view of validity.

In pragmatic validity, the truth can change over time as new evidence is found, and this may lead to the development of a new theory. This recent validity paradigm leads to an argument-based approach, and thus “truth” can be the degree of justification for the argument. This argument-based validity theory has been used for the iBT test validation. Chapelle (2008: 320) points out that “the conclusion for this argument is that TOEFL scores are valid for making decisions about the test takers’ language

readiness for academic study at English medium universities". This validity argument is supported by an interpretive argument consisting of six inferences (domain definition, evaluation, generalisation, explanation, extrapolation, and utilisation), and each inference is supported by backing obtained through theoretical rationales and empirical research (Chapelle *et al*, 2008: 19-21). For example, the evidence of strategy use can be used as "backing" supporting an assumption ("the linguistic knowledge, processes, and strategies required to successfully complete tasks vary in keeping with theoretical expectations") made for a warrant ("expected scores are attributed to a construct of academic language proficiency"), which again supports inferences made in order to explain students' academic English ability. Consequently, the TOEFL interpretive argument suggests the use of discourse analysis and cognitive processing studies (Chapelle *et al*, 2008: 20, Table 1.3) to investigate proficiency constructs such as linguistic knowledge, processes and strategies. Furthermore, each interpretive argument step is linked to the next, and finally conclusions can be drawn concerning academic readiness. Therefore, arguments can be raised at any step of the interpretive argument, but the answers can only be given in the validity argument, which provides a full picture of validation.

In sum, 'strategies' are not included as a construct of proficiency in positivistic trait theory or in behaviourism. However, strategies are now considered one of the constructs of language proficiency theory (Chapelle *et al*, 2008) based on the iBT test design and score interpretation. That is, strategy use should be included in score meaning. However, it can be said that proficiency theory does not provide sufficient explanations of the concept of strategies, and it is not based on a strong theory to be testable as to how strategies are related to language proficiency. In spite of the weak nature of theory, the study was conducted in a scientific way to investigate strategy use under the controlled variables of task types and proficiency levels. Furthermore strong evidence of strategy use is needed to help build a strong theory of proficiency, and we can claim that strategies should be considered as constructs to be measured. Therefore, the study initially needs a qualitative approach to investigate which strategies are used in both the iBT speaking test and in academic classrooms. Then,

the study will consider how this strategy is related to different proficiency levels and, task types, whether scores can be drawn inductively, and how strategy use can be present in actual speech.

3-3. Validity and reliability of the research

3-3-1. Validity

3-3-1-1. Internal validity

The concept of internal validity adopted for the main study concerns the extent to which the two data collection methods, stimulated recall and spoken discourse collection, provide us with data that is relevant and useful in answering the research questions. The study aims to investigate speaking strategies, defined as mental processes, employed consciously to complete given speaking tasks. If only one method is used, either discourse analysis or stimulated recall, we may miss the speakers' intentions by analysing only discourse-based data. Also, speakers' verbalisation from stimulated recalls may not explain how strategic processes connect with actual speech production. Stimulated recalls allow a researcher to investigate the strategies used while undertaking speaking tasks, which in some cases may have an observable correlation to the spoken data. Where this occurs it may be possible not only to compare strategy use across the two conditions, but also to suggest ways in which strategy assessment may be operationalised in the scoring rubric. Therefore, using two methods has allowed us to collect data as intended, and this has improved internal validity.

Furthermore, Miles *et al* (1994: 278) argue that we should have an “authentic portrait of what we were looking for” in order to validate research. Thus, the academic classes were simulated to resemble real classes with the same iBT speaking tasks types. In order to improve validity, much effort was made to demonstrate that these two

conditions represented authentic test-taking and classroom contexts (see Section 3-7-2).

3-3-1-2. External validity

In terms of external validity, we have to consider whether the findings of the study are transferable to other contexts, or to what extent we can generalise. The study has employed a highly qualitative approach from which it may not necessarily be possible to draw generalisations. However, the study was conducted using a replicable procedure and this may lead to more studies that investigate speaking strategy use in different contexts with more participants. Those studies may shape the generalisability of speaking strategy use in the iBT speaking test and academic classrooms. To compare strategy use under two conditions, test-taking and academic classroom conditions were simulated as closely as possible. However, the simulation of the classroom condition had to be planned much more carefully than the test-taking procedure since there has been no other theory or model for what academic classrooms should be like regarding the number of students and physical configuration, and these factors may affect speaking performance. The degree of similarity of the two conditions was checked by using a paired sample t-test with gain scores from both conditions. The paired sample t-test was used instead of the independent sample t-test as the same group of participants performed two parallel tasks under two conditions (actual tests vs. academic classroom activities). The t-test was conducted to compare the scores for all four tasks, the scores gained from familiar topic tasks (independent tasks), and the scores gained from academic topic tasks (integrated tasks). The results showed that the values of two-tailed significance were $> .05$ in all three categories. Therefore, it can be said that there were no significant differences between the test and academic classrooms in terms of the scores gained (see Table 3-1). This suggests that the iBT speaking test is valid in reflecting academic classroom contexts. Furthermore, the process of simulation of academic classrooms can be used for further studies that attempt to compare performance under both situations.

Table 3-1. *The results for t-test*

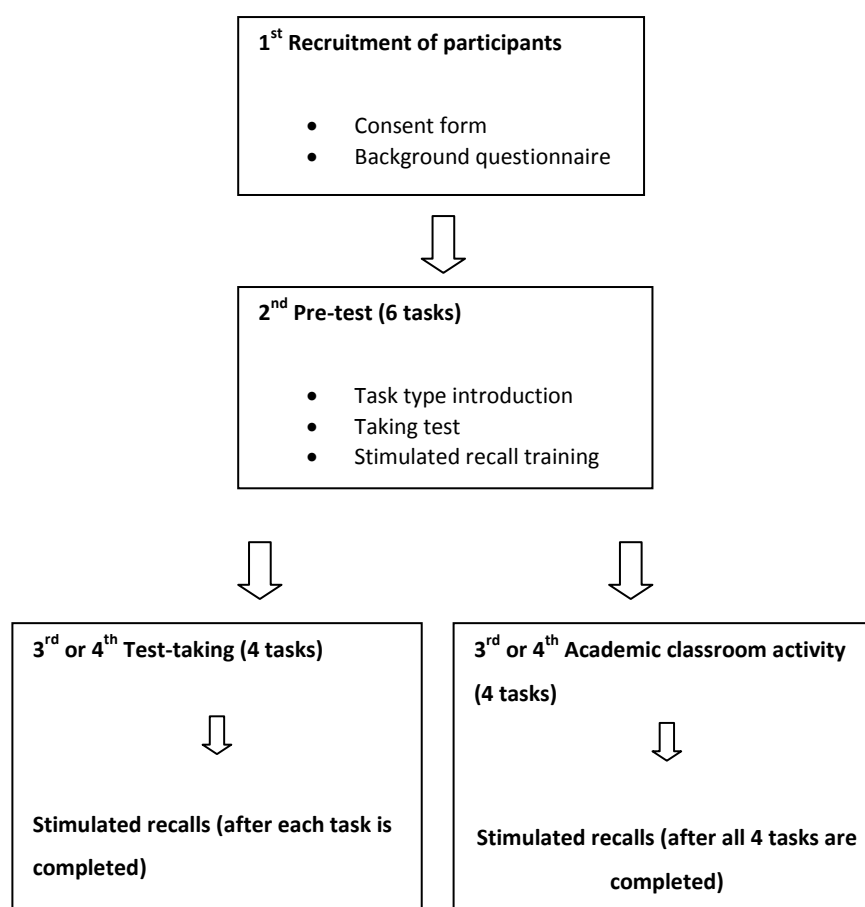
t-test for scores of 4 tasks								
	Paired differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence interval of the difference				
				Lower	Upper			
Pair 1 Class-Test	1.50000	3.08221	1.25831	-1.73458	4.73458	1.192	5	.287
t-test for scores of familiar topics								
	Paired differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence interval of the difference				
				Lower	Upper			
Pair 1 Class-Test	.66667	2.16025	.88192	-1.60037	2.93371	.756	5	.484
t-test for scores of academic topics								
	Paired differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence interval of the difference				
				Lower	Upper			
Pair 1 Class-Test	1.66667	3.72380	1.52023	-2.24122	5.57455	1.096	5	.323

3-3-2. Reliability

Miles *et al* (1994: 278) pointed out that reliability of the research is related to the consistency of the process involving researchers and methods. For this study in particular, as a large amount of equipment was needed to collect the data I had to control the equipment preparation carefully. I also had to follow a replicable procedure in order to lead each session in the same way as other sessions. The main data collection is mentioned in Section 3-7-3, and the overall sequence of data collection and the equipment set-up procedure is explained in more detail here. Furthermore, inter-rater reliability for the scores gained and inter-coder reliability for the coding procedure will also be described.

The overall sequence of data collection: the collection of data was carried out in the following sequence; (1) recruitment of participants; (2) pre-test; (3) test-taking or (4) academic classroom activity respectively for Korean participants. However, the study was counterbalanced so that any order effects would be controlled. Therefore, three Korean participants took the test first and they were involved in the academic classroom later. The other three participants did it the other way round, the academic classroom first and the test later (see more details in Fig. 3-1). For non-Korean participants, three steps of data collection were involved (1) recruiting; (2) pre-test; and (3) academic classrooms.

Figure. 3-1. *The procedure of data collection for Korean participants*



The equipment set-up procedure: 6 test-taking sessions and 6 academic classes were held and video recording and audio recording had to be carried out for each session. This required preparation of the following: two computers (one with a CD including test material for test-taking and the other connected to the projector), one voice recorder (with fully charged battery), one VHS video camera (with a blank tape to record speaking performance), a projector to show a speaking performance (connected to one of the computers), remote controls for the video player and projector, and finally papers and pens for participants to take notes. For classrooms, a USB drive which included reading passages (with a connection to one of the computers and a projector) was prepared. As I was in charge of controlling several pieces of equipment at the same time, I made a checklist of equipment to be prepared prior to

each session. Furthermore, each video and audio recording process was labelled with numbers and carried out in the same sequence for all data collection as follows:

Test-taking

- 1) Turn on two computers, a video camera, a video player, a voice recorder, and a projector.
- 2) Put a CD for test-taking into the computer, put a voice recorder beside this computer, and put a piece of paper and a pen next to it.
- 3) Put a blank video tape into the video camera.
- 4) Ask the participant to do the task and videotape the performance concurrently.
- 5) As soon as the participant completes one task, stop the video camera, ask the participants to stop the testing CD, and ask what the participant was thinking about while performing the task.
- 6) While doing step 5, take out the video tape from the video camera and put it into the video player.
- 7) While showing the performance, ask the participant to verbalise their thoughts involved during the performance and give him/her the remote control to stop the playback at any time.
- 8) Ask the participant to verbalise if there was anything left to report. At the same time, move the videotape from the video player to the video camera.
- 9) Ask the participant to play a test CD for the next task and move on to the second task in the same sequence from 1-8.

Academic classroom

- 1) Prepare three desks and chairs including three pieces of paper and three pens for note-taking for the three participants.
- 2) Turn on one computer, a video camera, a video player, a voice recorder and a projector.
- 3) Put a voice recorder on the middle of the desk.
- 4) Put a USB memory card including the questions and reading materials into a computer.
- 5) Put a blank video tape into the video camera.
- 6) Ask the lecturer to start the classroom activity and start to video.
- 7) Check the time for reading the passage for the 3rd task and inform the lecturer.
- 8) After classroom completion (all 4 tasks) give a 10-minute break.
- 9) While showing the performance, ask the participant to verbalise their thoughts involved in the performance and give him/her the remote control to stop playback at any time.
- 10) Ask the participant to verbalise if there was anything left to report.

Inter-rater reliability: Two raters were involved in assessing the participants' English proficiency and they assessed recorded speech production based on the iBT scoring rubrics (see Appendix 3-1). The inter-rater reliability was checked for the pre-test scores of all 24 participants, the pre-test scores of 18 actual participants (6 Korean and 12 non-Koreans), the pre-test scores of 6 Korean participants, the actual test scores of 6 Korean participants and the scores for 6 Korean participants' academic classroom speaking performance. The figures show that all pre-test scores by two raters were highly related, as R is higher than 0.9 after the alignment of disagreement of scores for 5 participants. All the disagreeing scores were eventually fine-tuned, except for in the case of one participant who did not take part in the main study. Furthermore, in the scores for the actual tests of Korean participants, R was greater than >0.8. However,

scores for academic classrooms correlated to a lesser degree with test-taking as $R > 0.7$ (see Table 3-2). Although the degree of R was different, they were highly acceptable in speaking tests.

Inter-coder reliability: KP1 SRV from test and KP5 SRV from the academic class were chosen to check inter-coder reliability. The coder was recruited and provided with background knowledge about strategies in foreign and second language education, and was trained in how to code based on the coding scheme developed for the study (see Appendix 3-6). The inter-coder reliability was 62.25%. The discrepancy occurred when two coders interpreted the translation differently because of problems related to literal translation from spoken Korean to English.

Table. 3-2. *Inter-rater reliability of the scores between two raters*

	All 24 participants' pre test	18 actual participants' pre test	6 Korean participants' Pre test	6 Korean participants' actual test	6 Korean participants' academic classroom
Inter-rater reliability	$R = 0.9588$, $p \leq 3.516e-09$ ($t = 15.47$, $DF = 21$) $y = 0.7569 * x + 0.6653$	$R = 0.9598$, $p \leq 2.675e-07$ ($t = 13.67$, $DF = 16$) $y = 0.7589 * x + 0.6593$	$R = 0.9952$, $p \leq 3.516e-05$ ($t = 20.25$, $DF = 4$) $y = 0.9027 * x + 0.3208$	$R = 0.8496$, $p \leq 0.04156$ ($t = 3.222$, $DF = 4$) $y = 0.9056 * x + 0.4709$	$R = 0.7463$, $p \leq 1$ ($t = 2.243$, $DF = 4$) $y = 0.6223 * x + 1.214$

3-4. Ethical issues

Dörnyei (2007) underlines that it is inevitable that researchers must show concern for ethical issues in research as people's lives are involved. He also points out that the researcher should maintain the participants' privacy, confidentiality and anonymity, and ensure the proper storage of data. According to Lynch (2003), the participants should be informed about the nature of the research, and the potential advantages or

disadvantages of being involved in the research, and should not be coerced into giving consent before the research starts. Ethical consent for the research was obtained from the Ethical Committee on November 25th 2009. The participants were informed all about the aim of the research, procedures, advantages and disadvantages they may encounter, and how the data would be dealt with in a confidential way in the consent form (see Appendix 3-2). Compensation was given to each participant as promised in the consent form. To keep the confidentiality of the participants, a lecturer, and two raters, all names were changed and data were only stored in the researcher's private files.

One lecturer involved in the classroom activities was not given the written consent form and her role was explained verbally so that she could give her consent. Until the simulation of the classroom setting the process of cooperation between the researcher and the lecturer went smoothly. However, due to the late arrivals of participants the classroom activities did not start on time, which inconvenienced the lecturer. I received a complaint by email from the lecturer and the research was nearly stopped. This raised an issue of data collection, particularly when we collected the data with more than two people at a time. I could not force participants to arrive on time, but informed them by phone and e-mail to arrive in the classroom 5-10 minutes early. However, a few participants still did not arrive on time. Furthermore, when some parts of data collection rely on one particular person, the research can be put in danger if that person withdraws part of the way through the research. For the main study, I should have anticipated some lack of punctuality and should have made it clear that this would cause inconvenience to others. However, despite these problems, after multiple attempts to arrange the data collection sessions, all the data required was obtained.

3-5. Methods of data collection

3-5-1. Stimulated recall

Early works of communication strategy taxonomy rely to a large extent on speech production, and discourse analysis is used to classify strategies. Therefore, Poulisse (1987) has criticized this by noting that the early processing of strategies might be missed, but Poulisse's (1990) study shows that compensatory strategies still depend on speech production. Nakatani and Goh (2007) claim that by using only discourse analysis, researchers may not be able to discover the real intentions behind certain types of strategy use. That is, we cannot tell whether speech production occurs due to the implementation of strategies, or automatically without any intended strategy use. Furthermore, the taxonomy of communication strategy has been developed through speech production, which greatly depends on researchers' interpretations (Tarone, 1977; Corder 1983; Færch and Kasper, 1983; Poulisse, 1990; Kasper and Kellerman, 1997; Yosida-Morrise, 1998). When we consider strategy use as an ability to be measured in English speaking tests, we cannot assess strategies easily just based on speech production. For example, as a rater, it is difficult to know precisely when speakers use reduction strategies to avoid making errors in test-taking. Thus, the verbal report method is recommended in order to trace mental processes involved in using specific strategies, and this will cover speakers' intentions with regard to strategy use, which cannot be detected through discourse analysis. For the research I adopted stimulated recall which is a retrospective type of verbal report. Although Green (1998) points out that a concurrent (simultaneous) report may provide more accurate data, the reason for using stimulated recall is that the nature of speaking cannot allow speakers to verbalise their on-going mental processes while they are engaged in tasks. The procedure for stimulated recall was to videotape participants' test-taking processes and academic classroom activities, and these videotapes were played as stimuli for participants to recall what they were thinking about while engaged in speaking tasks in both test situations and classroom contexts. The following issues were considered in order to ensure collection of the highest quality data using stimulated recall methods (Gass and Mackey, 2000 & Mackey and Gass,

2005): (1) The interval between the task and the recall session should be as short as possible, as memories can be hindered by the time delay; (2) participants should be encouraged to recall what they were thinking about during the performance rather than to provide explanations or interpretations; (3) participants should use their L1 in recall sessions; (4) the stimulated recall procedure should be piloted. While Dornyei (2007) points out that participants should be trained concerning how to recall, as thinking aloud is not a natural process, Gass and Mackey (2000) argue that extensive training sessions may have an influence on the data produced; thus, simple instructions should be given. According to Swain *et al* (2009), previous tasks completion and previous stimulated recall sessions may affect the next performance and the next stimulated recalls; thus, the main study needs careful consideration regarding sequences of performance and recall sessions between tasks in testing and between the testing condition and classroom condition. All the issues mentioned above were facilitated by undertaking a careful pilot study (see Section 3-6).

3-5-2. Speech sample collection

Lazaraton (2002: 13) states that “what is important is that there may be a difference between what goes on in oral testing situations and in other settings of everyday life, and these differences bear on the assessments which those engaged in oral testing want to make”. That is, those engaged in oral testing should consider how oral performance happens in non-test contexts, and this should be reflected in testing. In order to design the speaking test that reflects non-test contexts it is necessary to study the process of oral communication in both contexts. Van Lier (1989) also examines the different features of conversation in testing and in real situations by using discourse analysis. The discourse analysis method was favoured as an early approach towards communication strategies research, which focused on a problem-solving approach (Færch and Kasper, 1983). Therefore, discourse analysis may allow us to identify strategies from speakers’ actual speech production and differentiate between strategy

use in test and non-test conditions. Thus it may finally answer the question of to what extent test performance reflects strategy use in an academic context.

Questionnaires and interviews have been widely used to investigate strategy use, but these methods appear to rely on the speakers' perceptions. Thus, they are of limited use in observing the mental processes involved in strategy use. Kasper and Kellerman (1997) argue that communication strategies can be found explicitly or implicitly through discourse analysis. For instance, learners may explicitly admit their problems in speech, or they may implicitly exhibit increased periods of hesitation in their discourse. Therefore, they suggest that discourse analysis is one of the principle methods for investigating strategy use in speaking. However, Kasper and Kellerman (1997) did not explain what can be found explicitly and what can be exhibited implicitly. It is assumed that strategies found through researchers' interpretation can be implicitly used strategies, while strategic behaviour present in speech can be the result of an explicitly used strategy. For the study, therefore, observable strategies in speech were the focus of the investigation. This is important as we can only assess observable variables in language testing. Thus, another method which can be used for triangulation to make up for the limits of discourse analysis and stimulated recall, was used.

3-6. Pilot study

Three pilot studies were carried out to confirm whether the proposed methods were feasible ways of collecting the data (Mackey and Gass, 2005).

3-6-1. Pilot study 1: test-taking

Participant: A male postgraduate Korean student whose English proficiency level was limited (scaled score 10) took part in pilot study 1. For the 1st pilot study, the pre-test was not held to assess the participant's proficiency. The level of English proficiency was assessed from the test-taking sample speech.

Instrument: The practice version of the iBT speaking test included in the official guide to the new TOEFL® iBT (2007) was used. The test consisted of two independent tasks and four integrated tasks.

Data collection: First, the participant took the introduction to the iBT speaking test to make him familiar with the types of tasks and the test format. Consequently, the participant was given one sample independent task to familiarise himself with stimulated recalls. Then, he completed six tasks in about 20 minutes and the whole process was videotaped (using digital hard driver video camera) and audio recorded (using Olympus W-31). The sample speech recorded from test-taking was used to assess the level of proficiency and for discourse analysis. After the completion of six test tasks the stimulated recall session was conducted and the participant was asked to verbalise what he was thinking about during his speaking performance. The recorded performance was shown to the participant as stimuli during the stimulated recall. The stimulated recall was audio recorded. The participant was free to stop the video player whenever he wanted to report his thoughts when engaged in the speaking task, and he was allowed to speak in Korean.

Data analysis: First, test-taking speech production was transcribed and analysed quantitatively to see observable strategic behaviour such as pausing, repetition or self-correction. It was assumed that pausing may lead to or result from certain strategies. Furthermore, repetition and self-correction may be caused by consciously or subconsciously employed strategies. The frequency of these behaviours and their use on average in produced words were examined with the gained score in each task. The reason for focusing only on observable variables for discourse analysis was that the pilot studies were conducted to check the feasibility of data collection rather than to analyse the data in depth. Second, stimulated recall protocols were summarised in Korean and translated into English. The analysis of stimulated verbalisation was based on the working definition of speaking strategies for the study. The data was only analysed up to an initial stage (see Section 3-8-2).

Findings and discussion: The quantitative analysis did not show a significant result. However, the result showed that stimulated recall verbalisation enabled us to detect strategic behaviour that we could not find through discourse analysis. Furthermore, stimulated recall enabled us to investigate the speakers' real intention. For example, the participant reported that *"I used 'um' when I didn't want to use the same words."* If we had only used discourse-based data we would not have been able to know why the pause was made.

3-6-2. Pilot study 2: academic classroom

Participants: Three participants were involved in the classroom: one Korean (who did pilot study 1), and two non-Koreans. All of them were postgraduate students and the three participants were intended to simulate the small size of an academic classroom. The two non-Korean participants' proficiency levels were both good (see Table 3-3).

Table 3-3. *Estimated English proficiency levels of participants involved in an academic classroom*

Participant	Korean	Non-Korean	
	Korean male postgraduate	Non-Korean male postgraduate	Non-Korean female postgraduate
Proficiency level	Limited	Good	Good

*Scaled scores are omitted and only levels are shown for ethical reasons as two non-Korean participants were from the same department and their different scores can be revealed to one-another.

Instrument: An academic classroom was simulated with the assistance of the Student Learning Centre. One of the lectures from the Student Learning Centre was chosen and he revised one of his sessions, 'Plagiarism', to be in the same format as the iBT speaking test: two independent tasks and four integrated tasks. When the classroom

was designed, the iBT speaking task types, the classroom size, the length of reading text, and the length of listening passage were considered. A brief comparison of topics from speaking activities in tests and classrooms is described in Appendix 3-3. However, the simulated classroom designed for the pilot study could not be used for the main study as the lecturer involved in the research left the University to work elsewhere during the course of the research.

Data collection: The whole class was both videotaped and audio recorded. There was a ten-minute break between classroom and stimulated recall sessions. The stimulated recall procedure was the same as the one in pilot study 1 (see Section 3-6-1).

Data analysis: Only the Korean participant's speech sample was transcribed. However, if there were any interactions between the Korean participant and the others, or the two non-Korean participants and the lecturer, they were transcribed.

Findings and discussion: Discourse analysis showed that the participant used certain strategies which he did not use for test-taking such as asking to clarify the question (e.g. "sorry?" and "Summarising?") and making up words (e.g. "maded" for made and "unevitable" for inevitable). He also reported learning from his peers (for example, "*I was thinking of the way S spoke and learned how to use the sentences*"). Therefore, he reported strategies which were affected by his peers and these strategies could only have been made in classroom conditions where there were interactions with other students or lecturers.

3-6-3. Pilot study 3: test-taking

The purpose of pilot study 3: The 3rd pilot study altered the sequence of stimulated recall sessions. While the first pilot study stimulation recall verbalisation took place after all 6 tasks had been completed (see Section 3-6-1), pilot study 3 stimulated recall sessions were done immediately after each task. Moreover, it was also decided to include different proficiency levels, as it was planned for the main study that

proficiency level would be considered as the key moderator variable in strategy use in test and classroom conditions for the main study. Moreover, the 1st and the 2nd pilot studies used a digital hard drive video camera and a computer for the stimulated recall, which turned out to be a long and complicated process from task completion to stimulated recall. Thus, a different way of recording the speaking performance needed to be considered to reduce the time gap between task completion and stimulated recall verbalisation. Thus, after consulting the AVS (Audio Visual Service) about how to reduce the time gap between task completion and the stimulated recalls, their advice was taken and this pilot study used a VHS video camera, video player and a projector, which lessened the time between the task completion and the stimulated recall verbalisation.

Participant: A female undergraduate student took part in the 3rd pilot study. The level of her English was Fair (scaled score 20).

Instrument: The same material was used for pilot study 1.

Data collection: The data was collected in the same way as for the first pilot study, except the stimulated recall was conducted after each task was completed.

Data analysis: The speech sample and stimulated recall verbalisation were analysed in the same way as pilot study 1.

Findings and discussion: The result showed that the participant used less repetition for the independent task performance, and less pauses were made in integrated task performances when comparing the result with the one from pilot study 1. From stimulated recall verbalisation the participant reported significantly more strategies than in pilot study 1 (see Table 3-4).

Table 3-4. *Reported strategies from stimulated recall in the pilot studies 1 and 3*

	Pilot study 1	Pilot study 3
Task 1		Setting the goal Planning Searching for formal words
Task 2	Searching for new words Guessing	Understanding the context Setting the goal Searching for the normal way of speaking Searching for new words
Task 3	Using the words from the passage	Attempting to use new forms Using repetition to fill the time Linking to the learning from the classroom Avoidance L1 accent Attempting to use new words Using words from the passage
Task 4	Using the words from the passage Making up the answer	Note-taking Attempting to use the certain types of sentence
Task 5	Note-taking Planning structure	Using listening content Closing management
Task 6		Thinking about the solution for any mistakes made Closing management by using certain expression, such as “that’s all”

3-6-4. Implications from pilot studies for the main study

In pilot study 1, stimulated recall was conducted after all six tasks were completed and this may have caused a lack of verbalisation, since a participant’s memory may be

hindered by the passage of time. Therefore, the 3rd pilot was conducted to change the sequence of stimulated recall sessions. For the 3rd pilot, stimulated recall sessions were done after each task completion and more strategies were reported; therefore, this sequence was also applied to the main study. In pilot study 1, the participant reported his reflections rather than what he was thinking about while completing the speaking task. For example, he reported that *“if I had taken notes to write some reasons, the answer would have been more systematic”* (for task 1) and *“it would have been better if there had been enough time”* (for task 5). However, the participant reported his reflections less frequently in pilot study 2, which was conducted after the first pilot; thus, the participant may have been more familiar with stimulated recall procedure. As a result of this, during stimulated recall training sessions for the main study I showed some examples of the reflections or perceptions the participants might be able to report through stimulated recall sessions, and asked participants to report only what they were thinking about while engaged in the main study.

Although two campus-based topics were designed by ETS (discussing field trips or parking problems on campus), which usually occurs outside the classroom, in pilot study 1 I put these tasks into the classroom activities which were related to the topic of plagiarism. The types of tasks were the same as the ones in the test, but the topics were academic rather than campus-based. Therefore, I finally excluded the campus-based tasks from the main study because these were not the kinds of topics that lent themselves to use in an academic classroom environment.

The 3rd pilot study was conducted under test-taking conditions in order to examine how two different factors (the change of verbalisation time after each task and the participants' English proficiency level) affected the data. As a result, more strategies were reported, but whether high proficiency level speakers may use more strategies or how the sequence of protocols may affect data collection was not clear. Thus, this investigation was taken into consideration in the main study.

3-7. Main study

3-7-1. Participants

3-7-1-1. Korean participants and non-Korean participants

The sampling procedure consisted of four key factors, as suggested by Cohen *et al* (2007: 100): the size, representativeness, access to the sample, and the sampling strategy. First, six Korean participants were chosen (see Table 3-5). The number was small because the study would deal with a considerable amount of speech production data collected from stimulated recall verbalisation and spoken discourse. 12 non-Korean students were selected to simulate the academic classrooms (see Table 3-8). Second, according to ETS (2007), one of the biggest groups taking TOEFL was Koreans. Although six Korean students studying at English universities cannot represent all Korean students, the study can be used as a basis for further large scale studies in the future. Third, as the study was conducted at English-medium universities where there were plenty of international students who had to take academic proficiency tests, I did not expect to find any difficulty in recruiting participants. However, there were difficulties because female participants and students with a higher English proficiency level were more willing to take part in the research. As a result, the number participating in the academic classroom condition was reduced from four to three, even though it had originally been planned to control the gender variable in academic classrooms by simulating gender balanced academic classrooms with two males and two females. Second, over the period of data collection from recruiting participants and taking pre-tests to actual data collection from test-taking and academic classroom activities (see Figure 3-1 and Section 3-7-2-1), a maturation problem emerged. Twelve Korean students took pre-tests and none of them were in the lowest level: Weak level (scaled score, 0-9). The research attempted to investigate three different proficiency levels: Good (scaled score, 26-30), Fair (scaled score, 18-25) and Limited (scaled score, 10-17). Thus, two Korean students were selected for each level. However, students from Fair and Limited levels showed better performances in actual test-taking and academic classrooms by the time the main study took place. Therefore, strategic

processes were analysed in two different levels, Fair and Good, depending on the scores gained from the actual test (see Table 3-6). Six academic classrooms were set up and each classroom consisted of one Korean and two non-Korean students with the same proficiency levels as determined from pre-test scores, except for one Limited level class due to the participant leaving unexpectedly. His vacancy was fulfilled with a Fair level student (see Table 3-8). This was inevitable because after the classroom session was arranged, it was difficult to find a participant of the same level. Finally, I used the snowballing strategy to recruit participants, which means participants were introduced by participants who were already involved in the research. Consequently, to recruit participants I sent e-mails to the ELTU (English Language Teaching Unit), the TESOL (Teaching English for Speakers of Other Languages) master course and the Modern Language department, where students seemed to be more interested in English language testing. Twelve were recruited by circulating e-mails and 21 participants from the snowballing method. Finally, 18 out of 33 took part in the main study.

Table 3-5. *Korean participants' background*

	Gender& age	Education level	Length of English Study	Length of stay in English- speaking countries	Previous experience of English tests
KP1	Female, 21	Undergraduate	9 years	5 months	iBT
KP2	Female, 20	Undergraduate	11 years	12 years	TOEIC
KP3	Male, 34	Postgraduate	20 years	4 years	PBT, CBT
KP4	Female, 21	Undergraduate	12 years	2 months	iBT
KP5	Male, 24	Undergraduate	10 years	1 months	IELTS
KP6	Female, 31	Postgraduate	15 years	7 months	TOEIC, IELTS

Table 3-6. *Scores gained from the pre-test, actual test, and the academic classroom*

Participants	Pre-test score (raw and scaled) & level	Actual test score (raw and scaled) & level	Academic classroom score (raw and scaled) & level
KP1	3.39 (26) & Good	3.67 (28) & Good	3.63 (27) & Good
KP2	3.44 (26) & Good	3.46 (26) & Good	3.88 (29) & Good
KP3	3.23 (24) & Fair	3,67 (28) & Good	3.34 (27) & Good
KP4	3.23 (24) & Fair	3. 42 (26) & Good	3. 34 (27) & Good
KP5	1.81 (13.5) & Limited	2.25 (20) & Fair	3.42 (27) & Good
KP6	2.1 (15) & Limited	2.88 (22) & Fair	2. 96 (22) & Fair

3-7-1-2. Raters

Rater A: A 62-year-old Irish female took part in assessing the participants' speaking performance. She has been examining writing and speaking parts in most English proficiency exams provided by Cambridge ESOL since 1988.

Rater B: A 44-year-old Pakistani female was also involved in assessing speaking performance. She has had about 20 years of extensive examining experience in language assessment, involving many age levels from kindergarten to adult, from primary to advanced levels. She is now working for IELTS, assessing both writing and speaking.

Both raters claimed that they needed more standardisation training to assess the iBT speaking test at the beginning, since the format of test was not familiar. Also the criteria to be examined differed from the IELTS which is a one-to-one interview format. Therefore, they were given five speech samples to compare the scores and had a conversation on the phone to standardise the scoring procedure.

3-7-1-3. The lecturer for academic classroom activity

A 64-year-old female English lecturer was recruited for this part of the research. She was also involved in designing the academic class in terms of the content. She has been a professional writer and lecturer for 30 years.

3-7-2. Instruments

3-7-2-1. Test-taking: pre-test & main test

The official guide to the new TOEFL® iBT (2009) provided a CD-ROM including two practice tests, which supposedly imitate what prospective test-takers will face in the real test. Each test consisted of 6 tasks (two independent and four integrated tasks). The first test (all six tasks) was used for a pre-test to estimate all participants' English proficiency levels in order to place the same proficiency level participants in the same class, and also to train Korean students in how to conduct stimulated recalls. The second test (four tasks only to compare academic classrooms) was used to collect the main data (see Appendix 3-4). All the scores were assessed by two raters based on the scoring rubrics provided by ETS. The raw scores (range 0-4) were awarded according to 3 criteria (Delivery, Language Use, and Topic Development) and these raw scores were later converted into scaled scores (range 0-30). Finally, the participants were grouped into four levels classified by ETS as Good, Fair, Limited, and Weak (see Table 3-7). For the main study, there were no Korean participants in the Weak and Limited levels, thus students at these levels were not involved.

Table 3-7. *Speaking performance levels by ETS*

(<http://www.ets.org/toefl/scores/improve/>)

Performance level	The range of scaled scores
Good	26-30
Fair	18-25
Limited	10-17
Weak	0-9

3-7-2-2. Simulation of academic classrooms

An academic classroom was designed to investigate what strategies participants use when engaging in the iBT speaking tasks in an academic classroom. However, one standard model of an academic classroom does not exist in reality. It was assumed that academic classes could vary in terms of topics and configurations. Thus, much effort was focused on task types, classroom configuration, and the content of each task in order to replicate the iBT speaking tasks in the academic classroom. First, the simulated class was designed with four speaking tasks from the iBT speaking test (two independent and two integrated tasks). Although two integrated tasks based on campus topics were considered for inclusion in the main study until the piloting stage, these two tasks were excluded as it was difficult to generate in the classroom listening stimuli such as a conversation held between two students or between a student and a professor about the topics related to campus life. As noted above, those speaking activities were supposed to be performed outside of classrooms (ETS, 2009).

The configuration and the content of the academic classroom was mainly based on the suggestions from the TOEFL 2000 speaking framework (Butler *et al*, 2000) and test specification for the speaking element of TOEFL iBT (Pearlman, 2008: 246-247; ETS, 2009: 18). The participants' roles (number, gender, L1 and educational level), relationships (symmetric and asymmetric), and proficiency levels were considered, as well as the nature of the tasks and the stimulus. First, Butler *et al* (ibid), suggested that

there are four types of classrooms existing in academic settings: one-to-one, a small group, a small audience, and a large audience. The small group size classroom was adopted for the main study, as turns could be controlled by a lecturer in order to assign sometime to all the participants. Also, the classroom pictures shown in the official guide to the new TOEFL iBT (2009) show small groups of three to five students, and these were taken into consideration. Moreover, it was assumed that students were more likely to speak in a small class setting. Thus, initially the academic classroom was designed with four students (one Korean and three non-Korean students). However, this number was decreased from four to three (one Korean and two non-Korean students) due to the difficulty of recruiting participants. Although a gender balance could no longer be achieved, there is no theoretical reason to suspect that this might impact upon strategy use. Secondly, educational backgrounds and participants' L1 were also taken into consideration in order to control other variables that are not manipulated as part of the research design. Each class was made up of three students with the same educational background (either undergraduates only or postgraduates only) and they were all different L1 users. Thirdly, participants with the same proficiency levels participated in the same class. This is because if their levels differ, more variables must be taken into consideration for the data analysis. However, as noted, one class consisted of two limited level students and one fair level student, due to a participant's unexpected leaving. Finally, the nature of task types and stimulus materials were considered, including the length of reading and listening passages from specifications for the speaking measurement of TOEFL iBT (Pearlman, 2008: 246-247; ETS, 2009: 18). Much care was taken in the collection of reading materials and listening materials for tasks 3 and 4. For this, the topics of the tasks which might be comprehensible at any University level were chosen: Standard English for task 3 and Radio development in the UK and the USA for task 4. The content of tasks and specifications of tasks in the iBT speaking test and an academic classroom are shown and compared in Appendix 3-4.

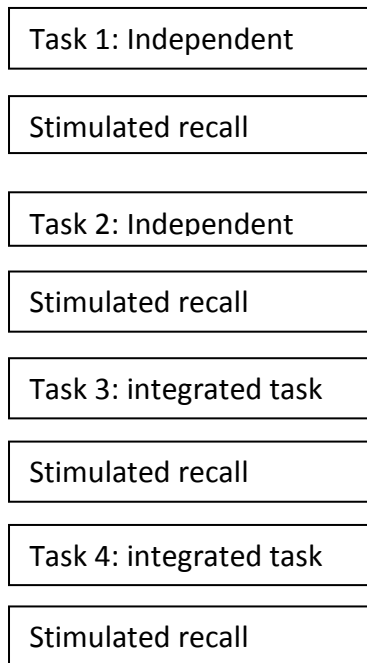
3-7-3. Data collection

3-7-3-1. The sequence of stimulated recall regarding task completion

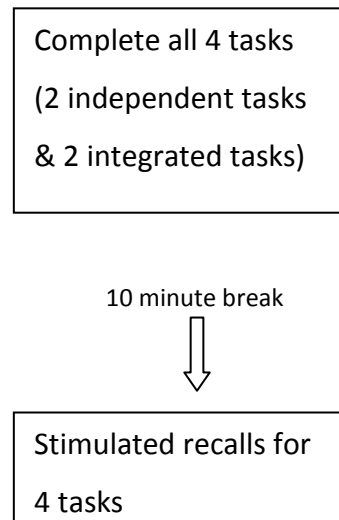
The sequences of conducting stimulated recalls for test-taking and academic classrooms were different. According to the pilot study, more verbalisation data was gathered when the stimulated recall session was carried out after each task was completed, rather than after all tasks were completed in the test-taking procedure. Therefore, stimulated recall sessions were conducted after each task was completed for test-taking (see Figure 3-2), whereas it appeared to be difficult to conduct stimulated recall verbalisation after each completed task in the classroom. Unlike test-taking procedures, there were four speakers (three students and one lecturer) involved in the academic classroom. If the class was stopped after each task was completed, the interaction occurring among speakers and the classroom flow would be interrupted. Thus, stimulated recall sessions were done after all four tasks had been completed in the academic classrooms (see Figure 3-2). Furthermore, the position of the researcher during the stimulated recalls was taken into consideration, as when the researcher sat facing the participant, the researcher tended to give feedback which interfered with the participant's recollection of memories. Therefore, the researcher sat behind the participant (see Figure 3-3).

Figure 3-2. *Comparing the data collection between test-taking and academic classroom*

A. Test-taking

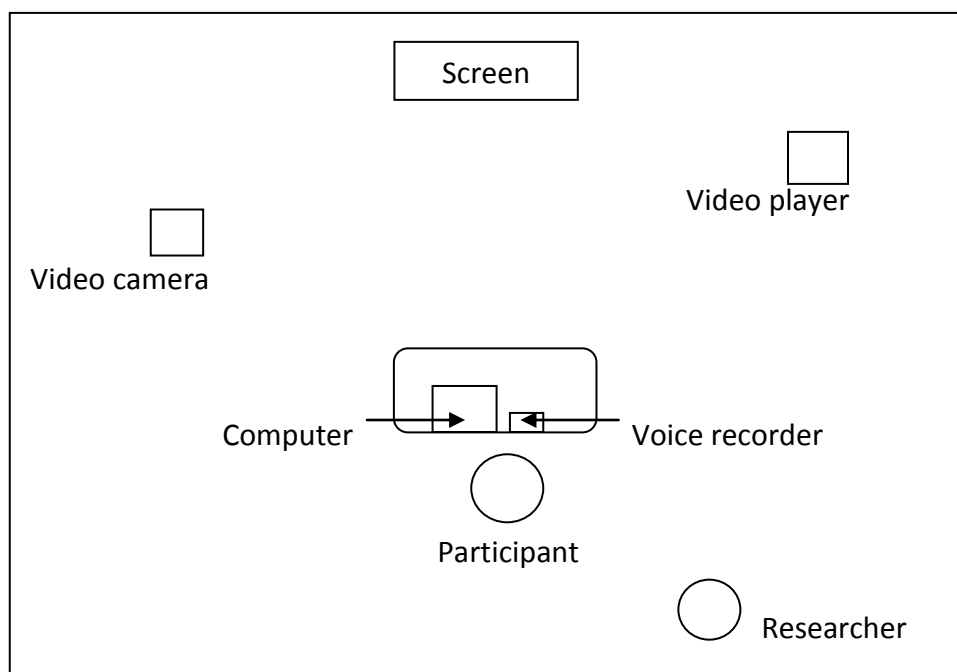


B. Academic classroom



*times were not limited for stimulated recalls

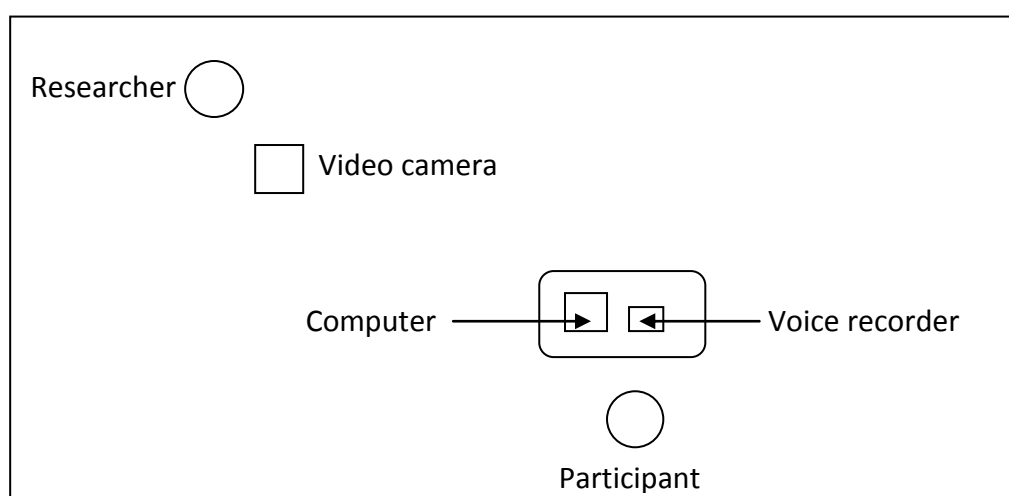
Figure 3-3. *The physical layout of stimulated recall sessions*



3-7-3-2. Test-taking

The participant sat in front of the computer, and the voice recorder (Olympus WS-311) was put next to the computer to record the participant's speech samples from test-taking and stimulated recalls. Test-taking processes were also videotaped (VHS type) and these recordings were used as stimuli for stimulated recall sessions (see Figure 3-4). The participant did one test task, and as soon as they completed that task they were asked to report what they were thinking when they were engaged in the task. The stimulated recall session was conducted in three steps: (1) The participants were asked to report what they were thinking about immediately after task completion. During this step the videotape was rewound to the first part of the task completion for the next step. (2) The participants watched their performance through a projector in order to help elicit their thoughts whilst they were engaged in speaking tasks (see Figure 3-3). They were free to stop and play the video player at any time in order to verbalise their thoughts. Furthermore, they were encouraged to verbalise when they kept silent or when they left long pauses or made gestures and facial expressions such as laughing or eye movements. If participants were unclear whether they were reporting their own thoughts during the task or their perception made after the task was completed, they were asked to clarify their verbalisation. However, they were not asked 'why' questions, as the research was only looking for the process involved in task completion. (3) After watching the video, the participants were asked to report anything they might have missed at steps (1) and (2). After one task completion and stimulated recall session was conducted, participants moved on to the next task (see Figure 3-4). Test-taking data collection was carried out six times separately with six different Korean participants.

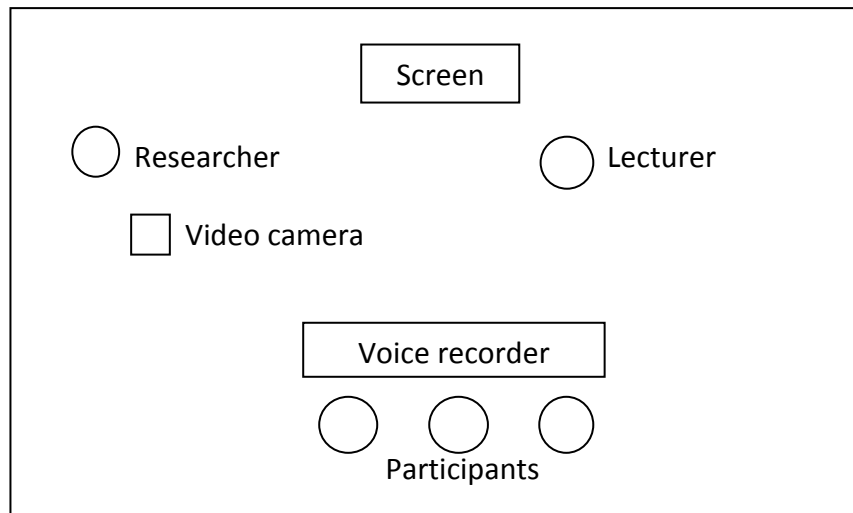
Figure 3-4. *The physical layout of the test-taking*



3-7-3-3. Academic classrooms

Two independent tasks and two academic topic-integrated tasks were given in academic classrooms. For task three (Reading-Listening-Speaking integrated task) the reading passage was shown on the projector and participants were allowed 60 seconds to read. The lecturer gave a lecture based on a transcript we had developed for the purpose (see Appendix 3-4). There were three students (one Korean and two non-Korean) and one lecturer involved in each academic classroom. The researcher was present in the classroom to control the videotaping, which would be used as a stimulus for stimulated recall sessions followed by classroom speech collection (see Fig 3-5).

Figure 3-5. *The physical layout of the academic classroom*



Members of each classroom are shown in Table 3-8 and the rationale for classroom configuration and content is described in Section 3-7-2-2. A test-taking stimulated recall session was carried out after each task completion and an academic classroom stimulated recall session was conducted after all four tasks had been completed. This was mainly because there were three participants involved at the same time and it was expected that it would interfere with the natural flow of the classroom session. All three students were involved in responding to four tasks and the turns were assigned by the lecturer. Each class lasted approximately 30 minutes. Ten minutes after the classroom session finished, one Korean student remained to conduct stimulated recall sessions. The stimulated recall session had three steps, the same as the test-taking one. Participants were asked what they were thinking about while they were engaged in the speaking tasks. Participants verbalised after the task completion, while watching their performance, and after watching their performance. Academic classrooms were both audiotaped and videotaped, but stimulated recall sessions were only audio recorded. Academic classroom sessions were conducted six times and six stimulated recall sessions were conducted with six Korean participants after each class.

Table 3-8. *Participants for each academic classroom*

Class number	Levels of Proficiency by pre-test	Educational level	Participants (L1 & Gender)
C1	Good	Undergraduate	C1KP1 (Korean, Female) C1NP1(German, Female) C1NP2 (Turkish, Male)
C2		Undergraduate	C2KP2 (Korean, Female) C2NP1 (German, Male) C3NP2 (Spanish, Female)
C3	Fair	Postgraduate	C3KP3 (Korean, Male) C3NP1 (Chinese, Female) C3NP2 (Arabic, Male)
C4		Undergraduate	C4KP4 (Korean, Female) C4NP1 (Chinese, Male) C4NP2 (Greek, Male)
C5	Limited	Undergraduate	C5KP5 (Korean, Male) C5NP1 (French, Female) C5NP2 (Arabic, Male)
C6		Postgraduate	C6KP6 (Korean, Female) C6NP1 (Turkish, Male) C6NP2 (Greek, Male: Fair Level)

3-7-4. Consideration for counter balance and order effect

It was assumed that strategy use may be affected by previous tasks and their completion. Therefore, in order to minimise the effect of consequences on the results, half of the Korean participants were involved in test-taking first and academic classroom activities later. Consequently, the other half did it the other way around (see Table 3-9).

Table 3-9. *The sequence of data collection regarding order effect*

Order	Academic classroom → Test-taking	Test-taking → Academic classroom
Participants	C1P1 (Good, undergraduate) C3P1 (Fair, postgraduate) C5P1 (Limited, undergraduate)	C2P1 (Good, undergraduate) C4P1 (Fair, undergraduate) C6P1 (Limited, postgraduate)

3-8. Data analysis

3-8-1. Coding scheme

3-8-1-1. Coding scheme for stimulated recall verbalisation

The coding scheme was developed based on the empirical study undertaken by Swain *et al* (2009) (see Appendix 3-5). Swain *et al* (2009: 2) defined “strategic behaviours” used to complete the iBT speaking tasks as “the conscious, goal-oriented thoughts and behaviours test-takers use to regulate cognitive processes, with the goal of improving their language use or test performance”, and presented strategies using five categories: Approach, Communication, Cognitive, Metacognitive, and Affective. Each category also contains substrategies. Swain *et al* (2009: 81) defined communication strategies as “involving conscious plans for solving a linguistic problem in order to reach a communicative goal”, focusing on compensatory functions of communication strategy use. Hence, the category of communication strategies was changed into compensation strategies for the main study. Consequently, the coding scheme has been modified with the new findings and has expanded to include strategic processes not included by Swain *et al* (2009). For example, in approach strategies, the strategy of *recalling the dialogue* was deleted from the final coding scheme as the main study excluded campus-based integrated tasks which involved dialogues. In compensation strategies, a new strategy was added into the coding scheme of the main study (*remaining silent*) while *simplifying the message*, *reading ahead*, and *restructuring*

were not included in the final coding. *Remaining silent* differs from *pausing* in that the former suggests no response was offered. In contrast, the latter reflects hesitation before a response is proffered. *Linking to the previous experience/knowledge* and *summarising* were moved into the cognitive category since those strategies were considered to involve explicitly mental activities. Swain *et al* (2009: 82-83) defined *paraphrasing* as “restating the thought in another form or with other words” “to clarify meaning”, or “to avoid repetitions”, and *approximating* as the use of lexical or grammatical substitution. For the final coding, *paraphrasing* retains only the meaning of “restating the thought in another form or with other words to clarify meaning”. *Approximating* was replaced with *lexical substitution*, and *generalisation* was added to present strategies defined as a “speaker using a single alternative lexical item, such as a superordinate”. In the cognitive category, *using imagery*, *memorising* and *processing inductively* were not found for the main study, but new findings of strategies were eventually included in the final coding scheme, such as *recalling the previous experience*, *recalling the previous learning*, *recalling own situation*, *searching*, *rethinking choices affected by peers*, and *considering grammar*. *Using mechanical means to organise or remember information* was used in four means of accomplishing communications in Swain *et al*, but for the main study these were merged into one strategy: *note-taking*. In the metacognitive category, 8 new strategies were added to the final taxonomy: *evaluating own knowledge*, *evaluating peers’ performance*, *evaluating time management*, *evaluating task difficulty*, *evaluating own comprehension of reading or listening passage*, *evaluating interlocutors’ comprehension*, *comparing own performance with peers’ performances*, and *justifying performance*.

Swain *et al* found that affective strategies were used in order to lower anxiety and encourage oneself, which accounts for 3.63% of the total number of strategies used; for the main study, participants only reported if they felt negatively or positively during task completion. Therefore, the final coding scheme excluded the category of affective strategies. However, Bachman and Palmer (2010: 42) state that “test takers’ affective schemata may influence the ways in which they process and attempt to

complete the assessment tasks”. That is, it is assumed that the feelings of participants may have affected their performance. For example, when speakers felt nervous or confused, their performance might have differed from when they felt confident or comfortable. Therefore, *positive feelings* and *negative feelings* were added into the final coding scheme. The development of the coding scheme for the study was done iteratively and the final coding scheme includes five categories. Each category possesses substrategies as follows (see definitions of each strategy and examples in Appendix 3-6):

Approach strategies: what the speaker does to orient him or her to the task

1. Recalling the task type
2. Recalling the question
3. Recalling the text or the reading passage
4. Recalling the lecture or the listening passage
5. Generating choices
6. Making choices
7. Developing reasons

Compensation strategies: involving conscious plans for solving a linguistic problem in order to reach a communicative goal

1. Avoiding
2. Using L1 (Korean)
3. Lexical substitution
4. Generalisation
5. Paraphrasing
6. Borrowing
7. Reviewing notes
8. Referring to notes
9. Organising thoughts
10. Guessing

11. Repeating
12. Rehearsing
13. Stalling
14. Slowing
15. Thinking ahead
16. Elaborating-a
17. Elaborating-b
18. Elaborating-c
19. Pausing
20. Reviewing the text
21. Remaining silent

Cognitive strategies: speakers involve manipulating the target language to understand and produce languages

1. Attending
2. Attending to peer speech
3. Anticipating the content
4. Anticipating the question
5. Anticipating the turn
6. Anticipating own performance
7. Note-taking
8. Summarising
9. Translating
10. Inferencing-a
11. Inferencing-b
12. Recalling the previous experience
13. Recalling the previous learning
14. Recalling own situation
15. Searching for the words or expressions
16. Rethinking choices affected by peers
17. Considering grammar

Metacognitive strategies: involving goal setting, planning and appraising

1. Setting the goal
2. Identifying the purpose of the task
3. Planning
4. Changing plans
5. Monitoring time
6. Self-correcting
7. Evaluating the content of what was read/heard
8. Evaluating performance
9. Evaluating language production
10. Evaluating own knowledge
11. Evaluating peer's performance
12. Evaluating time management
13. Evaluating task difficulty
14. Evaluating own comprehension of reading or listening passage
15. Evaluating interlocutors' comprehension
16. Comparing own performance with peers' performances
17. Justifying performance

Feelings: Speakers feel either positive or negative

1. Positive
2. Negative

3-8-2. Analysis of stimulated recall verbalisation

Firstly, recorded stimulated recall verbalisation was fully transcribed in Korean. Secondly, the Korean transcripts were translated into English. Thirdly, the translated scripts were split into segments which contained either one strategic process or one non-strategic process. Fourthly, each segment was coded based on the coding scheme

(see Appendix 3-6). Lastly, the strategies used were connected with actual speech where the discourse analysis indicated there was observable evidence that strategy use was taking place. The following shows an example of data analysis:

Test-taking task 4: KP1

Verbalisation from watching the video after the task completion

(1) Transcribing in Korean

그래서 지금 저기서 platform 한 다음에 약간 멈춰하고 있는 게 platform 이라는 그게 그 대게 뭐랄까 그 복잡한 감정을 표현하기 위한 건데 그거를 어떻게 그냥 platform is to express 뭐 이렇게 했으면 될 것 같은데 지금 생각하면 저 때 생각이 안 나서 benefit 여기 딱 benefit 적은 게 보여서 그 동사를 이용해서 했어요

(2) Translating from Korean to English

(a) I stopped for a while after saying “platform” because I thought that “platform” meant something like complicated emotions, so I should have said that “platform is to express” simply./ (b) But I couldn’t think of it and I just used the verb “benefit” as it was seen in here (her notes)/

(3) Selecting of the transcription where a strategic process is involved

(a) I stopped for a while

(b) I just used the verb, “benefit” as it was seen here (her notes)

(4) Coding

(a) was coded as *pausing*

(b) was coded as *referring to notes*

(5) Strategies found for comparing with actual speech

(b) was evident in the actual speech

The stimulated recalls were conducted at three stages: (1) participants verbalised right after they completed a task, (2) participants verbalised while they were watching their own performance through the video, (3) participants verbalised after watching the whole performance. The data from stages (1) and (3) sometimes overlapped with the data from (2), and participants sometimes reported the same thoughts repeatedly. Hence, in those two cases, the more detailed verbalisations were chosen for final data analysis. For example, KP4 reported her thoughts right after completing test-taking task 3, as *"I realised that there wasn't enough time left and it made me embarrassed and I didn't answer well."* She also reported during watching her own performance that *"I stopped at that time as I thought that I had spent too much time explaining about the situations, so I thought that I had to finish it soon and I was in a hurry which made me feel frustrated and stop talking."* Both verbalisations showed that she reported the same thoughts, but the latter was chosen for the main data since it was reported in more detail.

Furthermore, it was challenging when translating the data from spoken Korean (some of which was in broken Korean) into English, so some implicit meanings were embedded in brackets to make the sentences more understandable for readers.

3-8-3. Analysis of spoken discourse

Collected speech production was fully transcribed prior to the analysis of the data. Then, the collected discourse from test-taking and academic classrooms was analysed in two ways. Firstly, the discourse was coded based on the working definition and taxonomies developed from the product-oriented and process-oriented approach of communication strategy studies (Tarone, 1977; Færch and Kasper, 1983; Kasper and Kellerman, 1997; Poulisse, 1990) (classified in 2-2-2). As mentioned at the beginning of

2-2-2, new types of strategies were investigated as theories and previous studies were not conducted with the same tasks and in the same contexts. After the coding procedure, strategy use was compared by proficiency level and tasks in the primary conditions of test and non-test situations. Secondly, strategies found in discourse were compared with strategies reported from stimulated recall verbalisation in order to see how reported strategies relate to actual speech production, and this may let us know something about the degree of consciousness. This is important, as how strategic behaviours present in actual speech may provide observable evidence of strategy use. This may help with the possibility of adding strategies into the scoring rubrics, as we cannot measure speaking proficiency by analysing test takers' minds, but only from their speech production. Furthermore, the findings concerning degrees of consciousness may provide useful ideas for strategy instruction in classrooms.

3-8-4. Statistical analysis

Although the study has utilised a qualitative approach in order to find evidence of strategy use by using stimulated recalls and collecting speech samples to show observable evidence in actual speech, some descriptive statistical analysis was carried out in order to investigate the frequencies, the relationship between levels and task types, and strategy use.

4. Findings and Discussion

This chapter illustrates the findings of the study with examples of data and discussions of the findings and their significance. Firstly, strategic processes reported from stimulated recall verbalisation (SRV) after completing tasks in tests are explained according to proficiency levels and task types. Secondly, strategic processes involved in academic classrooms are shown in the same order as in the test. Thirdly, strategic processes are compared between the test and classroom by overall use, proficiency levels, and task types. Consideration will be given to the way strategic processes differ from individual to individual according to achievement levels in both contexts. Particularly when there are different levels gained, strategic processes are compared by contexts. Reported feelings will be looked at across different contexts. Finally, the connection between reported strategy use and actual speech production will be examined, followed by a summary of the findings and their significance.

4-1. Strategic processes in the test

4-1-1. Overall strategic processes (see Appendix 4-1)

50 individual strategies were used to complete four speaking tasks in the test-taking situation, comprising 6 different approach strategies, 19 different compensation strategies, 11 different cognitive strategies, and 14 different metacognitive strategies. In total, 246 different instances of strategy use were noted. Metacognitive strategies were the most frequently used, and accounted for 54.07 % of total strategy use. Second in frequency were compensation strategies (19.11%), third were cognitive strategies (15.45%), and approach strategies (11.38%) were used the least frequently. The most frequently used strategies in each category were *making choices* in approach, *pausing* in compensation, *searching for the words or expressions* in cognitive strategies and *evaluating language production* in metacognitive strategies. Under test conditions, the most used individual strategy was *evaluating language production* which accounted for 13.82% of total strategy use, followed by *planning* (9.76%),

evaluating performance (7.72%), *evaluating own comprehension* (6.50%), and *monitoring time* (4.47%). The five most used strategies were all metacognitive. Although metacognitive strategies were used the most frequently, compensation strategies were used over the widest range, with 19 different types of strategy. The following provides examples of individual strategies that were used most frequently in the top 5 from KP1's performance in the test (see Appendix 4-9).

Evaluating language production from test task 3: “여기서는 말하면서도 그냥 한국말로 계속 이게 자신의 상황에 맞춰서 생각을 해서 다른 사람의 다른 사람이 아니 지금도 말이 잘 안 나오는데 뭔가 저기는 그냥 망했다고 생각을 했어요” (Translation: As I was speaking this part I was thinking that I should say “keep own situation and others” in Korean. But I can't even say that properly now. At that time I thought that I had failed.)

Planning from test task 2 from test task: “서로 도울 수 있다는 것을 생각했을 때는 구체적으로 뭘 돕지 해서 지금 당장 이번 주에 이사를 해야 되니까 이사를 할 때 도와줄 수 있다 이게 생각이 나서 그냥 일단 move 할 때 move stuff 를 준비했던 것 같아요” (Translation: I thought that people could help each other and I thought that we could help in small matters and I was thinking of the situation when I had to move and I prepared the words, “move stuff” to say it.)

Evaluating performance from test task 3: “여기서 계속 people people 이런 게 생각해 보니까 내가 the reading passage explains different in way people 하니까 explain 이 또 있는 거예요. 뭐지 왜 explain 이 또 있지? 아 그때 생각이 잠깐 안 나가지고 사람이 행동하는 거니까 behave 란 단어를 서야겠다 그래서 약간 멈췄어요” (Translation: I kept saying, “people people” here and I realised that there was the word, “explain” after saying that “the reading passage explains different in way people”. What? Why is there “explain”? At that moment I wasn't thinking of anything and I was planning to use the word, “behave” as it was about human action, thus I stopped for a while.)

Evaluating own comprehension from test task 4: “그래서 지금 이 예는 대개 착실하게 들어가지고 잘 설명할 수 있었을 것 같은데 왜냐면은 그 콧등을 만들면서 처음에는 별로여서 실망하고 계속 하면서 성공하고 그게 다 다른 상황에도 적용하고 이런 걸 대개 잘 이해를 했는데”(Translation: Therefore, for this example, (I expected that) I was going to explain well because I thought that I understood well about the following: as (children) were making clay (they) were disappointed at the beginning with poor quality of making but as they kept making it they were more successful and this (process) could be applied into different situations)

Monitoring time from test task 1: “easy to read 하고 나서는 별로 그거밖에 할 게 없는데 시간이 너무 많이 남아서....” (Translation: and after I said, “easy to read” I found there was nothing much left to mention and there was much time left....)

The findings of strategic processes from the test should be compared with ones in the classroom, which enable us to find characteristics of strategic process patterns in each context and this will be done in Section 4-3.

4-1-2. Strategic processes by proficiency levels: Good vs. Fair (see Appendix 4-2)

The total number of strategies employed by good level speakers was 159, while 87 were utilised by fair level speakers. According to the number of participants in each level, there are 4 good levels and 2 fair level participants. Thus, we need to consider the means of each speaker's strategy use in order to compare the frequency of strategy use between two groups. The mean of strategy use by those at good levels ($n=4$) and those at fair levels ($n=2$) were 39.75 and 43.50 respectively. That is, fair level speakers used more strategies than good level speakers overall. The four good level participants used 45 individual strategies including 5 types of approach strategies and 17 types of compensation strategies, 11 types of cognitive and 12 types of metacognitive strategies. On the other hand, the two fair level participants reported 29 individual strategies, including 6 types of approach strategies, 8 types of compensation strategies, 4 types of cognitive strategies, and 11 types of metacognitive strategies. The percentages of strategy use were calculated within each level.

Metacognitive strategies were used the most by good and fair level participants: 50.94% and 59.77% respectively. Furthermore, the second most used were compensation strategies (23.27%) by good level participants and cognitive strategies (16.09%) by fair level participants. Good level speakers showed the widest range of strategy use in compensation strategies (17 types) and metacognitive strategies (11 types) showed the widest range for fair level speakers. Both levels had 24 individual strategies in common, and those at good levels used 21 strategies which were not used by fair level students, while fair level participants used 5 individual strategies which were only used by those at fair level. Participants with a good level demonstrated significantly more compensation and use of cognitive strategies (see Table 4-1).

Table 4-1. *Strategies used only by each level in the test*

Strategy	Only used by good levels	Only used by fair levels
Approach		Recalling the listening passage
Compensation	Borrowing Reviewing notes Referring to notes Organising thoughts Repeating Rehearsing Stalling Thinking ahead Elaborating-a Reviewing the screen Remaining silent	Guessing Slowing
Cognitive	Anticipating the content Anticipating the question Anticipating the result of performance Recalling the previous experience Recalling the previous learning Recalling own situation Considering grammar	
Metacognitive	Evaluating the content of what was read/heard Evaluating own knowledge Justifying performance	Identifying the purpose of the task Changing plans
Total use	21	5

4-1-3. Strategic processes by task types: Independent vs. Integrated (see Appendix 4-3)

37 different types of strategies were used to complete independent tasks in test-taking conditions, and also 38 types of individual strategies were used for integrated tasks. 12 strategies were used only for independent tasks and 13 strategies were used only for integrated task completion. Both tasks elicited 25 types of strategies in common. The total number of strategies used was 246, 104 times for independent tasks and 142 times for integrated tasks, which constituted 42.28% and 57.72% of whole strategy use respectively. For both tasks, metacognitive strategies were used most frequently and compensation strategies were the second most used. However, cognitive strategies were the least used for independent tasks while approach strategies were the least used for integrated tasks. Table 4-2 shows strategy categories from the most to the least used according to the task type. As seen in Table 4-2, almost double the number of metacognitive strategies was used to complete integrated tasks than ones used for independent tasks. As Table 4-2 demonstrates, completion of integrated tasks relied on almost twice the number of metacognitive strategies required to complete independent tasks. Meanwhile, *evaluating own knowledge* and *evaluating own comprehension* were used more frequently to complete to independent tasks.

Table 4-2. *Percentage of strategy use by task types in the test*

	Strategies used for Independent tasks	Strategies used for Integrated tasks
1 st	Metacognitive: 18.70%	Metacognitive: 35.37%
2 nd	Compensation: 8.54%	Compensation: 10.57%
3 rd	Approach: 7.72%	Cognitive: 8.13%
4 th	Cognitive: 7.32%	Approach: 3.66%
Total	42.28%	57.72%

4-2. Strategic processes in the academic classroom

4-2-1. Overall strategic processes (see Appendix 4-4)

A total of 263 examples of 54 types of individual strategy use were found in the academic classroom, and these individual strategies fell into four categories: approach (6 types), compensation (16 types), cognitive (17 types), and metacognitive (15 types). The most frequently used strategies were metacognitive (44.49%) followed by cognitive (32.32 %), approach (11.79%), and compensation (11.41 %). *Making choices* (3.80%) was the most frequently used individual approach strategy and *lexical substitution* (1.90%) was most frequently used out of 16 types of compensation strategy. *Attending* (4.94%) and *planning* (8.75%) were the most-used in cognitive and metacognitive strategies respectively. The most-used of individual strategy was *planning* (8.75%), followed by *evaluating language production* (6.84%), *evaluating performance* (5.70%), *evaluating own knowledge* (4.94%) and *attending* (4.94%). The top 4 strategies were from the metacognitive category. The most widely utilised range of strategies was cognitive with 17 types of individual strategy.

4-2-2. Strategic processes by proficiency levels: Good vs. Fair (see Appendix 4-5)

228 individual strategies were used by the 5 good-level participants in 4 categories: approach strategies (11.40%), compensation strategies (11.84%), cognitive strategies (32.01%), and metacognitive strategies (44.74%) within good levels. 34 strategies were reported in speaking tasks in the classroom by one fair-level performance using 14.71% of approach strategies, 8.82% of compensation strategies, 32.35% of cognitive strategies, and 44.12% of metacognitive strategies within their own level. Both groups used metacognitive strategies the most (see Table 4-3). Furthermore, good-level participants used 49 individual strategies and fair-level participants used 19. 15 individual strategies (3 in approach, 4 in cognitive, and 8 metacognitive strategies) were used in common, but neither group showed any common use of compensation strategies. 5 good-level speakers used 34 individual strategies (2 approach strategies,

14 compensation strategies, 11 cognitive strategies, and 7 metacognitive strategies) which were not used by any fair-level speaker, while a fair-level speaker used 4 individual strategies: *recalling the reading passage*, *avoiding*, *guessing*, and *anticipating the performance* which were not used by good-level speakers. It can be assumed that the different number of participants may have resulted in the number of strategies only used by those at a good level being far greater than ones only used by those with a fair level of proficiency (see Table 4-4).

Table 4-3. *Percentage of strategy use by good- and fair-level speakers in the class*

	% of strategies used by good levels	% of strategies used by fair levels
Approach	11.40	14.71
Compensation	11.84	8.82
Cognitive	32.01	32.35
Metacognitive	44.74	44.12
Total	100 %	100 %

Table 4-4. *Strategies used only by each level in the class*

Strategy	Only used by good-level speakers	Only used by fair-level speakers
Approach	Recalling the question Generating choices	Recalling the reading passage
Compensation	Using L1 Lexical substitution Generalisation Paraphrasing Borrowing Reviewing notes Organising thoughts Repeating Rehearsing Stalling Slowing Thinking ahead Elaborating-b Elaborating-c	Avoiding Guessing
Cognitive	Attending to peer speech Anticipating the question Anticipating the turn	Anticipating performance

	Note-taking Summarising Translating Inferencing-a Inferencing-b Recalling the previous learning Rethinking choice Considering grammar	
Metacognitive	Setting the goal Monitoring Self-correcting Evaluating performance Evaluating task difficulty Evaluating interlocutors' comprehension Comparing own performance with peers' performances	
Total	34 substrateiges	4 substrategies

4-2-3. Strategic processes by task types: Independent vs. Integrated (see Appendix 4-6)

32 types of strategies (5 approach, 8 compensation, 11 cognitive, and 8 metacognitive) were used for independent tasks, while 46 types of individual strategies (6 approach, 11 compensation, 15 cognitive, and 14 metacognitive) were involved in completing independent tasks in the classroom. A greater range of strategies were employed for integrated tasks. However, two types of tasks showed some common use of 24 types of strategies: 5 approach, 3 compensation, 9 cognitive, and 7 metacognitive. 8 individual strategies (5 compensation, 2 cognitive, and 1 metacognitive) were used for only independent tasks, and 21 (11 compensation, 7 cognitive, and 3 metacognitive) for integrated tasks. The total number of strategies involved in performing independent tasks was 88, which constituted 33.84% of total strategy use in the classroom. 175 strategies were reported for integrated task completion, which accounted for 66.15% of whole strategy use in the classroom. That is, nearly two-fold the number of strategies were used to perform integrated tasks than independent tasks as a whole. The most widely used strategies were metacognitive for integrated tasks (31.56%), and the second most-used were cognitive strategies (22.81%) also for

integrated tasks. The third most-used were metacognitive strategies (12.93%) used to complete independent tasks, and the fourth were cognitive strategies (9.51%) for independent tasks (see Table 4-5). As seen in Table 4-5, except approach strategies, the other three categories of strategies were favoured for the completion of integrated tasks.

Table 4-5. *Frequency and percentage of strategy use by task types in the class*

Strategy	Independent tasks	Integrated tasks
Approach	18 (6.84%)	13 (4.94%)
Compensation	12 (4.56%)	18 (6.84%)
Cognitive	25 (9.51%)	60 (22.81%)
Metacognitive	34 (12.93%)	83 (31.56%)
Total	89 (33.84%)	174 (66.15%)

4-3. Strategic processes: Test vs. Academic classroom

In the previous section, strategic processes were presented in the test and classroom by levels and by task types. The data shows how strategies were used in each context and how strategy use varies by proficiency level and task type used in each context. In this chapter I compare strategic processes between test and classroom conditions in order to examine the extent to which the test condition replicates the academic classroom in terms of strategic processes across proficiency levels and task types.

4-3-1. All reported strategic processes: Test vs. Academic classroom

As seen in Table 4-6, more strategic processes were involved in the classroom in terms of total frequency (263), total individual strategy use (54), types of cognitive strategies

(17), and metacognitive strategies (15), while test conditions elicited more types of compensation strategies (19). The same numbers occurred in approach strategies (6). The figures in Table 4-6 can only give a brief idea of whole strategy use in terms of frequencies; thus, I compared strategic processes by grouping strategies used either only for tests or only for classes, and compared frequencies of common strategy use.

Table 4-6. *Comparative figures on strategic processes involved in test and classroom*

Condition	Test	Classroom
Total frequency	246	263
Total number of strategy types	50	54
Approach strategy types	6	6
Compensation strategy types	19	16
Cognitive strategy types	11	17
Metacognitive strategy types	14	15

4-3-1-1. Strategies used for only each condition

4-3-1-1-1. Test

I illustrated strategies used only for each context in Table 4-7. 8 types of strategy were used only under test conditions. These comprised 1 approach strategy (*recalling the listening passage*), 5 compensation strategies (*referring to notes, elaborating-a, pausing, reviewing the screen, remaining silent*) and 2 metacognitive strategies (*changing plan, evaluating time management*). First, *recalling the listening passage* was detected when KP5 was performing test task 3. He reported that “*At that time I appeared to say, ‘a couple of day before’ as I could remember that when the professor mentioned about his experience...*” KP1 referred to the notes she took as she could not think of the word. She verbalised: “*So I should have said that ‘platform is to express’ simply. But I think that I couldn’t think of it and I just used the verb ‘benefit’ as it was*

seen in here (notes)” KP4 used *elaborating-a* for the test task 1 when time was left. She reported: “*After answering I found out some more time was left and I added the story about the magazine...*” In fact, this strategy was used as she recalled the test preparation tip she had learnt. *Remaining silent* (by KP1 for test task 1) was also used to deal with the time that remained, but in this case the participant chose not to speak to fill the time. Another time related strategy was reported which was *evaluating time management*. KP2 reported that “*I didn’t figure out something I took a note of and this caused a delay. As a result, I thought that the time wasn’t enough*”. In the test, the participant seemed to be aware of time as it was limited, which was not the case in the classroom. Furthermore quite a number of strategies about *pausing* were reported by 4 participants. KP1 stopped for a while to search for the expression for test task 2. She reported “*I stopped after I said that ‘we can’ because I had to think about what would help...*”. Furthermore, both KP1 and KP4 reviewed the screen for the test task 3. They looked at the screen because they could not remember part of the listening passage. Finally, KP5 reported that he changed the plan as he thought that what he had prepared for the answer was not good enough to complete the question for test task 1. He verbalised: “*but there was something lacking, so I changed it into magazine*”. It should be noted that *recalling the listening passage*, *elaborating-a*, *remaining silent*, and *changing plans* were used for only one task. Thus, it is important to investigate whether these would be used generally or more specifically. Although Swain *et al* (2009) examined the strategic behaviours used to complete iBT speaking tasks, *remaining silent* and *changing plans* did not occur in their study, but this study found examples of their use. In particular, *reviewing the screen* shows that the test is computer-delivered, and the term can be replaced with *reviewing the reading passage* if the test is paper-based. Test conditions did not elicit strategies used only under the test in the cognitive category.

4-3-1-1-2. Class

In total, only 13 individual strategies were reported for the academic classroom: 1 approach strategy (*recalling the reading passage*), 2 compensation strategies (*generalising* and *paraphrasing*), 7 cognitive strategies (*attending peer speech*, *anticipating the turn*, *summarising*, *inferencing-a*, *inferencing-b* and *rethinking choices*) and 3 metacognitive strategies (*evaluating peer performance*, *evaluating interlocutor's comprehension*, *comparing own performance with peers' performances*, and *linking to the previous learning*). Out of these 13 strategies, only the existence of interlocutors in the classroom situation can elicit the following strategies: *attending to peer speech*, *anticipating the turn*, *rethinking choices (affected by peer's speech)*, *evaluating peer performance*, *evaluating interlocutors' comprehension*, and *comparing own performance with peers' performances*. As discussed in Section 2-3-3-2, process-oriented strategies are developed from the speaker's internal cognitive processes. In other words, the role of interaction was not taken into account. Therefore, Yule and Tarone (1997) suggested that research should investigate how interaction affects strategy use. Consequently, these five strategies may answer how interactiveness elicits strategies that cannot be elicited by the iBT computer-delivered monologic speaking test. Furthermore, research is needed to examine the extent to which these class-specific strategies are utilised in the real academic classroom. If these interactive skills are crucial for the ability to achieve communicative goals in the classroom, the computer delivery test should develop alternatives tasks to measure these.

Table 4-7. *Strategies used only for each condition*

Strategies used only in test (frequency in total)	Strategies used only in class (frequency in total)
Approach	
Recalling the listening passage (1)	Recalling the reading passage (2)
Compensation	
Referring to notes (1) Elaborating-a (1) pausing (8) Reviewing the text (2) Remaining silent (1)	Generalisation (1) Paraphrasing (1)
Cognitive	

	Attending to peer speech (6) Anticipating the turn (5) Summarising (2) Inferencing -a (1) Inferencing-b (3) Rethinking choices affected by peers' speech (2) Recalling previous learning (2)
Metacognitive	
Changing plans (1) Evaluating time management (4)	Evaluating peers' performance (8) Evaluating interlocutor's comprehension (1) Comparing own performance with peers' performances (3)

4-3-1-2. Strategies used for both conditions

42 individual strategies were used under two conditions: 5 types of approach strategy, 14 types of compensation strategy, 11 types of cognitive strategy, and 12 types of metacognitive strategy. The two conditions shared 67.74 percent of strategies, while the test condition has 84 percent in common with the classroom condition and the class has 77.78 percent in common with the test condition. This is a relatively high percentage, which shows that the iBT speaking test reflects academic classroom English use in terms of strategic processes. Furthermore, as seen in Section 4-3-1-1-2, 6 strategies (*attending to peer speech, anticipating the turn, rethinking choices (affected by peers' speech), evaluating peers' performance, evaluating interlocutor's comprehension , and comparing own performance with peers' performances*) were directly elicited by the interlocutors' presence. It can be said that the other 6 individual strategies (*recalling the reading passage, generalisation, paraphrasing, summarising, inferencing-a, inferencing-b*) can be used to complete the computer-delivered speaking test, and this has been evidenced by Swain *et al* (2009: 23). Therefore, 84% of strategy types used in the test could potentially be raised to 96% if the research scale is expanded with greater numbers of participants. Therefore, it can be said that the degree to which the iBT speaking test replicates the academic classroom is significant in terms of strategy use.

The iBT speaking test has been proven to elicit strategies which are used in the classroom. However, this can only be proven with respect to the types of strategies utilised. Since some strategies may be used with greater frequency than others, their incidence in both situations should be compared. In approach strategies, *recalling the task type* and *developing reasons* were used more in the test than in the class, while *recalling the question*, *generating choices*, and *making a choice* were reported more in the classroom (see Table 4-8). In particular, participants reported using the strategy, *recalling the question* a greater number of times in class conditions than in the test: 2 versus 9 in the test and in the class respectively. This was because KP3 verbalised it 7 times in the class and 7 times for the independent tasks. He thought about how the familiarity of the question would affect the answer in task 1 and he recalled the question to find out the meaning of the question for task 2. In task 1, for example, he reported: “*Firstly, what I was thinking was that this kind of question seems difficult as we don’t think about the teacher all the time*”, while in task 2 he simply said: “*I was wondering whether to answer either the difference between sharing the place together or studying on my own in the place: or whether between co-work and self study*”. While speakers are given the question after reading or listening to the passages for integrated tasks, speakers are given the question at the beginning for the independent tasks. Therefore, speakers seem to use *recalling the question* more for the independent tasks. In addition, the strategy of, *developing reasons* was significantly more frequent for the independent tasks. Again, this showed that the questions for the independent tasks may have affected strategy use, as the questions asked for the reasons ‘why’ (see Appendix 3-4).

In compensation strategies, 7 strategies (*avoiding*, *using Korean (L1)*, *reviewing notes*, *guessing*, *repeating*, *elaborating-b*, and *elaborating-c*) were utilised more in the test, while 5 strategies were used more in class (*lexical substitution*, *stalling*, *thinking ahead*). The strategies *borrowing* and *slowing* were used the same number of times in both situations. Significant differences appeared in the use of *using Korean (L1)* and *elaborating-b*. In the test rather than the classroom, these two strategies were used with significant frequency: 6 and 4 times respectively. For example, KP4 tended to

think about what she wanted to say in Korean first, and later attempted to translate her thoughts into English. For example, for the test task 3, she verbalised: *“At that time, I had to say that the behaviours of others and myself were different and I thought that I should say, ‘others’ behaviour (다른 사람의 행동) in Korean, but in English, I should say ‘behaviours’ of others?”*. The frequency of using L1 in the test resulted in the greater use of *translating*. *Elaborating-b* was used to fill the time even if the words were irrelevant to the task. Test conditions involved a time limit and participants knew that they had to fill the given time. For example, KP1 said that *“all of a sudden I said, ‘society’, so I knew that I shouldn’t have said, ‘easy to read’ because it didn’t make sense. But I had no choice but to say that as I didn’t have enough time”* for test task 1. This showed participants apparently making an effort to fill the time rather than considering the content of the speech. Moreover, it can be said that the limitations on time in the test affected performance. In the classroom, *thinking ahead* was used significantly more frequently. KP1 and KP3 used it while their peers were speaking. This showed that in the classroom, if speakers knew that they were assigned a task to complete, they tended to prepare answers in advance during their peers’ speech. For example, KP1 verbalised: *“That was the teacher I was only able to think about and I didn’t listen to whether the person sitting next to me was speaking or not. From that point I was only thinking about what I was going to say”* for class task 1.

In cognitive strategies, among 11 strategies in this category 7 were used more in classroom situations and 6 of the 7 showed great differences compared to their use in the test. These 6 strategies were *attending*, *anticipating the content*, *anticipating the question*, *recalling the previous experience*, *recalling the previous learning* and *recalling own situation* (see frequencies in Table 4-8). It is assumed that these large differences in use may have been caused by the content of the tasks. While the content of the reading and listening passages for the test were about examples of actors and observers in life for task 3, and how children learn art for task 4, the content of reading and listening passages in the classroom were about Received Pronunciation (RP) in the UK for task 3, and radio development in the USA and in the UK. The participants reflected on their previous experience, previous learning and own

situations to prepare their answers. First KP5 reported: *"I could hear the different accents the teacher commented"* for class task 3. Furthermore, KP1 recalled her previous learning about RP, as she verbalised that *"As soon as I read about RP I remembered that I had learned about it before and I was thinking that it might be different from what I had learnt"* for class task 3. The participants thought of a situation regarding their own country's standard language to answer the task 3. For example, KP6 said that *"I thought that the situation here was different from our own situation in terms of the concept of standard language or dialects as we (Koreans) are not really marginalised even if we speak dialects"*. Since participants anticipated the question and the content more readily in the classroom, it was presumed they found this context more favourable. For example, classroom task 3 asked participants to explain the advantages and disadvantages of RP. As soon as the researcher mentioned the word 'advantages' participants immediately anticipated the 'disadvantages'. KP1 reported: *"While Julia was questioned about advantages I expected to have the question about disadvantages"*. However, KP4 recalled: *"At first I was anticipating that this topic might be similar to the previous one, but I realised that it wasn't."* The participants paid more attention to the class and they reported that the topics were either new or interesting to them. KP 3 verbalised: *"(I thought that) it was genuinely different from the USA because it was the first time to hear about UK radio development. So I was aware of getting new information"*. Translating was the only strategy used significantly more in the test than in the classroom. As discussed in relation to compensation strategies previously, *using L1* led to use more *translating* as speakers thought of the words in Korean, and then attempted to translate them later.

In metacognitive strategies, *identifying the purpose of the task*, *monitoring time*, *self-correcting*, *evaluating performance*, *evaluating language production* and *evaluating own comprehension* were used in the test. Except for *identifying the purpose of the task*, the use of the other 5 strategies occurred more than in the test (see Table 4-8). In particular, *monitoring time* was reported 10 times in the test but only once in the class. Being given limited time in test situations affected the use of strategies as the participants often tended to check the time remaining as well as *evaluating time*

management in metacognitive strategies. The following are examples of SRV for cognitive strategies used significantly more in the test.

- **Monitoring time** from test task 4 by KP3: *“Around about that time, I realised that I didn’t have enough time”.*
- **Self-correcting** from test task 2 by KP5: *“I thought that ‘close’ was right. So I changed to close after saying ‘fami’”.*
- **Evaluating performance** from test task 4 by KP2: *“I was hesitant as I felt that I was repeating words”.*
- **Evaluating language production** from test task 4 by KP4: *“I said those things for each case as I had learnt. I should have said that this case was for novels and that case for magazines. I seemed to be editing something towards the end and I thought that I didn’t do well”.*
- **Evaluating own comprehension** from test task 3 by KP1: *“For the rest of it, I was able to understand 60% of the reading passage and (I was able to) understand through examples while listening and it was easy to speak”.*

The classroom involved more strategies than in test-taking situations, such as *setting the goal, planning, evaluating the content, evaluating own knowledge, evaluating peers’ performance, and justifying performance* (see Table 4-8). Again, the following are examples of strategies which were significantly used more than ones in the test:

- **Setting the goal** from class task 2 by KP5: *“For the second task I was careful about accents and intonation and I was thinking that I should try to use British English which the teacher used and I decided not to use Korean English”*
- **Evaluating the content** from class task 4 by KP6: *“I found this (task content) strange and I thought that they (British people) were like communists. What I meant by that was that they seem to make the format. Anyway I thought that it was strange”.*
- **Evaluating own knowledge** from class 3 task by KP4: *“I thought that it was simply talking about standard language or non standard language and that it*

was about standard pronunciation like my country. I thought that it was fortunate as I knew about it”.

- **Justifying performance** from class task 2 by KP2: *“Simply I selected a teacher who I could talk about easily.”*

Table 4-8. *Strategies used both in the test and the academic classroom*

Strategies	Individual strategies	The total frequency of use (test vs. class)
Approach (5 types)	Recalling the task type Recalling the question Generating choices Making choices Developing reasons	8 (5:3) 11 (2:9) 7 (3:4) 19 (9:10) 11 (8:3)
Compensation (14 types)	Avoiding Using Korean (L1) Lexical substitution Borrowing Reviewing notes Organising thoughts Guessing Repeating Rehearsing Stalling Slowing Thinking ahead Elaborating-b Elaborating-c	3 (2:1) 7 (6:1) 8 (3:5) 4 (2:2) 3 (2:1) 3 (1:2) 5 (3:2) 3 (2:1) 3 (1:2) 6 (2:4) 2 (1:1) 5 (1:4) 5 (4:1) 4 (3:1)
Cognitive (11)	Attending Anticipating the content Anticipating the question Anticipating performance Note-taking Translating Recalling the previous experience Recalling the previous learning Recalling own situation Searching Considering grammar	17 (4:13) 9 (2:7) 7 (1:6) 2 (1:1) 8 (5:3) 8 (7:1) 13 (2:11) 5 (1:4) 11 (3:10) 17 (9:8) 3 (1:2)
Metacognitive (12)	Setting the goal Identifying the purpose of the task	17 (7: 10) 5 (3:2)

	Planning	45 (22: 23)
	Monitoring time	11 (10: 1)
	Self-correcting	4 (4:1)
	Evaluating the content	6 (1:5)
	Evaluating performance	34 (19: 15)
	Evaluating language production	52 (34:18)
	Evaluating own knowledge	18 (5:13)
	Evaluating task difficulty	8 (4:4)
	Evaluating own comprehension	25 (16:9)
	Justifying performance	5 (1:4)

4-3-2. Strategic processes by proficiency levels

This section discusses how strategy use differs between good-level and fair-level participants presented in Sections 4-1-2 and 4-2-2, with regard to the frequency of strategy use. Examples of strategy use are provided. Thus, the following sections investigate the extent to which strategic processes used in test conditions replicate strategic processes used in the academic classroom with regard to proficiency levels and by task types.

4-3-2-1. Test, good level vs. academic classroom, good level

Firstly, good-level participants used the same approach strategies: *recalling the task type, recalling the question, generating choices, making choices and developing reasons* (see Table 4-9). Both good-level speakers used 36 individual strategies in common across conditions. Good-level speakers used 8 individual strategies in test conditions which were not used in classroom conditions (*avoiding, referring to notes, elaborating-a, pausing, reviewing the text, remaining silent, anticipating performance, and evaluating time management*). On the other hand, 12 strategies (*generalisation, paraphrasing, slowing, attending to peer speech, anticipating the turn, summarising, inferencing-a, inferencing-b, rethinking choices (affected by peers), identifying the purpose of the task, evaluating peers' performance, evaluating interlocutor's comprehension*) were only used in the classroom. 75% of types of strategies used by good-level speakers in the class were used under test conditions. Strategies used by

good-level speakers were checked with strategies used by fair-level speakers (see Section 4-3-2-2) and the following shows strategies only used by good-level speakers:

- Strategies used by good level only in the test (4 individual strategies): *referring to notes, Elaborating-a, reviewing the text, remaining silent.*
- Strategies used by only good level in both conditions (10 individual strategies): *borrowing, reviewing notes, organising thoughts, repeating, searching, stalling, thinking ahead, anticipating the content, recalling the previous learning, considering grammar.*
- Strategies used by good level only in the class (12 individual strategies): *generalisation, paraphrasing, attending peer speech, anticipating the turn, summarising, inferencing-a, inferencing-b, rethinking choices, evaluating peers' performance, evaluating interlocutors' comprehension, comparing own performance with peers' performances.*

The above strategies used by good level speakers can be implemented in English learning and teaching for learners of English to improve their English oral skills. Again, however, the bigger number of participants involved research should be conducted in the future which may result in generalising some specific strategies significantly.

Table 4-9. *Strategy use by good-level speakers in the test and the classroom*

Strategy	Strategy used by good-level speakers in the test		Strategy used by good-level speakers in the class
Approach		Recalling the task type Recalling the question Generating choices Making choices Developing reasons	
Compensation	Avoiding Referring to notes Elaborating-a Pausing Reviewing the text Remaining silent	Using Korean (L1) Lexical substitution Borrowing Reviewing notes Organising thoughts Repeating Rehearsing	Generalisation Paraphrasing Slowing

		Stalling Thinking ahead Elaborating-b Elaborating-c	
Cognitive	Anticipating the performance	Attending Anticipating the content Anticipating the question Note-taking Translating Recalling the previous experience Recalling the previous learning Recalling own situation Searching for the word or expression Considering grammar	Attending peer speech Anticipating the turn Summarising Inferencing-a Inferencing-b Rethinking choices (affected by peers)
Metacognitive	Evaluating time management	Setting the goal Planning Monitoring time Evaluating the content of what was read/heard Evaluating performance Evaluating language production Evaluating own knowledge Evaluating task difficulty Evaluating own comprehension Justifying performance	Identifying the purpose of the task Evaluating peers' performance Evaluating interlocutors' comprehension

4-3-2-2. Test, fair level vs. academic classroom, fair level

Fair-level participants used 29 individual strategies (6 approach, 8 compensation, 4 cognitive, and 11 metacognitive) in the test while 20 strategies (4 approach, 2 compensation, 6 cognitive and 8 metacognitive) were employed in the class. 11 strategies (3 approach, 2 compensation, 2 cognitive, and 4 metacognitive) were used in both conditions, which meant 35.48% of the strategies used in the class were used in the test condition. Comparing the strategy use with good-level speakers, some fair-level- specific strategies were found:

- Strategies used by fair- level speakers only in the test (3 individual strategies):

slowing, changing plans, self-correcting.

- Strategies used only by fair-level speakers in both conditions (1 individual strategy): guessing.
- Strategies used by fair-level speakers only in the class (2 individual strategies): recalling the reading passage, evaluating the content.

It should be noted that the differences and similarities shown here cannot present a deep insight into strategy use by fair-level speakers, since a very small number of fair-level participants were involved (2 for test conditions and 1 for classroom conditions), but the result can be the basis for further large-scale research. For example, there were no classroom-only compensation strategies used by fair-level participants, which should be investigated by further researchers in order to examine whether test conditions make fair-level speakers use more compensation strategies, and how this affects actual speech.

Table 4-10. *Strategy use by fair-level speakers*

Strategy category	Strategy use by fair-level speakers in the test	Strategy used by fair-level speakers in both	Strategy use by fair-level speakers in the class
Approach	Recalling the question Recalling the listening passage Generating choices	Recalling the task type Making choices Developing reasons	Recalling the reading passage
Compensation	Using Korean (L1) Lexical substitution Slowing Elaborating-b Elaborating-c Pausing	Avoiding Guessing	
Cognitive	Note-taking Translating	Attending Searching for the word or expression	Anticipating the content Anticipating performance Recalling the previous experience Recalling own

			situation
Metacognitive	Setting the goal Changing plan Monitoring time Self-correcting Evaluating performance Evaluating time management Evaluating task difficulty	Identifying the purpose of the task Planning Evaluating language production Evaluating own comprehension	Evaluating the content Evaluating own knowledge Evaluating peers' performance Justifying performance

4-3-3.Strategic process by task types

4-3-3-1. Test, independent vs. class, independent

Independent tasks elicited 38 and 31 types of strategies in the test and in the class correspondingly. Furthermore, 25 common types of strategies were used under both conditions. That is, independent tasks in tests can replicate 25 strategies also used in the class. Overall, more strategies were used under test situations. As seen in Table 4-11 independent tasks showed different patterns of strategy use by conditions in different categories. For example, 5 approach strategies were used in both tests and classrooms. However, in the compensation category, 8 compensation strategies (*using L1, organising thoughts, stalling, slowing, elaborating-a, elaborating-b, pausing, and remaining silent*) were used only for test conditions, while only one compensation strategy (*borrowing*) was evident in the classroom. Furthermore, 12 metacognitive strategies were used to complete independent tasks for both conditions and 5 strategies belonged to the test (*identifying the purpose of the task, changing plan, monitoring time, self-correcting, evaluating time management*) and only one (*evaluating peers' performance*) to the class.

While there was a wide range of compensation and metacognitive strategy use for independent tasks in the test, the classroom condition elicited only 4 cognitive strategies (*attending to peer speech, anticipating the turn, and rethinking the choice affected by peers*). The two conditions had 7 common strategies. As *anticipating the question* was used in the test and *attending peer speech* and *anticipating the turn*

were also used for integrated tasks, it can be said that *rethinking the choice affected by peers* can be class-specific and task-specific at the same time.

- Test and independent task-specific: *elaborating-a, remaining silent, changing plans.*
- Independent task-specific: *avoiding, elaborating-c.*
- Class and independent task-specific: *rethinking choices affected by peers.*

Table 4-11. *Strategy use by independent task types*

Strategic category	Strategy use for independent tasks in the test	Strategy use for independent tasks for both	Strategy use for independent tasks in the class
Approach		Recalling the task type Recalling the question Generating choices Making choices Developing reasons	
Compensation	Using L1 Organising thoughts Stalling Slowing Elaborating-a Elaborating-b Pausing Remaining silent	Avoiding Lexical substitution Repeating Rehearsing Thinking ahead Elaborating-c	Borrowing
Cognitive		Attending Note taking Translating Recalling previous experience Recalling previous learning Recalling own situation Searching	Attending peer speech Anticipating the question Anticipating the turn Rethinking choices
Metacognitive	Identifying the purpose of the task Changing plan Monitoring time Self-correcting Evaluating time management	Setting the goal Planning Evaluating performance Evaluating language production Evaluating task difficulty Justifying performance	Evaluating peers' performance

4-3-3-2. Test, integrated vs. class, integrated

While 37 individual strategies were used to complete the integrated tasks in the test, 45 were used in the class. As 27 strategies (3 approach, 5 compensation, 9 cognitive, and 10 metacognitive) were used for both conditions, shared strategy use was 49.09%. Strategies presented in Table 4-12 were categorised into 5 groups depending on their context-specific and task-specific.

- Test and integrated task-specific (4 individual strategies): *recalling the listening passage, borrowing, referring to notes, reviewing the text.*
- Integrated task-specific (9 individual strategies): *reviewing notes, guessing anticipating the content, anticipating performance, considering grammar, evaluating the content, evaluating own knowledge, evaluating own comprehension, comparing own performance with peers' performances.*
- Class and integrated task-specific (7 individual strategies): *recalling the reading passage, generalisation, paraphrasing, summarising, inferencing-a, inferencing-b, evaluating interlocutors' comprehension.*

Table 4-12. *Strategy use by integrated task types*

Strategy	Strategy use for integrated tasks in the test	Strategy use for integrated tasks for both conditions	Strategy use for integrated tasks in the class
Approach	Recalling the listening passage	Recalling the task type Generating choices Making choices	Recalling the question Developing reasons
Compensation	Using L1 Borrowing Referring to notes Repeating Pausing Reviewing the text	Lexical substitution Reviewing notes Guessing Stalling Elaborating-b	Generalisation Paraphrasing Organising thoughts Rehearsing Slowing Thinking ahead
Cognitive	Translating	Attending Anticipating the content Anticipating the question Anticipating the performance Note taking Recalling previous experience	Attending to peer speech Anticipating the turn Summarising Inferencing-a Inferencing-b Recalling the previous learning

		Recalling own situation Searching Considering grammar	
Metacognitive	Monitoring time Evaluating time management	Setting the goal Identifying the purpose of the task Planning Self-correcting Evaluating the content Evaluating performance Evaluating language production Evaluating own knowledge Evaluating task difficulty Evaluating own comprehension Comparing own performance with peers' performances	Evaluating peers' performance Evaluating interlocutors' comprehension Justifying performance

4-4. Comparing strategy use within individual performance

In this part, the individual scores gained from the test and the academic classroom will be presented, and attempts will be made to look into how strategy use differs in the test and the academic classroom when the levels are different. Furthermore, the strategic process only used by one participant will be presented. The background of participants has been documented in Table 3-5.

4-4-1. KP1

KP1 was placed into the good level according to the pre-test score, and she also gained good-level scores for all tasks in the test and the classroom, in which she showed constantly good performance across different tasks and conditions (see Table 4-13). She used 72 strategies in the test and 50 strategies in the class. Her most used strategy was metacognitive in the test, and the second most used was cognitive in the class (see Appendix 4-8). She had previous experience in taking the iBT test once and

attending TOEFL preparation classes. While engaged in test task 1 she reported: “At the time I said, ‘This is why’. That was because I noticed that there were 10 seconds left and I recalled (what I had learnt from) the TOEFL preparation class that I should repeat things to fill the time when there was more extra time left”. She managed to apply the strategy learnt from the test preparation class by repeating what she had mentioned previously in order to fill time. This is one of the strategies we have observed only under test conditions where time is limited, and speakers feel the need to fill the given time. Moreover, KP1 used mostly metacognitive strategies in the test. For example, she used the strategies of related time management, such as *monitoring time*, to complete the tasks on time, while she used cognitive strategies, such as *attending* or *anticipating the question* or *anticipating the content*, most frequently in the class. The result shows that the participant made more effort to complete the tasks on time in the test, while she appeared to concentrate on the content of the lecture or the peers’ speech in the classroom. There were some strategies used only by KP1: *generalisation* (test, task 4), *reviewing notes* (class, task 4 and test, task 4), *referring to notes* (test, task 4) and *‘inferencing-b’* (class, task 4).

Table 4-13. KP1 scores and levels

	Test	Academic classroom
Task 1	27 (Good)	27 (Good)
Task 2	30 (Good)	26 (Good)
Task 3	28 (Good)	29 (Good)
Task 4	27 (Good)	29 (Good)
Overall	28 (Good)	27 (Good)

4-4-2. KP2

This participant gained higher scores from integrated tasks in the academic classroom than in the test. As shown in Table 4-14, she scored 23 (Fair) and 23 (Fair) from tasks 3 and 4 respectively in the test, while she scored 29 (Good) and 28 (Good) from tasks 3

and 4 in the classroom. She gained good-level scores for all familiar topics, tasks 1 and 2 both in the test and in the classroom. Thus, the strategies used in tasks 3 and 4 in both conditions are compared in Table 4-15. She reported 36 strategies (19 for the test and 17 for the class) to complete all tasks given in both conditions, which was the fewest among the 6 participants. As seen in Table 4-15, she used more metacognitive strategies to complete task 3 in the test, but she used more metacognitive strategies for task 4 in the class. Her gained levels were good for the latter and fair for the former. Her performance for tasks 3 and 4 in the test were poorer than any other performances. However, her verbalisation enabled me to find the reasons why she performed poorly. First, she informed me: *"I knew about the content (what I had to talk about) but it got messy from the beginning and I didn't know how to solve the problem and I was so puzzled and confused"* in test task 3. She evaluated her performance, as she was speaking and once she realised her performance was not good she tended to feel negative. Furthermore, she reported that *"I didn't figure out something I took note of and this caused a delay. As a result of this, there wasn't enough time left"* in test task 3. Consequently, the problems she faced in both tasks affected the rest of her performance in the test. However, in the class she managed to overcome the difficulty in replacing a word. Furthermore, the difficulty did not seem to affect the rest of her performance. She said that *"As a whole, it was easier than I did on my own. It wasn't a monologue. It was communication. As listening to others I thought that it was even easier"* in class task 4. This shows that interactional features of the classroom improved her speech. Her performance raises issues about how test developers help test-takers perform as well as they do in the class, and the need for instruction in note-taking skills, as she was not able to read her notes and that disturbed her performance. Note-taking is considered to be one of the most important academic skills, and therefore it is worth investigating whether the techniques for note-taking skills used in the test are the same as those in the class.

Table 4-14. *KP2 scores and levels*

	Test	Academic classroom
Task 1	29 (Good)	30 (Good)
Task 2	30 (Good)	30 (Good)
Task 3	23 (Fair)	29 (Good)
Task 4	23 (Fair)	28 (Good)
Overall	26 (Good)	29 (Good)

Table 4-15. *Strategy use in task 3 and task 4 by KP2*

Strategies used in Task 3		Strategies used in Task 4	
Test (frequency)	Class (frequency)	Test (frequency)	Class (frequency)
Pausing (1) Planning (1) Evaluating performance (1) Evaluating language production (1) Evaluating own comprehension (1)	Lexical substitution (1) Attending (1) Attending peer speech (1) Anticipating the question (1) Planning (1)	Lexical substitution (1) Stalling (1) Searching (1) Planning (1) Evaluating time management (1)	Stalling (1) Evaluating performance (1) Evaluating own knowledge (1) Evaluating peers' performance (1) Evaluating task difficulty (2) Comparing own performance with peers' performances (1)

4-4-3. KP3

KP3 gained good-level scores for all performances, except that he obtained only a fair level for the class task 1. Although he scored a fair-level placement in the pre-test result, he showed a good level overall in the test. This might have been caused by the time gap between the pre-test and the test, or KP3's degree of familiarity with the iBT test types. Overall, he used 18 strategies in the test and 27 in the class. Unlike KP2, he

gained a higher score in the test. In class task 1, he used 3 types of approach strategies and 1 cognitive strategy, while he used 2 approach strategies and 2 metacognitive strategies in the class. He verbalised: *“Firstly, what I was thinking was that this kind of question seems difficult if we don’t have a teacher we admire”* and he started to talk about his current supervisor as his favourite. He was thinking of other teachers at the same time, and then finally he chose a Korean teacher for the answer. He used more approach strategies to make a final choice of the teacher he admired. Also, he reported that he had negative feelings as a result of having to remember this particular teacher; this indicates that sometimes such tasks can cause unexpected affective responses that may impact upon performance.

Table 4-16. *KP3 scores and levels*

	Test	Academic classroom
Task 1	28 (Good)	24 (Fair)
Task 2	28 (Good)	26 (Good)
Task 3	29 (Good)	27 (Good)
Task 4	28 (Good)	26 (Good)
Overall	28 (Good)	27 (Good)

Table 4-17. *Strategy use in task 1 by KP3*

Strategies used in test task 1 (frequency)	Strategies used in class task 1 (frequency)
Making choices (1)	Attending (1)
Recalling the previous experience (1)	Recalling the question (2)
Recalling the question (1)	Generating choices (1)
Justifying own performance (1)	Making choices (1)

4-4-4. KP4

She used 50 strategies (7 in task 1, 14 in task 2, 16 in task 3 and 13 in task 4) in the test, and 46 strategies in the class (6 in task 1, 7 in task 2, 17 in task 3 and 16 in task 4) (see Appendix 4-8). The metacognitive strategies were used the most for task 3 in both conditions. She was classified as being in the fair level from the pre-test, but she performed better to achieve good-level scores for both conditions in the main study. However, she only obtained a fair level for class task 3. She used most strategies for class task 3. She verbalised: *“(I thought that) it was simply talking about standard language or not standard language. It was about standard pronunciation like my country. I thought that it was fortunate because I knew about the topic”*. It was assumed that she had a good start as she knew about the topic, but she felt embarrassed when she was assigned an answer which she had not anticipated. She reported: *“For this (task), I had to answer the question first. I was thinking that I had time to prepare the answer by taking notes but all of a sudden (the lecturer) asked me to answer and I had no time to think about (the question) and got embarrassed”*. While KP2 took advantage of the interactional nature of the classroom, KP4 was affected by the features of the classroom. If she had not been allocated a turn to speak she would have performed better. Furthermore, she managed to fill the time remaining after she had finished the task, which she had learnt in the TOEFL preparation class. This was the second example of using a strategy the participant had learned from the exam preparation class (see Section 4-4-1). While KP 1 repeated the sentence to fill the time, KP 4 elaborated the sentence to fill the remaining time. KP1 and KP4 were the only participants who had taken the iBT previously and they were capable of applying strategies in test conditions. Therefore, strategies used by them would be helpful for test-takers who are going to take the iBT or who are planning to take the computer-delivered speaking test. In terms of feelings, she reported that she felt more negative while she was engaged in test task 3 than in the class. However, she attained a better score for test task 3. This tells us that feelings may not directly relate to the scores the participants obtain. It may be assumed that feelings are more context-specific (see Section 4-6).

Table 4-18. *KP4 scores and levels*

	Test	Academic classroom
Task 1	27 (Good)	26 (Good)
Task 2	27 (Good)	27 (Good)
Task 3	26 (Good)	23 (Fair)
Task 4	26 (Good)	26 (Good)
Overall	26 (Good)	27 (Good)

Table 4-19. *Strategy use in task 3 by KP4*

Strategies used in test task 3 (frequency)	Strategies used in class task 3 (frequency)
Recalling the previous experience (1) Planning (2) Monitoring time (1) Evaluating the content (1) Evaluating language production (2) Evaluating own knowledge (5) Evaluating time management (1) Negative feelings (4)	Developing reasons (1) Lexical substitution (1) Anticipating the question (1) Anticipating the turn (1) Recalling the previous experience (1) Planning (2) Evaluating the content (1) Evaluating language production (2) Evaluating own knowledge (5) Evaluating peers' performance (1) Comparing own performance with peers' (1) Negative feelings (2)

4-4-5. KP5

This participant had different scores for test and classroom on all four tasks. He performed better for all four tasks in the classroom than in the test (see Table 4-20). In fact, his level from the pre-test was limited, but he made significant progress during

the course of the research. He gained good levels for all tasks in the class, but he obtained fair levels for tasks 1, 2, and 3 in the test. Only on test task 4 was a limited level obtained. Therefore, his strategy use was compared between the test and the class in order to examine whether he showed any unique use of strategies to gain higher levels. Similarly, what strategic processes were used for test task 4 will be considered in more depth as he was awarded the lowest score. First, he used strategies more frequently than any other of the 6 participants. He used 60 strategies in the test and 89 strategies in the class. As shown in Table 4-21, he used a greater number of cognitive strategies and metacognitive strategies in the class than in the test. However, the total words he used to complete all four tasks were, 297 words, compared to 852 words in the test and the class respectively. Thus, the average number of strategies elicited by words was calculated. 60 strategies were used to produce 297 words, which means he used one strategy per 4.95 words in the test whilst 89 strategies were used to produce 852 words in the class, which means one strategy was used every 2.86 words. That is, on average, test conditions elicited more strategy use. Due to the lack of time limitations in class, he produced more speech, but it was not elicited from greater strategy use. When he was given the tasks to complete without a time limit he tended to perform better. This has raised issues about the length of response time allowed, which may affect performance in test conditions. As seen in Table 4-21, 23 and 33 individual strategies were used in the test and the classroom, respectively. That is, KP5 used more types of strategy while performing speaking tasks in the classroom. He used 8 strategies only in the test and 18 strategies only in the class (see boldface in Table 4-21). Particularly, he did not show specific strategy use in the cognitive category in the test. Out of 23, 15 strategies used in the test were used in the class, which means 65.22% of strategy used in the test reflected strategy use in the class. However, out of 33, 18 strategies (54.55%) used in the class were not used in the test. He had better scores in the class for all tasks; thus the 54.55 strategies he used only in the class should be further examined. Furthermore, he used *elaborating-b*, *monitoring time*, *self-correcting* and *evaluating time management* to complete task 4 only in the test (see Table 4-22). Except *self-correcting*, three of them are time-related. He achieved the lowest score in test task 4 although he made an

effort to complete the task on time. As a result of this, we may assume that time-limited conditions had an impact on his performance. *Paraphrasing* (class task 4), *slowing* (test task 2, class task 4), *changing plans* (test task 1), and *evaluating interlocutor's comprehension* (class task 4) were only used by KP5.

Table 4-20. KP5 scores and levels

	Test	Academic classroom
Task 1	24 (Fair)	27 (Good)
Task 2	24 (Fair)	26 (Good)
Task 3	19 (Fair)	26 (Good)
Task 4	17 (Limited)	27 (Good)
Overall	20 (Fair)	27 (Good)

Table 4-21. Strategy use in the test and the academic classroom by KP5

Strategy	Test (frequency)	Class (frequency)
Approach	Recalling the task type (1) Generating choices (2) Making choices (2) Recalling the lecture (1) Developing reasons (2)	Recalling the task type (1) Generating choices (3) Making choices (4) Recalling the question (1)
Subtotal frequency	8	9
Compensation	Avoiding (1) Lexical substitution (1) Slowing (1) Elaborating-b(1) Elaborating-c(1) Pausing (1)	Using Korean (1) Lexical substitution (3) Paraphrasing (1) Borrowing (2) Organising thoughts (1) Repeating (1) Rehearsing (1) Stalling (3) Slowing (1) Thinking ahead (1) Elaborating-c (1)
Subtotal frequency	6	16
Cognitive	Attending (2) Note-taking (1) Searching (7)	Attending (1) Attending peer speech (3) Note-taking (2) Inferencing-b (1) Recalling the previous

		experience (7) Recalling own situation (4) Searching (3) Considering grammar (1)
Subtotal frequency	10	22
Metacognitive	Setting goals (3) Planning (9) Changing plan (1) Monitoring time (2) Self-correcting (3) Evaluating performance (10) Evaluating language production (4) Evaluating task difficulty (1) Evaluating own comprehension (3)	Setting goals (7) Planning (11) Self-correcting (1) Evaluating the content (2) Evaluating performance (9) Evaluating language production (5) Evaluating own knowledge (2) Evaluating peer performance (1) Evaluating own comprehension (3) Comparing own performance with peers' performances (2)
Subtotal frequency	36	39
Total frequency	60	89

Table 4-22. *Strategy use in test task 4 by KP5*

Strategy	Strategies used in test task 4 (frequency)	Strategies used in class task 4 (frequency)
Approach	Generating choices (1)	Generating choices (2) Making choices (2)
Compensation	Elaborating-b (1)	Paraphrasing (1) Organising thoughts (1) Stalling (2) Slowing (1)
Cognitive	Attending (1) Searching (1)	Attending (1) Note-taking (1) Inferencing-b (1) Searching (1) Considering grammar (1)
Metacognitive	Planning (2) Monitoring time (1) Self-correcting (2) Evaluating performance (4) Evaluating language production (1) Evaluating time management (1) Evaluating own comprehension (1)	Planning (4) Evaluating the content (1) Evaluating performance (2) Evaluating language production (2) Evaluating own knowledge (1) Evaluating peers' performance (1) Evaluating own comprehension (2) Evaluating listeners' comprehension (1)

4-4-6. KP6

KP6 was classified as being at the limited level, but for the main study she achieved the fair level for both conditions. 34 strategies were used in the class, while 28 strategies were used in the test (see Appendix 4-8). While KP2 had difficulty in reading her notes, which made her speech delayed (see Section 4-4-2), KP6 had difficulty making sentences based on the words from her notes. She reported: *“I took notes in English and in Korean and I thought that I didn’t have enough time to write whole sentences, so I only wrote down the words. Thus it was difficult changing from words to sentences while I was speaking”* after completing test task 1. Test-takers are allowed to take notes for the iBT, thus how this has an influence on test-takers’ performance should be further examined. She achieved the highest score in test task 4 while she gained all fair levels for others. Comparing her strategy use for test task 4 with ones for class task 4, she did not use any cognitive strategies for test task 4, while she used 4 cognitive strategies for class task 4 (see Table 4-24). As seen in Section 4-1-2 and 4-2-2, good-level speakers used more cognitive strategies than fair-level speaker. She did not prove this in her test task 4, but she did obtain a good level. She stated the reason why any cognitive strategies were not involved in test task 4: *“For this task, it is good for those who don’t speak much or speak only a little bit because they only should speak about what they heard before”*. Moreover, she verbalised: *“I didn’t have to think about (answering). I just had to repeat what was described before, so this kind of task was ok (for me). I know this is a speaking test, but in a way this can be a listening test as well (which means) I have to listen well, and then I could also speak well. Thus this kind of task wouldn’t be difficult for those who study English”*. Furthermore, she did not use any compensation strategies for task 4 under the both conditions. KP6 chose someone in order to answer easily for class task 1, instead of talking about her actual favourite teacher. KP6 verbalised: *“I was thinking that it would be difficult to give the reasons for my real favourites, so I was thinking of someone who was easy to give the reasons”*. It is assumed that KP6 seemed to focus on the completion of the task rather than attempting to deliver her real opinions. According to ETS (2009), independent tasks are designed with familiar topics. However, some test-takers either may not be

familiar with the topic or may find it difficult to answer the given tasks. As a result of this, some test-takers might focus on completing the tasks with a fake story like KP6. This may affect issues to do with the authenticity of the test. Therefore, how the degree of familiarity has an influence on performance should be investigated in the future.

Table 4-23. *KP6 scores and levels*

	Test	Academic classroom
Task 1	22 (Fair)	22 (Fair)
Task 2	19 (Fair)	23 (Fair)
Task 3	22 (Fair)	23 (Fair)
Task 4	26 (Good)	23 (Fair)
Overall	22 (Fair)	22 (Fair)

Table 4-24. *Strategy use in task 4 by KP6*

	Strategies used in test task 4 (frequency)	Strategies used in class task 4 (frequency)
Approach	Recalling the task type (1) Guessing (1) Identifying the purpose of the task (2)	Recalling the task type (1) Identifying the purpose of the task (1)
Compensation		Attending (1) Anticipating the content (1) Recalling own situation (1) Searching (1)
Cognitive		
Metacognitive	Planning (1) Evaluating language production (1) Evaluating task difficulty (2) Evaluating own comprehension (1) Negative feelings (1)	Planning (1) Evaluating the content (1) Evaluating language production (1) Evaluating own knowledge (1) Evaluating own comprehension (1) Justifying performance (1)

4-5. How strategies reported from stimulated recalls present in actual speech production

This section considers how reported strategic processes are realised in actual speech production. Putting examples of discourse taken from the speaking performance and placing them next to speakers' thoughts from stimulated recall protocols is an original and innovative approach, will provide new insights into strategy use by directly utilising speech production as first-hand evidence. If any strategy affects speech production it will be shown in bold face in speech. Then, I discuss how it may be possible to use this evidence of strategy use in the assessment of strategic competence.

SRV (Stimulated Recall Verbalisation), **SP** (Speech Production)

KP1, Test task 1

KP1 used 18 strategies for test task 1, and 3 of them related to the actual speech as below:

- A. **Recalling the previous learning**: SRV: *"I (was asking to myself) should I (choose) from one of subjects I attended last term? I recalled J and (remembered) that such authors wrote novels based on society or the culture and (I thought) that I had gained some such knowledge".*
- B. **Recalling the previous learning** and **Repeating**: SRV: *"I recalled (what I learnt from) TOEFL preparation class which meant I had to repeat things to fill the time when there was more extra time".*

SP: *"I'd like to read the novel when I have free time because firstly it is easy to read because **A. it is based on culture and society at the time** so it's based on the language so it is easy to read and then secondly I can get a lot of information by reading a novel because as I say before it is based on culture at the times so I can get much information about history as I say I can be (.) I can have much more interest by reading novel **B. this is why I prefer reading novel**".*

KP1 managed to draw her previous learning into the speech turn and also managed to fill the remaining time by drawing on what she had learned from the TOEFL preparation class.

KP1, Test task 2

C. **Planning:** SRV: *"I thought that people could help each other and I thought that we could help in small matters and I was thinking of the situation I had to move and I prepared the word, 'move stuff' to say it".*

After she decided what to say she planned the words she was going to use. She planned the phrase "move stuff" and she even elaborated on this in the speech turn by saying "move very heavy stuff".

SP: *"I prefer to live with roommate to live alone because (.) I can be a very good friend with her and I will not be bored by staying alone. And secondly we can help each other when we need help because if we have roommates we can (..) help by talking and because we will know each other when we need help or not and then for example when we have to C. move very heavy stuff we can help each other when we have to move. So this is that's why I prefer live with roommate to live alone".*

KP1, Test task 4

D. **Referring to notes:** SRV: *"I couldn't think of it and I just used the verb, 'benefit' as it was seen here (notes)".*

SP: *"The tutor explain about how learning art can impact child's development. According to this one, this passage art skills D. benefit development of child and she's giving two ways of (.) benefit development of child. First is platform platform and*

second is encouraging encouraging par persistence. Firstly, platform platform is to express comfort emotion for children. So when it when someone is young it is difficult to express his his emotion because he has limited vocabulary. So for example when he was to express the emotion of pride he can draw his feeling instead of using vocabulary and second is encouraging persistence because he can keep trying to make certain art work when he comes to clay art when(.) he can make a car”.

KP1 showed how useful *note-taking* was. The iBT test allows test-takers to take notes while they listen to or read passages. This also can be an important academic skill. However, most participants did not show the use of *referring to notes*.

KP1, Class task 3

*E. **Generalisation:** SRV “I was deciding what I should say, Kyungsang-do, Jeonla-do or the south, but I decided to say just namjjok (the south) as it would be too difficult (to say the other two words)”.*

In her mind she was thinking of more specific names of places, but she chose to say the words which could generalise the concepts she had been thinking of. She mentioned that it would be difficult to represent the words “Kyungsang-do” and “Jeonla-do” but she might also have considered interlocutors because she might think that the name of Korean places would be difficult for them to understand. This case has raised the issue of additional methods to investigate intentions we may miss by using two methods employed by using the current study.

SP: “Yeah we have kind of standard Korean in kind of dialect. It’s like very different from cen central Seoul in E. south of part. So if I meet some people from south part of Korea we don’t have any problem about communication but just kind of some certain words or kind of intonations. So we can feel difference each other. But when we comes to like like British BBC so we want to be like very formal way of speaking we have to

use standard Korean. But don't have that much communication problem like German. But still have difference intonations and certain words something like that".

KP3, Test task 2

*F. **Recalling own situation**: SRV: "For this, I didn't think of something special. Just I was thinking that I should consider my family as roommates as I am now living with them".*

*G. **Making choices**: SRV: "I decided to say about my student life".*

*SP: "F. **We currently I'm living with my family** so where (...)I may not be the best person to answer the questions but um G. **when I think back my university days where I think I prefer to live alone yeah to live alone yeah**. Uh that's because at home generally I (...) I hope to be on my own yah I can watch TV anytime I want and I can eat anytime I want so that might be the issue of my freedom of living"*

KP3, Class task 3

*H. **Setting the goal**: SRV: "As I mentioned earlier that I had accent, I could have mentioned about prejudice toward people using different accents. I was thinking that I should speak more logically and try not to be more emotional, then decided to say that our prejudice might be a problem".*

In his actual speech in bold face below, he said what he intended to, but seemed to fail to use the word "prejudice". Thus he tended to show some examples in order to explain the disadvantage of having accents or not using Received Pronunciation.

*SP: "Well I think it's the the people's general conceptions H. **that if you don't speak received pronunciations you you are not well I can say you are not well educated people. You are not going to be in the major society group or something like that I mean so well the Received Pronunciation that itself it's good I think it's good. The problem is people's use that received pronunciation as a standard or criteria to***

decide you are I mean the class or social grouping of people yah. That might be the disadvantage”

KP4, Test task 1

- I. **Elaborating-a** and **Recalling the previous learning**: SRV *“After answering I found out some more time was left and I added the story about magazine because I learnt to separate answers (when time is left) when I was studying TOEFL in the past when I was studying TOEFL (I had learnt that) I should divide the answer”*.

KP4 recalled what she had learnt from the TOEFL preparation class when time was left. When she realised time was remaining, she added another topic to fill the time. For this case, two strategies came simultaneously and were employed to complete the task.

SP: *“Uh the favourite material that I like to read is usually novel because I usually read to relax or take a rest so for me novel is most enjoyable material to read and when I was young I was I dream to be a novelist so I was interested in novel than any other kinds of reading materials so that’s why I choose novel to read and I. if I want to get some information then at that time I also read magazine”*.

KP5, Test task 1

- J. **Reasoning** : SRV: *“I thought that if I chose magazine (there are a lot things to say) different fields of magazines, so we can get practical information and magazine if self is interesting, so we can kill the time”*.

He developed the reasons why he chose a magazine as a favourite and he was successful in commenting on his reasons in speech.

*"I prefer to read eh magazines rather than novels or poetry when I have free time. The first reason is that eh I can have rather fun from them as well as get eh **J. practical informations** which is quite far from my area coz I can read (...)eh make a magazines or or eh just health magazines things like that and **J. I can kill the free time** (...)eh without uh without any (...)boring(...)feelings".*

KP5, Test task 2

- K. **Lexical substitution**: SRV: "I said 'I really' and I wanted to mention about "가장 우선시 하다 (prioritise)", but I couldn't think of it, so I had no choice but to say, 'like'".
- L. **Self-correcting**: SRV: "I thought that 'close' was right, so I changed to 'close' after saying 'famil'".

The word, "like" in the speech was replaced with the word, "prioritise" as he failed to recall the word he wanted. This is a manifestation of *lexical substitution* in the test. Also, he corrected the words, from "famil" to "close". He recalled the moment as "I thought that 'close' was right, so I changed to 'close' after saying 'famil'". He consciously used the strategy of *self-correcting* and he corrected the word. The use of *lexical substitution* was evident 3 more times in KP2, test task 4 (the word "place") and in KP4, class task 3 (the word "creation"), and in KP5, class task 3 (the word "British people"). *Lexical substitution* was reported 5 times but 4 of them were not successful. Furthermore, the strategy, 'self-correcting' was used 4 times by KP 5 and they were all present in his actual speech, as in class task 3 ("all of" was corrected to "most of"), in class task 4 (from "educational art" to "being educated" and from "a draw" to "draw").

SP: "I absolutely prefer to live alone uh rather than live live uh living with roommates and the main reason is that I really eh **K. like** my freedom to live because uh if I live with roommates uh can get they can uh they can bored me when I when I uh when I go to sleep earlier than them and because the life style is quite different even if we are so **L. famil close friends**".

13 strategies used in the test were evidenced in actual speech, while 7 strategies used in the class applied directly to speech. It became clear through stimulated recall protocols that speakers use strategies when they perform the given speaking tasks and that these strategies affect speech. However, the number of strategies evidenced in speech was very low. In the test only 5.28% of strategy use related directly to speech, and 2.66% in the classroom; but in speaking tests, only speech production is assessed. In this case, we should find out whether evidence found in the speech production is suitable for strategy assessments. The samples given above tell us that strategies affect speech but if we look at speech samples alone it can be said that it is difficult to assess strategy use without simulated protocols.

4-6. Reported feelings

Affective strategies were taken into account in Swain *et al* (2009) and the participants' affective strategy use accounted for 3.63% of whole strategy use. In the current study, however, no affective strategies were found, but speakers reported their feelings while they were engaged in the given tasks. As shown in Table 4-25, the participants felt considerably more negative than positive throughout the whole task completion. Thus, it is worth looking at feelings in terms of conditions, levels and tasks types, and at how these affect performance.

Overall, the participants felt considerably more positive in the class than in the test, and a lot more negative in the test than in the class. As seen in Table 4-25, in all the categories positive feelings were less reported than negative feelings, except that fair levels felt more positive in the class and participants felt more positive when they performed independent tasks in the class. While participants reported only one *positive feeling* under the test condition, 11 *positive feelings* were reported in the class. One *positive feeling* was reported by KP1 for test task 2. This *positive feeling* came from the participant feeling familiar with the question. KP 1 verbalised this in the following way: *"I was tense with the first question which I had never thought of, but I*

*felt relaxed with this one as I thought of what I was going to say right away". Positive feelings were reported under classroom conditions on 11 occasions by four participants (KP1, KP2, KP5, and KP6). The participants felt positive when dealing with familiar topics (3 cases), when receiving positive feedback from the lecturer (3 cases), when feeling comfortable in the classroom atmosphere (2 cases), when evaluating language production (1 case), after completing the task (1 case), and when the content was related to pleasant memories (KP5 felt happy when he was talking about his favourite teacher). This can be contrasted with the greater numbers of *negative feelings* that were reported in the test and the class: 29 times and 17 times respectively by all six participants. Therefore, it can be said that feelings are more context-specific than task-specific.*

Table 4-25. *Reported feelings by conditions, by levels, and by tasks*

	Positive feelings	Negative feelings
In total	12	46
Under the test	1	29
Under the class	11	17
By good levels/test	1	18
By good levels/class	10	17
By fair levels/test	0	11
By fair levels/class	1	0
In independent tasks/test	1	8
In independent tasks/class	9	7
In integrated tasks/test	0	21
In integrated tasks/class	2	10

4-7. Summary of findings

Under test conditions, 50 types of individual strategies were used to complete the given tasks. The total numbers of strategies used was 246. The most frequently used strategy category under test conditions was metacognitive, which accounted for 54.07% of total strategy use, followed by compensation (19.11%), cognitive (15.45%) and approach (11.38%) strategies. Furthermore, the top 5 most used strategies were all metacognitive strategies: *evaluating language production* (13.82%), *planning* (9.76%), *evaluating performance* (7.72%), *evaluating own comprehension* (6.50%), and *monitoring time* (4.47%). The mean strategy use by good-level and fair-level participants was 39.75 and 43.50 respectively. That is, fair-level speakers used more strategies than good level speakers overall in the test. Both groups mostly used the metacognitive category. 15 individual strategies (3 approach, 4 cognitive, and 8 metacognitive) were shared in both groups, but neither levels showed any common use of compensation strategies. By task type, integrated tasks elicited more strategy use with 57.72% of the total use, while independent tasks elicited strategy use by 42.28%. Both tasks types shared 25 strategies (3 approach, 7 compensation, 6 cognitive, and 9 metacognitive) in common.

Under classroom conditions, 54 types of individual strategies (6 types of approach, 16 types of compensation, 17 types of cognitive and 15 types of metacognitive) were employed and 263 strategies were used in total. Comparing this with the strategies used in the test, the class elicited 4 more types of individual strategies and the total frequency was 17 more than that of the class. Under the classroom condition metacognitive strategies (44.49%) were mostly used, and the second most common was cognitive strategy use (32.31%), followed by approach (11.79%) and compensation (11.41%). The most used strategy was *planning* (8.75%) and this was followed by *evaluating language production* (6.84%), *evaluating performance* (5.70%), *evaluating own knowledge* (4.94%) and *attending* (4.94%). While *evaluating own comprehension* and *monitoring time* were included in test top 5 strategy use, in the class these were replaced with '*evaluating own knowledge*' and '*attending*'.

When comparing strategy use between both settings, 42 types of individual strategy were used in common, and 84% of types of strategy used in the test were used in the class. Under test conditions 8 unique strategies were used (*recalling the listening passage, referring to notes, elaborating-a, pausing, reviewing the text, remaining silent, changing plan and evaluating management*), which were not used in the class. On the other hand, 11 unique strategies (*recalling the reading passage, generalisation, paraphrasing, attending peer speech, anticipating the turn, summarising, inferencing-a, inferencing-b, rethinking choices affected by peers, evaluating peers' performance, and evaluating interlocutors' comprehension*) were only used in the class.

In terms of frequency in common strategy use, *recalling the question, thinking ahead, attending, anticipating the content, anticipating the question, recalling previous experience, recalling own situation, evaluating the content, and evaluating own knowledge* were used a greater number of times in the class than used in the test. On the other hand, *developing reasons, using Korean (L1), elaborating-b, translating, evaluating language production, and evaluating own comprehension* were used more frequently in the test. Although these strategies were shared under both conditions the degree of frequency was significantly different. Therefore, the portion of strategy replication should also be taken into consideration in any future study.

Strategy use was also compared across the conditions between good levels and fair levels, and between independent tasks, and integrated tasks. This enables me to classify strategy use according to specific levels, as below:

- 1) **Test-specific**: *recalling the listening passage, referring to notes, elaborating-a, pausing, reviewing the text, remaining silent, changing plan, evaluating time management.*
- 2) **Class-specific**: *recalling the passage, generalisation, paraphrasing, attending to peer speech, anticipating the turn, summarising, inferencing-a, inferencing-b, rethinking choices affected by peer's speech, linking to the previous learning, evaluating peer's performance, evaluating interlocutor's comprehension, comparing own performance with peers' performances.*

- 3) **Test and good level-specific**: *referring to notes, elaborating-a, reviewing the text, remaining silent.*
- 4) **Good level-specific**: *borrowing, reviewing notes, organising thoughts, repeating, searching, stalling, thinking ahead, anticipating the content, recalling the previous learning, considering grammar.*
- 5) **Class and good level-specific**: *generalisation, paraphrasing, attending peer speech, anticipating the turn, summarising, inferencing-a, inferencing-b, rethinking choices, evaluating peers' performance, evaluating interlocutors' comprehension, comparing own performance with peers' performances.*
- 6) **Test and fair level-specific**: *slowing, changing plans, self-correcting.*
- 7) **Fair level-specific**: *guessing.*
- 8) **Fair level and class-specific**: *recalling the reading passage, evaluating the content.*
- 9) **Test and independent task-specific**: *elaborating-a remaining silent, changing plan.*
- 10) **Independent task-specific**: *avoiding, elaborating-c.*
- 11) **Class and independent-specific**: *rethinking choices affected by peers.*
- 12) **Test and integrated task-specific**: *recalling the listening passage, borrowing, referring to notes, reviewing the text.*
- 13) **Integrated task-specific**: *reviewing notes, guessing, anticipating the content anticipating performance, considering grammar, evaluating the content, evaluating own knowledge, evaluating own comprehension, comparing own performance.*
- 14) **Class and integrated task-specific**: *recalling the reading passage, generalisation, paraphrasing, summarising, inferencing-a, inferencing-b, comparing own performance with peers' performances.*

Strategies which are only classified as good level-specific can be the resources for low-level learners, and for strategies that are classified in any class-specific sense, it should be considered whether they can only be elicited by class conditions, or whether they are suitable for a further study.

Analysing strategy use by individuals has shown us some unique features of strategy use by individuals. For example, two participants, KP1 and KP2, showed evidence of strategy use gained from TOEFL preparation class. They filled the remaining time by repeating and elaborating. KP2 showed that classroom features affected her performance positively, while once she faced the difficulty in the test she was hesitant. As a result of this, she achieved lower levels for test task 3 and task 4.

The levels of KP3, KP4, KP5 and KP6 obtained from the main study were higher than in the pre-test. It was assumed that the familiarity of the test and the time gap between the pre-test and the actual test accounted for this difference. KP3, KP4 and KP6 had higher levels in the test than in the class. KP 3 had a good level for test task 1 and a fair level for class task 1. KP4 achieved a good level for test task 3, and a fair level for class task 3. However, KP2 (class task 3 and 4) and KP5 (all four tasks) performed better in the class.

In terms of feelings reported, participants did not show any attempts to overcome negative feelings. For example, Swain *et al* (2009) found out that participants used affective strategies in order to lower their anxiety. However, for the current study, participants reported that they experienced feeling embarrassed or feeling stuck. Thus, feelings were included for the study as part of strategic processes as they might affect performances. Participants felt much more positive in the class than in the test. 11 positive feelings were reported in the class and only one positive feeling was indicated in the test. In the test, negative feelings were reported 29 times, but in the class, only 17 negative feelings were reported. This can tell us that participants feel more under pressure in the test and better in the classroom, where they can receive feedback (KP2 and KP5). The classroom made participants felt negative in the case of considering peers (KP1).

Lastly, how reported strategy use is realised in actual speech was investigated by matching stimulated recall verbalisation and the actual speech production. It was discovered that 13 strategies were evidenced under the test condition, and 7 under

the classroom condition, which was 5.28% and 2.66% respectively. The finding shows that some of the strategies used to complete given tasks can be observable, and thus they can be assessed. However, the small instances of evidence bring into the question whether the strategy assessment can be operationalised.

4-8. Significance of findings: Answering the Key Research Questions

Two conditions shared 67.74% of types of strategies and 84% of types of strategies used in the test reflect strategies used in the classroom. Thus, the degree of overlap justifies the claim that the test adequately reflects the class condition in terms of strategy use. There were 12 types of strategies that were only used under classroom conditions: *recalling the reading passage, generalising, paraphrasing, attending peer speech, anticipating the turns, summarising, inferencing-a, inferencing-b, rethinking choices, evaluating interlocutor's comprehension, and comparing own performance with peers' performances*. However, 6 of them (*recalling the reading passage, generalisation, paraphrasing, summarising, inferencing-a, and inferencing-b*) were detected in Swain *et al* (2009), which means a degree of shared strategy use between the two conditions could be as high as 77.2%. That is, the test condition can reflect the academic classroom performance by eliciting a high level of strategy use. Therefore, it should be considered whether those class specific strategies (*attending peer speech, anticipating the turn, rethinking choices affected by peers, evaluating peers' performance, evaluating interlocutors' comprehension, and comparing own performance with peers' performances*), are crucial strategies for use in the academic classroom or not. According to the findings of the study those strategies were used in small percentages: 2.28%, 1.90%, 0.76%, 3.04%, 0.38%, and 1.14% respectively. The test condition could not tap those strategies as they can only be created under conditions where there is genuine "interaction". We can therefore confidently answer the main research question posed in this thesis: that the iBT speaking tasks can elicit most strategies which are used in the academic classroom, and thus it is likely that iBT speaking scores reflect strategy use.

Recalling the listening passage, referring to notes, elaborating-a, pausing, reviewing the text, remaining silent, changing plan and evaluating time management were found to be used only under test conditions. It can be said that *recalling the listening passage (or the lecture)* and *reviewing the text* are strategies used under academic conditions. As these were not observed under classroom conditions, it could be said that the test simulates key academic skills that may not often be present in interactive context, unless there is a deliberate pedagogy to incorporate these key skills. However, this study has revealed that the iBT speaking test design has succeeded in tapping key strategy uses that are important for academic success.

Elaborating-a, pausing, remaining silent, and evaluating time management, which are time related, can be defined as specific test taking strategies. We cannot avoid using time related strategies as tests are always time-limited. Thus test-takers should practice how to deal with time limits in order to complete given tasks on time. KP5 achieved higher scores for all tasks in the classroom. He was given enough time in the class which seems to be a reasonable explanation for why he achieved higher scores under that condition. In terms of test fairness, the length of preparation time or given time for performance, therefore, should consider individual abilities in terms of time management. It is often the case that timing studies are conducted prior to the roll-out of operational tests, and this research underscores the importance of these studies in ensuring the meaningfulness of scores.

Negative feelings were reported more commonly under test conditions than classroom conditions, while more positive feelings were involved in the classroom. KP2 reported that she felt more comfortable when there was interaction in the classroom, which led her to perform better in that setting. Therefore, how these positive and negative feelings are involved during the performance should be further investigated in order to investigate whether they are variables that affect actual speech production.

The findings have also shown that strategy use is realised in actual speech, and can be detected through discourse analysis techniques. 14 strategy uses were identified in speech elicited under the test condition, and 8 strategy uses under the classroom

condition, which was 5.28% and 2.66% respectively. That these were genuine instances of strategy use was confirmed by the use of verbal protocol analysis. This triangulation gives more credibility to the validity of findings. This is particularly significant, firstly because it lends more credibility to the analysis and to the conclusion that the iBT elicits strategy use that reflects strategy use under non-test conditions; and secondly because it opens up the possibility that the assessment of strategy use could be added to the iBT speaking test scoring rubrics. That is, once it is possible to identify observable attributes of strategy use, it is also possible for human raters to pay attention to those attributes during the process of scoring.

5. Conclusions and Recommendations

5-1. Summary of the study

The research was initiated on the grounds that there are no strategies mentioned in the iBT speaking scoring rubrics (Swain and Huang, 2006; Swain *et al*, 2009). Although the iBT test is designed on the basis of academic proficiency theory, which includes strategy use as an ability speakers use to achieve communicative goals, little information is provided about strategies. As a result of this, we cannot make any inferences from the score obtained about how strategy use relates to academic English readiness, and we also cannot operationalise strategy assessment in the iBT speaking test. Therefore, the study was conducted to examine what strategic processes are involved in completing given speaking tasks by task types (independent and integrated tasks) and proficiency levels (Good and Fair) under two conditions, test and academic classrooms. The practice version of the iBT speaking test provided by ETS was used for participants to take the test, but campus-based tasks were excluded, due to the difficulty of replicating tasks in the academic classroom. The academic classrooms were simulated with four iBT speaking test tasks (2 independent and 2 academic topic integrated tasks) based on the iBT speaking test specification and the framework of speaking (Butler *et al*, 2000) which provides the theoretical background to the iBT speaking test. Six Korean participants (2 male students and 4 female students) who were studying at a British University in various disciplines took part in the study. Strategy research has relied heavily on either questionnaire or discourse-based data. However, those methods do not allow us to investigate the strategic processes employed to complete speaking tasks. That is, speakers' intentions are missed in the data. Therefore, speech samples and stimulated recall verbalisations were collected under both tests and academic classroom conditions, in order to investigate the extent to which the iBT speaking test reflects academic English in terms of strategy use. Consequently, how strategies affect actual speech has been examined. The findings have acknowledged that strategies were employed to complete given speaking tasks in both conditions. 50 types of individual strategies were used in the

test, while 54 types of strategies were used in the class. The total uses of strategies were 246 and 263, respectively. Metacognitive strategies were most favoured in both conditions. Moreover, more strategies were elicited by integrated tasks and fair-level participants showed that they used more strategies than good-level participants in the test. Both settings shared 67.74 percent of strategies, while the test condition has 84 percent in common with the classroom condition and the class has 77.78 percent in common with the test condition. The uniqueness of strategy use appeared in the class and in the test. That is, 12 strategies were used only in the class while 8 strategies were shown only in the test. All participants showed that they used more cognitive strategies in the class. 84% of strategies were used in the test were used in the class, which shows that the iBT speaking test reflects a significantly high percentage of strategy use under academic classroom conditions. Furthermore, 5.28% and 2.66% of strategies used in the test and in the class respectively affected actual speech, which means the operationalisation of strategy use potentially has the possibility to be measured, as we can only measure observable evidence in speech. The low percentage of observable strategy use, however, requires further study to enable the generalisation of strategy assessment.

5.2. The contribution of the current study

5-2-1. The innovative methods

The study employed stimulated recall to trace mental processes utilised in speaking performance, and also collected actual speech produced to complete given speaking tasks. These methods not allow the examining of strategies consciously employed, they also provide evidence for strategy use in speech. The study enabled us to know that some speech production was affected by strategy use and also proved that there were genuine instances of strategy use that could be elucidated effectively through verbal protocol analysis. The strategies that were highlighted by this process were in

turn shown to be reflective of participants' cognitive and metacognitive processes, both in a classroom environment and under test-taking conditions.

5-2-2. Providing the idea of inclusion of strategy use in the iBT scoring rubrics

The study has been initiated by the fact that there is no information available about strategies in the iBT speaking scoring rubrics. Although strategies are claimed to be one constructs of academic proficiency, test users can not make any inferences regarding how strategy use is related to academic proficiency: strategies seem simply to be treated as a universal ability by iBT test designers. However, the findings of the study tell us that a number of strategies used to complete given speaking tasks were evidenced in speech. The study has shown that it is possible for researchers and human raters to identify examples of strategy use by test takers through verbal protocol analysis. These strategies can be verbalised, observed, conceptualised and related to specific tasks in both test and classroom conditions. If it is possible for these attributes of strategy use to be observed, then it is also possible for human raters to pay attention to those attributes during the scoring process.

5-3. Limitations of the study

5-3-1. Proficiency maturation

The study was originally designed to consider three proficiency levels: good, fair, and limited. Moreover, in order to get rid of gender and proficiency variables, the classroom was designed with four participants who were different L1 users, 2 males, and 2 females at the same proficiency level. More females were willing to take part in the research and good-level students were more motivated to volunteer. As a result of this, there was a time delay in meeting the necessary conditions in order to stimulate the classrooms. Therefore, maturation problems emerged as 4 participants achieved

higher levels in the main study over the time gap between the pre-tests and actual tests. Good-level participants remained at the same level, but two fair-level participants advanced to good-level and two limited-level participants stepped up to fair-level. Finally, the study was conducted using two levels. When proficiency level is a variable of the study this maturation problem is to be expected. Nonetheless, the study provided rich data even with two levels.

5-3-2. Translating stimulated recall protocols

One of the methods employed was stimulated recall to elicit participants' mental processes. Six Korean participants were chosen, as if the L1 is the same between participants and the researcher, the participants can verbalise more easily. Therefore, participants did not seem to have any difficulty verbalising what they were thinking about during stimulated recalls. However, literal translation is not always possible. Therefore, I added extra words into brackets to make translation more intelligible, this may have affected the validity of the data. Nonetheless, every effort was made to produce faithful translations.

5-3-3. Generalisations of the study

The study employed a highly qualitative approach with small numbers of participants as it was heavily reliant on their stimulated recall verbalisations and speech production. The study did not intend to make generalisations regarding strategy use. In strategy research, there has been some confusion in terms of agreed-upon definitions and taxonomies. The study therefore focused on finding strategies that were context-specific and task-specific under iBT test conditions and in academic classrooms. The study attempted to operate replicable procedures in order to be a basis for a future large-scale study which may draw generalisation of strategy use by proficiency levels and task types. To compare strategy use under two conditions, test-taking processes

and academic classrooms were carefully designed. Since the data cannot be collected in genuine test-taking conditions and real academic classrooms, the researcher attempted to design test-taking and classroom situations to make them as realistic as possible.

5-4. Directions and Recommendations for future research

5-4-1. Further large-scale research to make generalisation of level-specific, task-specific, and context-specific strategies found in the study

The study showed that a number of strategies were specifically utilised at certain levels, tasks and contexts (see Section 4-7), but due to the small scale, generalisations cannot be drawn from the current study. Thus, these specific strategy usages should be further studied with more participants from various contexts, and this may provide us with opportunities for the generalisation of strategy use. If specific strategy usages are generaliseable we may apply specific strategies into teaching and learning English. For example, strategies used only by good-level speakers may be taught to help lower-level speakers to improve their English oral skills. Moreover, test developers should be concerned about class-specific strategies. If the findings from a large-scale research project show that the iBT speaking test cannot elicit some of strategic processes involved in the class, test developers may inform test users what the iBT speaking test can measure and what it may not measure in terms of strategy use. The current study shows that some of the strategy use is evident in speech. Thus, if we can draw generalisation from these in further research, the iBT scoring rubrics should include strategy use. This allows us to make inferences about academic speaking readiness in terms of strategy use.

5-4-2. Research for comparison between examinees' intention of strategy use and how those strategy uses were interpreted from the raters' point of view

The current study focused on what strategies speakers used and what mental processes were involved in completing the given speaking tasks. Some evidence was identified that speakers used strategies while they were engaged in speaking tasks, and also some of the strategies used affected actual speech. This opens the door to a possibility of strategy assessment. Consequently, strategies may be included in the scoring rubrics which help us to interpret the score and its use. Without speakers' stimulated recall protocols it would not be possible to confirm intentionality of strategy use. However, how strategy use evidence can be interpreted by raters is the remaining question. Some findings of the study tell us that stimulated recalls support the evidence of strategy use in actual speech, but speech itself affected by strategies might be difficult for examiners to identify as strategies, as test-takers do not provide their thoughts. Therefore, it is suggested that future research should be conducted about examiners' point of view as well. This approach will give strength to the strategy research.

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Appendices

Appendix 1-1. The iBT speaking task types

http://www.ets.org/Media/Tests/TOEFL/pdf/TOEFL_Tips.pdf

Task type	Task description	Timing (seconds)
Independent tasks		
1. Personal preference	This question asks the test taker to express and defend a personal choice from a given category—for example, important people, places, events or activities that the test taker enjoys.	Preparation time: 15 Response time: 45
2. Choice	This question asks the test taker to make and defend a personal choice between two contrasting behaviors or courses of action.	Preparation time: 15 Response time: 45
Integrated tasks		
Read/Listen/Speak		
3. Campus Situation Topic: Fit and Explain	<ul style="list-style-type: none"> • A reading passage (75–100 words) presents a campus-related issue. • A listening passage (60–80 seconds, 150–180 words) comments on the issue in the reading passage. • The question asks the test taker to summarize the speaker's opinion within the context of the reading passage. 	Preparation time: 30 Response time: 60
4. Academic Course Topic: General/Specific	<ul style="list-style-type: none"> • A reading passage (75–100 words) broadly defines a term, process, or idea from an academic subject. • An excerpt from a lecture (60–90 seconds; 150–220 words) provides examples and specific information to illustrate the term, process, or idea from the reading passage. • The question asks the test taker to combine and convey important information from the reading passage and the lecture excerpt. 	Preparation time: 30 Response time: 60
Listen/Speak		
5. Campus Situation	• The listening passage (60–90 seconds; 180–220 words) is a conversation	Preparation time: 20

Topic: Problem/Solution	about a student-related problem and two possible solutions. <ul style="list-style-type: none"> • The question asks the test taker to demonstrate an understanding of the problem and to express an opinion about solving the problem 	Response time: 60
6.Academic Course Topic: Summary	<ul style="list-style-type: none"> • The listening passage is an excerpt from a lecture (90–120 seconds; 230–280 words) that explains a term or concept and gives concrete examples to illustrate that term or concept. • The question asks the test taker to summarize the lecture and demonstrate an understanding of the relationship between the examples and the overall topic. 	Preparation time: 20 Response time: 60
Total		20 minutes

Appendix 1-2. The pictorial samples of the iBT speaking tasks

http://www.ets.org/Media/Tests/TOEFL/pdf/TOEFL_Tips.pdf

Independent speaking task: a question appears on the screen and is read by the narrator, and the clock shows remaining preparation and performance time.

The screenshot displays the TOEFL Speaking interface. At the top, a dark header bar contains the text "TOEFL Speaking" on the left, the ETS logo in the center, and a "VOLUME" control icon on the right. Below the header, the text "Question 1 of 6" is centered. The main content area is white and contains the following text: "Describe a class you have taken in school and explain why the class was important to you. Include details and examples to support your explanation." Below this text is a horizontal line. Under the line, the timing information is displayed: "Preparation Time: 15 Seconds" and "Response Time: 45 Seconds". At the bottom center, there is a black rectangular button with the white text "PREPARATION TIME". Directly below this button is a white rectangular box with a black border containing the text "00 : 00 : 14".

Integrated speaking task (Read/Listen/Speak): First, a reading passage presents on the screen and either a lecture or a conversation is provided. The actual question appears as below:

TOEFL Speaking

Question 3 of 6

Reading Time: 45 seconds

Animal Domestication

For thousands of years, humans have been able to domesticate, or tame, many large mammals that in the wild live together in herds. Once tamed, these mammals are used for agricultural work and transportation. Yet some herd mammals are not easily domesticated.

A good indicator of an animal's suitability for domestication is how protective the animal is of its territory. Nonterritorial animals are more easily domesticated than territorial animals because they can live close together with animals from other herds. A second indicator is that animals with a hierarchical social structure, in which herd members follow a leader, are easy to domesticate, since a human can function as the "leader".

TOEFL Speaking

Question 3 of 6



TOEFL Speaking

Question 3 of 6

The professor describes the behavior of horses and antelope in herds.
Explain how their behavior is related to their suitability for domestication.

Preparation Time: 30 Seconds
Response Time: 60 Seconds

PREPARATION TIME

00 : 00 : 21

Integrated speaking task (Listen/Speak): a listening passage is provided and an actual question is given about what is heard.

TOEFL Speaking

Question 6 of 6



A progress bar is located below the video frame.

TOEFL Speaking

Question 6 of 6

The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Preparation Time: 20 Seconds
Response Time: 60 Seconds

PREPARATION TIME

00 : 00 : 07

Appendix 3-1. The iBT speaking test scoring rubrics

http://www.ets.org/Media/Tests/TOEFL/pdf/Speaking_Rubrics.pdf



TOEFL® iBT Test Independent Speaking Rubrics (Scoring Standards)

Score	General Description	Delivery	Language Use	Topic Development
4	The response fulfills the demands of the task, with at most minor lapses in completeness. It is highly intelligible and exhibits sustained coherent discourse. A response at this level is characterized by all of the following:	Generally well-paced flow (fluid expression). Speech is clear. It may include minor lapses, or minor difficulties with pronunciation or intonation patterns which do not affect overall intelligibility.	The response demonstrates effective use of grammar and vocabulary. It exhibits a fairly high degree of automaticity with good control of basic and complex structures (as appropriate). Some minor (or systematic) errors are noticeable but do not obscure meaning.	Response is sustained and sufficient to the task. It is generally well developed and coherent; relationships between ideas are clear (or clear progression of ideas).
3	The response addresses the task appropriately, but may fall short of being fully developed. It is generally intelligible and coherent, with some fluidity of expression though it exhibits some noticeable lapses in the expression of ideas. A response at this level is characterized by at least two of the following:	Speech is generally clear, with some fluidity of expression, though minor difficulties with pronunciation, intonation, or pacing are noticeable and may require listener effort at times (though overall intelligibility is not significantly affected).	The response demonstrates fairly automatic and effective use of grammar and vocabulary, and fairly coherent expression of relevant ideas. Response may exhibit some imprecise or inaccurate use of vocabulary or grammatical structures or be somewhat limited in the range of structures used. This may affect overall fluency, but it does not seriously interfere with the communication of the message.	Response is mostly coherent and sustained and conveys relevant ideas/information. Overall development is somewhat limited, usually lacks elaboration or specificity. Relationships between ideas may at times not be immediately clear.
2	The response addresses the task, but development of the topic is limited. It contains intelligible speech, although problems with delivery and/or overall	Speech is basically intelligible, though listener effort is needed because of unclear articulation, awkward intonation, or choppy rhythm/pace; meaning may be	The response demonstrates limited range and control of grammar and vocabulary. These limitations often prevent full expression of ideas. For the most part, only basic sentence structures are	The response is connected to the task, though the number of ideas presented or the development of ideas is limited. Mostly basic ideas are expressed with limited elaboration

	coherence occur; meaning may be obscured in places. A response at this level is characterized by at least two of the following:	obscured in places.	used successfully and spoken with fluidity. Structures and vocabulary may express mainly simple (short) and/or general propositions, with simple or unclear connections made among them (serial listing, conjunction, juxtaposition).	(details and support). At times relevant substance may be vaguely expressed or repetitious. Connections of ideas may be unclear.
1	The response is very limited in content and/or coherence or is only minimally connected to the task, or speech is largely unintelligible. A response at this level is characterized by at least two of the following:	Consistent pronunciation, stress, and intonation difficulties cause considerable listener effort; delivery is choppy, fragmented, or telegraphic; frequent pauses and hesitations.	Range and control of grammar and vocabulary severely limit (or prevent) expression of ideas and connections among ideas. Some low-level responses may rely heavily on practiced or formulaic expressions.	Limited relevant content is expressed. The response generally lacks substance beyond expression of very basic ideas. Speaker may be unable to sustain speech to complete the task and may rely heavily on repetition of the prompt.
0	Speaker makes no attempt to respond OR response is unrelated to the topic			

Score	General Description	Delivery	Language Use	Topic Development
4	The response fulfills the demands of the task, with at most minor lapses in completeness. It is highly intelligible and exhibits sustained, coherent discourse. A response at this level is characterized by all of the following:	Speech is generally clear, fluid, and sustained. It may include minor lapses or minor difficulties with pronunciation or intonation. Pace may vary at times as the speaker attempts to recall information. Overall intelligibility remains high.	The response demonstrates good control of basic and complex grammatical structures that allow for coherent, efficient (automatic) expression of relevant ideas. Contains generally effective word choice. Though some minor (or systematic) errors or imprecise use may be noticeable, they do not require listener effort (or obscure meaning).	The response presents a clear progression of ideas and conveys the relevant information required by the task. It includes appropriate detail, though it may have minor errors or minor omissions.
3	The response addresses the task appropriately, but may fall short of being fully developed. It is generally intelligible and coherent, with some fluidity of expression, though it exhibits some noticeable lapses in the expression of ideas. A response at this level is characterized by at least two of the following:	Speech is generally clear, with some fluidity of expression, but it exhibits minor difficulties with pronunciation, intonation, or pacing and may require some listener effort at times. Overall intelligibility remains good, however.	The response demonstrates fairly automatic and effective use of grammar and vocabulary, and fairly coherent expression of relevant ideas. Response may exhibit some imprecise or inaccurate use of vocabulary or grammatical structures or be somewhat limited in the range of structures used. Such limitations do not seriously interfere with the communication of the message.	The response is sustained and conveys relevant information required by the task. However, it exhibits some incompleteness, inaccuracy, lack of specificity with respect to content, or choppiness in the progression of ideas.
2	The response is connected to the task, though it may be missing some relevant information or contains inaccuracies. It contains some intelligible speech, but at times problems with intelligibility and/or	Speech is clear at times, though it exhibits problems with pronunciation, intonation, or pacing and so may require significant listener effort. Speech may not be sustained at a consistent level	The response is limited in the range and control of vocabulary and grammar demonstrated (some complex structures may be used, but typically contain errors). This results in limited or vague expression of relevant ideas and imprecise or	The response conveys some relevant information but is clearly incomplete or inaccurate. It is incomplete if it omits key ideas, makes vague reference to key ideas, or demonstrates limited development of

	overall coherence may obscure meaning. A response at this level is characterized by at least two of the following:	throughout. Problems with intelligibility may obscure meaning in places (but not throughout).	inaccurate connections. Automaticity of expression may only be evident at the phrasal level.	important information. An inaccurate response demonstrates misunderstanding of key ideas from the stimulus. Typically, ideas expressed may not be well connected or cohesive so that familiarity with the stimulus is necessary to follow what is being discussed.
1	The response is very limited in content or coherence or is only minimally connected to the task. Speech may be largely unintelligible. A response at this level is characterized by at least two of the following:	Consistent pronunciation and intonation problems cause considerable listener effort and frequently obscure meaning. Delivery is choppy, fragmented, or telegraphic. Speech contains frequent pauses and hesitations.	Range and control of grammar and vocabulary severely limit (or prevent) expression of ideas and connections among ideas. Some very low-level responses may rely on isolated words or short utterances to communicate ideas.	The response fails to provide much relevant content. Ideas that are expressed are often inaccurate, limited to vague utterances, or repetitions (including repetition of prompt).

0 Speaker makes no attempt to respond OR response is unrelated to the topic

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Appendix 3-2. The consent forms

Consent Form of the Research (Korean participants)

The aim of the research: to investigate strategies used for the iBT speaking test and in academic classrooms.

Procedure: If you agree to be a participant for this study you will be asked to perform the following activities:

Part I

1. Filling out the background questionnaire: approximately 10 minutes
2. Induction for the types of the iBT speaking tasks: approximately 5 minutes
3. Taking the iBT speaking test (practice version (1), ETS 2009): approximately 20 minutes

Part II

4. Attending stimulated recall training session: 5 minutes
5. Taking the iBT speaking test (practice version (2), ETS 2009) and stimulated recall verbalisation: approximately 60 minutes

Part III

6. Attending the academic classroom and stimulated recall verbalisation: approximately 60 minutes

Cf: the sequences of 5 and 6 may be changed.

Advantages and disadvantages of being involved in the research

Advantages: you may experience the computer delivery speaking test and you also have a chance to trace your process of English speaking performance. Moreover, you can estimate your English speaking proficiency.

Disadvantages: you may get tired after taking tests and stimulated recall verbalisation. However, there will be a break between speaking performance and stimulated recall

verbalisation, and each part will be carried out on a different day. If you do not want to continue as a participant you can stop anytime you wish.

Compensation: you will receive a small gift to thank you for your time contribution and your help. Although the gift is small, due to a limited budget, it is a sign of huge appreciation.

Confidentiality: the data obtained from you will be stored only on the researcher's computer. When the study is published your name will be replaced with a pseudonym.

I have read the above information and I agree to be a participant for the research.

Name:

Signature:

Date:

Consent Form of the Research (non-Korean participants)

The aim of the research: to investigate speaking strategies used for the iBT (internet-Based TOEFL) speaking test and in academic classrooms.

Procedure: If you agree to be a participant in this study you will be asked to perform the following activities:

1. Filling out the background questionnaire: approximately 10 minutes
2. Induction for the types of speaking tasks: approximately 5 minutes
3. Taking the iBT speaking test (practice version (1), ETS 2009): approximately 20 minutes
4. Attending the academic classroom: approximately 30 minutes

Advantages and disadvantages of being involved in the research

Advantages: you can experience the computer delivery English speaking test. Moreover, your test-taking will be assessed by two experienced English oral testing assessors and you can estimate your English speaking proficiency.

Disadvantages: you may get tired after taking tests and attending an academic classroom. However, there will be a gap of few days between testing performance and classroom activities.

Compensation: you will receive a small gift for your time contribution and your help after the research is completed. Although it won't be a large gift, due to the limited budget of a research student, it is a sign of huge appreciation.

Confidentiality: the data obtained from you will be stored only on the researcher's private computer. When the study is published your name will be replaced with a pseudonym.

I have read the above information and I agree to be a participant for the research.

Name:

Signature:

Date:

Appendix 3-3. Brief comparison of topics of speaking activities in testing and classroom for pilot study 2.

Task 1

Testing: Choose a place you go to often that is important to you and explain why it is important. Please include specific details in your explanation.

Classroom: Choose a favourite newspaper or television program and explain why it is your favourite including specific examples and details in your explanation.

Task 2

Testing: Some college students choose to take courses in a variety of subject areas in order to get a broad education. Others choose to focus on a single subject area in order to have a deeper understanding of that area. Which approach to course selection do you think is better for students and why?

Classroom: How does the Internet affect your academic study? Explain either advantages or disadvantages of the internet for your study.

Task 3

Testing: The reading passage is about 'Bus Service Elimination Planned'. The listening content is about the discussion between two students about the same topic of the reading passage. The question: the man expresses his opinion of the university's plan to eliminate the bus service. State his opinion and explain the reasons he gives for holding that opinion.

Classroom: The reading passage is about a specific software programme which enables us to find out how much written works contain others' written work. The question: What do you think about the passage?

Task 4

Testing: The reading passage is about the nature of social interaction. The listening is about 'audience effect' from a sociology class. The question: explain how the examples of tying shoes and learning to type demonstrate the principle of audience effect.

Classroom: The reading passage is about how to paraphrase, summarise, and quote from sources. The lecture explains the terminology to students. The question: When would you paraphrase rather than quote?

Task 5

Testing: The listening content is the conversation between one geology professor and a student about a field trip. The question: The speakers discuss two possible solutions to the woman's problem. Describe the problem and the two solutions, then explain what you think the woman should do and why.

Classroom: The lecturer gives the lecture about the history of plagiarism with issues related to plagiarism from past to present. The question: Is paraphrasing or summarising really plagiarism if we only add it to our work?

Task 6

Testing: the listening content is a part of a talk from an economics class about definitions of money. The question: Using points and examples from the talk, explain the two definitions of money presented by the professor.

Classroom: The lecturer gives a lecture about legal issues in academic fields and highlights issues of plagiarism, giving two cases (Goodwin case and doctor Raj Persaud). The question: Why is avoiding plagiarism important in the academic field?

Appendix 3-4. The comparison of the task specification and task contents between test and academic classroom

Task 1. (Independent task)

	Test	Academic classroom
Nature of task	Personal; describe and explain reason for a personal opinion about familiar persons, places, objects, events, activities, etc.	The same as in the test
Actual question	What kind of reading material, such as novels, magazines, or poetry, do you most like to read in your free time? Explain why you find this kind of reading material interesting.	Choose a teacher you admire and explain why you admire him or her. Please include specific examples and details in your explanation.
Preparation time	15 seconds	It may vary depending on the sequence of responding.
Response time	45 seconds	It may vary as the lecturer does not count time.
Taking notes	Yes	Yes

Task 2. (Independent task)

	Test	Academic classroom
Nature of task	Personal; describe and support personal preference with respect to given pair of behaviours or courses of action.	The same as in the test
Actual question	Some students would prefer to	Some students study for

	live with roommates. Others would prefer to live alone. Which option would you prefer and why?	classes individually. Others study in groups. Which method of studying do you think is better for students and why?
Preparation time	15 seconds	It may vary depending on the sequence of responding.
Response time	45 seconds	It may vary as the lecturer does not count time.
Taking notes	Yes	Yes

Task 3. (Reading-listening-speaking integrated task)

	Test	Academic classroom
Nature of task	Academic content; explain how examples or specific information provided in a listening stimulus support a broader concept presented in the reading passage.	The same as in the test
Nature of stimulus material	Reading passage: broad description of theory, concept, term or other subject of academic relevance Listening passage: detailed information about topic, or concrete example	The same as in the test

Reading passage topic	Actor-observer	Received Pronunciation (RP)
The content	See below (1)	See below (3)
The length	104 words	110 words
Given time to read	45 seconds	45 seconds
Listening passage topic	Examples of actor and observer in life	The impact of RP use
The content	See below (2)	See below (4)
The length	257 words	229 words
Actual question	Explain how the two examples discussed by the professor illustrate differences in the ways people explain behaviour	What are the advantages and what may be the disadvantages of Received Pronunciation’?
Preparation time	30 seconds	It may vary depending on the sequence of responding.
Response time	60 seconds	It may vary as the lecturer does not count time.
Taking note	Yes	Yes

(1) Reading passage content for the test

People account for their own behaviour differently from how they account for the behaviour of others. When observing the behaviour of others, we tend to attribute their actions to their character or their personality rather than to external factors. In contrast, we tend to explain our own behaviour in terms of situational factors beyond our own control rather than attributing it to our own character. One explanation for this difference is that people are aware of the situational forces affecting them but not

of situational forces affecting other people. Thus, when evaluating someone else's behaviour, we focus on the person rather than the situation.

(2) Listening passage content for the test

So, we encounter this in life all the time, but many of us are unaware that we do this...even psychologists who study it...like me. For example, the other day I was at the store and I was getting in line to buy something. But just before I was actually in line, some guys come out of nowhere and cuts right in front of me. Well, I was really annoyed and thought, "That was rude!" I assumed he was just a selfish, inconsiderate person when, in fact, I had no idea why he cut in line in front of me or whether he even realised he was doing it. Maybe he didn't think I was actually in line yet...But my immediate reaction was to assume he was a selfish or rude person.

Ok so a few days after that, I was at the store again. Only this time I was in a real hurry-I was late for an important meeting-and I was frustrated that everything was taking so long. And What's worse, all the check-out lines were long, and it seemed like everyone was moving so slowly. But then I saw a slightly shorter line! But some woman with a lot of stuff to buy was walking toward it, so I basically ran to get there first, before her, and, well, I did. Now I didn't think of myself as a bad or rude person for doing this. I had an important meeting to get to-I was in a hurry, so, you know, I had done nothing wrong.

(3) Reading passage content for the classroom

In the United Kingdom there is a form of English that is sometimes called 'Received Pronunciation' (RP) or 'The Queen's English'. This is a particular use of pronunciation and grammar which dominated British Broadcasting from the first radio programmes in 1922. The use of this standardised form of English continued through to the earliest days of television programming.

For many people in the UK, while they understood this accent and pronunciation, only 2% of the population used it in their own domestic lives. Regional accents and dialect

differed very strongly from each other. But it was not until the 1960s that regional accents were heard, nationally, on radio and television.

(4) Listening passage content for the classroom

(Examples given from the differences in accent and dialect in the constituent countries of the UK: Wales, Scotland, Northern Ireland and England, and also the different regions and even cities in England itself. An illustration of the fact that even in London the accent varies from area to area). A standardised form of English, RP, is a good way to ensure that listeners from all over the country can understand what is being said, which is why it was originally adopted by the BBC. However, the problem is that many people with regional accents felt that their way of speaking was not approved of by those in authority, and suggested that they weren't educated or were from a lower class. RP tended to perpetuate the class system in the UK. Many parents sent their children to elocution (speaking and pronunciation) lessons, from private tutors so that they could obtain good jobs and be regarded as acceptable to others. The use of regional accents on radio and television from the 1960s onwards meant that people were no longer ashamed of their natural regional accent. As a result, fewer younger speakers with regional accents consider it necessary to adapt their speech to the same extent. Many commentators even suggest that younger Received Pronunciation speakers often go to great lengths to disguise their middle-class accent by incorporating regional features into their speech.

Task 4. (Listening-speaking integrated task)

	Testing	Academic classroom
Nature of task	Academic content: summarise a short lecture segment that explains meaning of term or concept	
Nature of stimulus material	Lecture on a academic topic presenting two aspects or	

Listening passage topic	perspectives on a concept with concrete illustrations Young children and art	Radio development in the USA and the UK
The content	See below (1)	See below (2)
The length	252 words	318 words
Actual question	Using points and examples from the talk, explain how learning art can impact a child's development	I explained how radio developed differently in the USA and the UK. What are those differences?
Preparation time	20 seconds	It may vary depending on the sequence of responding.
Response time	60 seconds	It may vary as the lecturer does not count time.
Taking note	Yes	Yes

(1) Listening passage content for the test

Ok. Young children and art. Research suggests that learning art skills can benefit a young child's development. Two of the ways it can do this is by providing a platform to express complex emotions and by encouraging persistence.

What do I mean when I say "a platform to express complex emotions"? Young children have limited vocabulary. How would they communicate the feeling of pride, for example? A drawing, though, making a drawing of feeling proud...this is something a young child could do. A little girl might draw herself jumping up in the air next to her

bike. In the drawing, her arms are raised up in the air and she's smiling. Children can draw to communicate their emotions, whether positive or negative, through the drawing-mm-better than they could with words.

And encouraging persistence? Art skills can help children to develop patience and concentration to persist in an activity...the willingness to keep trying to reach a goal. So, suppose there's a little boy who wants to mold a lump of clay into the shape of a car. The first attempt doesn't look too much like a car. He's disappointed but wants to try again. The second, third, fourth try still don't look quite right, but there's improvement his creation. The newly shaped clay car is an instant reminder of an accomplishment-a success resulting from his persistence. The boy may be able to transfer this lesson toward other situations and activities because he's had the experience of successfully accomplishing a goal through hard work.

(2) Listening passage content for the classroom

There are certain differences in the ways that the development of radio impacted on the populations of the USA, and the UK.

The USA is a very large land mass. There, immigrants from other nations settled in certain areas, with their own cultures and communities. Each area developed separately from others and although there was a United States of America, there was little common culture. Newspapers, for instance, tended to be local in scope and content. So, people developed their own ways of living, dressing and speaking.

The advent of radio changed that quite dramatically. Americans in different regions began to listen to the same popular radio programmes. They began to repeat things they heard on radio and some phrases from songs and entertainment programmes started to be used all over the United States. The news programmes on radio tended to be national, and people became aware of the cultures and events in other regions. One of the interesting things about US radio programmes, however, was that they were sponsored. All radio production was commercial. So, along with giving the United

States more awareness about each other, they also created a culture of an aspirational nation buying or wanting the same products.

In the UK, as a much smaller country, the impact of radio was not quite as life-changing. The UK had always national newspapers, and those who were able to read were aware of news generated in different parts of the country. However, radio was state-owned, with the production fees paid by the purchase of a licence. This gave the BBC, the British Broadcasting Corporation, potentially huge power to dictate the way people thought, through the control of what they heard. This was the way state radio was used in some regimes, worldwide. But the BBC has in its constitution the fact that the programmes have to be balanced. Therefore it cannot be used to spread propaganda.

Appendix 3-5. Swain, *et al*'s (2009) coding scheme

Approach strategies: What the test-taker does to orient him- or herself to the task

1. Recalling the task type
2. Recalling the question
3. Recalling the text
4. Recalling the dialogue
5. Recalling the lecture
6. Generating choices
7. Making choices
8. Developing reasons for choosing what to say/do

Communication strategies: Involving conscious plans for solving a linguistic problem in order to reach a communicative goal

1. Simplifying the message
2. Avoiding
3. Using L1
4. Paraphrasing (2 types)
5. Approximating
6. Linking to prior experience/knowledge
7. Borrowing (2 types)
8. Reviewing notes
9. Referring to notes
10. Organising thoughts
11. Guessing
12. Repeating (2 types) for unfamiliar words or to fill the time
13. Rehearsing
14. Reading ahead
15. Restructuring
16. Stalling

17. Slowing (2 types) to gain time or to avoid making mistakes
18. Summarizing (verbal) the task
19. Thinking ahead
20. Elaborating (3 types) to fill time or to clarify meaning

Cognitive strategies: involving manipulating the target language to understand and produce language

1. Attending
2. Anticipating the content
3. Anticipating the structure
4. Anticipating the question
5. Using Imagery
6. Using mechanical means to organise or remember information (4): writing things down to organise or remember information; using symbols for drawing attention during delivery; writing down information in numerical form during a listening or reading activity; mapping information to organising notes during a listening or reading activity
7. Memorising
8. Summarising
9. Translating (2 types)
10. Inferencing
11. Processing inductively (to make generalisations)

Metacognitive strategies: involving organising, planning, and evaluating

1. Setting goals
2. Identifying the purpose of the task
3. Planning
4. Monitoring
5. Self-correcting
6. Evaluating previous performance

7. Evaluating the content of what was read/heard
8. Evaluating performance
9. Evaluating language production

Affective strategies

1. Lowering anxiety
2. Encouraging self
3. Justifying performance

Appendix 3-6. Coding scheme for the main study

1. Approach strategies: What the speaker does to orient him or her to the task

Strategy	Excerpts from stimulated recall verbalisation (Strategic processes in Bold face)
1. Recalling the task type: speaker thinking about the task type	<p>KP4 class task 2</p> <p>제가 생각한 건 뭐냐면 토플은 예를 들어 시험을 보면 딱 시간이 정해져 있잖아요. 준비시간이 몇 초 그러니까 그거는 딱 그렇게 긴 시간이 아니데 이걸 시간 제한이 없으니까 다른 학생들이 너무 길게 하니까 저도 길게 해야 될 것 같은 거예요. (Translation: <i>I thought that when we take TOEFL, for example, time was limited. For example there are a few minutes for preparation which isn't a long time, but for this (class), there was no such limitation for time. I thought I had to speak as long as the others spoke long</i>)</p>
2. Recalling the question: speaker thinking about the meaning of the question	<p>KP3 class task 1</p> <p>아 이게 보통 질문이 선생님들 그거 물어보는 거였잖아요. 사실 저거에 대해서 답할 때 무슨 생각이 제일 먼저 들었냐며 는 저런 이런 류의 질문은 평소에 내 마음에 존경하는 선생님이 있지 않고서는 쉽게 바로 대답을 할 수 없겠구나 그 생각을 했어요 (Translation: <i>Firstly, what I was thinking was that this kind of question seems difficult if we don't have a teacher we admire</i>)</p>

3. Recalling the text or the reading passage: speaker thinking about the reading passage	<p>KP6 class task 3</p> <p>근데 기억에 received 가 queen's 하고 같은 paragraph 에 있었던 거 같애 (Translation: <i>I was thinking that RP was in the same paragraph as queen's</i>)</p>
4. Recalling the lecture or the listening passage: speaker thinking about the lecture or the listening passage	<p>KP5 test task 3</p> <p>이때 제가 a couple of day before 라고 말했던 것 같은데 아 이게 그 전 교수가 내가 어느 날 이런 경험을 했고 그 다음 날 이런 경험을 했다고 했었는지 어떤 날 이런 그 어떤 사람이 내 줄에 새치기 하는 경험을 했고 그리고 얼마 지나서 라고 말했듯이 그게 잘 기억이 안 났거든요. (Translation: <i>At that time I appeared to say, "a couple of day before". I could remember that when the professor mentioned about his experience whether he did such experience then next that he experienced (something else)</i>)</p>
5. Generating choices: speaker generating choices	<p>KP1 test task 2</p> <p>일단 some students prefer to live with roommates 를 보자마자 는 그냥 약간 할 말이 많을 거라고 생각이 딱 들었는데 왜냐면은 이런 roommate 랑 사는 게 좋냐, 아니냐는 평소에 친구들하고 얘기를 많이 해봤던 거라서 어떤 친구들은 혼자 사는 것을 좋아하고 어떤 사람들은 roommate 랑 살고 싶어하는 이유가 더 많아서 이걸 쉽게 얘기할 수 있겠다면서 (Translation: <i>As soon as I came across "some students prefer to live with roommates" I was thinking that I would have many things to talk about. This was because I often</i></p>

	<p><i>talked about whether living with roommates was good or not with friends. Some prefer to live with by themselves; others have more reasons to live with roommates. Then I thought that I had an occasion to choose (living with roommates) and I thought that this task would be easy to talk as I had more reasons to live with roommate)</i></p>
<p>6.Making choices: speaker narrowing down the choices</p>	<p>kP3 test task 2</p> <p>그래도 학생 때를 생각해서 얘기하자 그래서 (Translation: <i>I decided to say about my student life</i>)</p>
<p>7.Developing reasons: speaker developing reasons for making a particular choice of topic</p>	<p>KP6 test task 1</p> <p>최근에 만난 사람, 일단은 가슴 깊이 기억에 남는 사람이 아니기 때문에 최근에 만 난사람 lecturer 를 얘기를 했는데 그 사람이 특별히 이제 그거를 가지고 왜 존경을 해야 되는지를 얘기를 해야 되니까 마음에 드는 점을 그냥 얘기를 한거죠 최근에 만났고 제 semester 3 supervisor 니까 (Translation: <i>I was thinking of the person who I met recently, not the one who was remembered in my heart, my lecturer. Then I had to talk about him why I respected him, so I said something about why I liked him because I met him lately and he was my supervisor for the third term</i>)</p>

2. Compensation strategies: Involving conscious plans for solving a linguistic problem in order to reach a communicative goal

Strategy	Excerpts from stimulated recall verbalisation (Strategic processes in Bold face)
1.Avoiding: speaker thinking about avoiding areas that pose linguistic difficulties	<p>KP6 class task 2</p> <p>왜냐면 그 뭐야 공부를 잘하고 못하고 에 차이라기 보다는 일단은 그 뭐야. 책임감하고 적극성이 좀 수반이 되고 그리고 또 그거에 합당한 그 책임하고 적극성이 수반이 돼야죠 group work 가 제대로 효과를 낸다 이런 얘기를 하고 싶었는데 적극성이 생각이 안 나는 거예요. 그래가지고 그냥 그 책임감만 했는데 (Translation: <i>I wanted to mention that successful group works need the initiative and responsibility, but I couldn't think about the word, '적극성 (the initiative)'</i>) I wanted to mention that successful group works need responsibility and active involvement, but I couldn't think about the word, active involvement, so I decided to say responsibility only)</p>
2.Using L1 (Korean): speaker using L1 to formulate what to say	<p>KP1 test task 1</p> <p>그래서 그냥 그렇게 한국말로 생각을 해도(Translation: <i>which I was thinking of in Korean</i>)</p>

<p>3.Lexical substitution: speaker substituting a word he cannot think of an intended word</p>	<p>KP3 class task 3</p> <p>그래가지고 아 이 지역이라는 표현을 쓰고 싶은데 그걸 못 써서 place 라고 대신 했는데 음 적절하지 않다고 생각하지만 서도 이 상황에서는 그게 최선이라서 place 라고 (Translation: <i>Therefore, I replaced the word with 'place' as I didn't think it was right but it was the second best</i>)</p>
<p>4.Generalisation: speaker using a single alternative lexical item , such as a superdonate</p>	<p>KP1 class task 3</p> <p>저 때는 south 라고 할까 경상도 전라도 라고 얘기 할까 하다가 너무 어려울 것 같아서 그냥 남쪽이라고 해야겠다 생각했어요 얘기하는 도중에 (Translation: <i>I was deciding what I should say, Kyungsang-do, Jeonla-do or the south, but I decided to say just namijok (the south) as it would be too difficult (to say the other two)</i>)</p>
<p>5.Paraphrasing: speaker restating the thought in another form or with other words to clarify meaning</p>	<p>KP5 class task 4</p> <p>미국사람들이 돈에 관한 컨셉을 변하기 시작했다. 머니 라는 얘기를 했는데 아 monetary concept 이라고 내가 나중에 얘기를 하면은 어 이 단어를 쓰면 되겠구나 선생님이 말한 거와는 조금 다르게 좀더 평소에 잘 안 쓰지만 덜 쓰지만 덜 쓴다기 보다 좀 더 어휘가 어휘가 풍부해 보이게 아 이렇게 해서 monetary concept 이라고 말을 하면 되겠구나 정리를 했었어요 (Translation: <i>While I was listening about that American people changed the concept of money and I was thinking of the word, monetary concept, which I tried to use the word different from the teacher</i>)</p>

	<i>and it was used rarely, so I thought my lexical ability would look more abundant</i>
6.Borrowing : speaker thinking about words heard or read during the listening or reading activity while completing the given task	<p>KP5 class task 1</p> <p>이때도 내가 my goals 이 문제에 대해서 이 주제에 질문을 했을 때 저는 전에 옆에 친구가 자기 의견을 얘기하면서 적었던 게 my goals 라는 단어 였는데 (Translation: <i>At this time, for this question, when (I was) asked about this topic I (heard) that the peer sitting next to me said, “my goal”</i>)</p> <p>그 선생님이 block 이라고 해서 아 block 이라고 하는구나 이런 단어를 써야겠구나 이런 생각을 하고 block 이라고 고쳐서 다시 말했어요 (Translation: <i>But the teacher said, “block” and I thought that I should use the word, “block” and I corrected it to “block”</i>)</p>
7.Reviewing notes: speaker reviewing notes to remember or formulate what to say	<p>KP1 test task 4</p> <p>준비하면서 처음부터 내가 적은 걸 쪽 봤는데 여기서 너무 들리는 거에 키워드만 적어놔서 그 준비를 하면 또 어떻게 연계를 시켜서 얘기를 해야 되지 그것 땀에 약간 긴장됨이 있었어요 (Translation: <i>When I was preparing I thoroughly looked at the note taking I did and found I wrote only key words heavily based on listening and I was thinking how to make a link to speak// and got tense</i>)</p>
8.Referring to notes: speaker referring to the notes	<p>KP1 test task 4</p>

	<p>그래서 지금 저기서 platform 한 다음에 약간 멈췄하고 있는 게 platform 이라는 그게 그 대게 뭐랄까 그 복잡한 감정을 표현하기 위한 건데 그거를 어떻게 그냥 platform is to express 뭐 이렇게 했으면 될 것 같은데 지금 생각하면 저 때 생각이 안 나서 benefit 여기 딱 benefit 적은 게 보여서 그 동사를 이용해서 했어요 (Translation: <i>Thus, I stopped for a while after saying “platform” because I thought that “platform meant something complicated emotions, so I should have said that “platform is to express” simply. But I think that I couldn’t think of it and I just used the verb “benefit” as it was seen in here (notes)</i>)</p>
<p>9.Organising thoughts: speaker organising thoughts while speaking</p>	<p>KP1 test task 1</p> <p>좀 어떻게 말을 하다 보니까 의도 된 얘기였는데 좀 irrelevant 하게 들리는 것 같아서 어떻게 하면 좀 매끄럽게 할 수 있을까 생각을 (Translation: <i>While speaking I realised that what I said sounded irrelevant although the speech was intended and I thought how I should make the speech more smoothly</i>)</p>
<p>10.Guessing: speaker guessing by using</p>	<p>KP6 class task 3</p> <p>그래서 나는 처음 에 received pronunciation. Queens’ 뭔 소리를 하는 건지 도대체 received 는 사투리인가 queen’s는 표준말인 것 같은데 뭐 이런 생각을 막하고 있었지 (Translation: <i>So, at first, I had no idea about Received Pronunciation and Queen’s English. I was thinking that RP might be dialect</i></p>

	<i>and Queen's English might be standard language)</i>
11.Repeating: speaker repeating phrases in order to gain time or repeating phrases to fill the time	KP5 class task 1 (case 2) 일단 말을 끊고 생각할 수도 없었고 또 머릿속에 생각이 안 나가지고 계속 persuade persuade 이 단어만 썼던 것 같아요 (Translation: <i>I couldn't make pause and couldn't think about (any words), so I kept using "persuade"</i>)
12.Rehearsing: speaker mentally rehearsing what to say	KP4 test task 2 역시 이유를 충분히 생각하지 못했고 갑자기 갑자기는 아니고 번역이 잘 안돼서 머릿속에서 이게 잘 안돼서 머릿속에서 말을 했어요. (Translation: <i>I couldn't think of reasons and I didn't translate it well so I talked to myself in mind</i>)
13.Stalling: speaker using verbal fillers and formulaic expressions to gain time	KP4 test task 2 그냥 그렇게 말 못하고 그냥 내가 늦게 일어나고 늦게 자는 습관이 있다고 말하는 게 낫겠다고 생각했는데 이 때 정말 갑자기 생활 패턴이 다르니까 그럼 방해가 되고 나도 방해가 된다는 말을 떠올리고 싶었는데 떠올리지 못해서 이때 계속 음 했어요 (Translation: <i>I couldn't say that and I thought that it would be better if I said that if get up late. And I wanted to say that the different life pattern will disturb and I tried to recall the word, "Banghae" (Disturb) I couldn't do it and made sounds, "Erm"</i>)

<p>14.Slowing: speaker slowing down to gain time or Speaker slowing down to avoid making mistakes</p>	<p>KP5 test task 2</p> <p>그리고 계속하면서 마지막으로 생각을 했던 게 이거 하나밖에 없었기 때문에 말을 좀 더 천천히 하자 시간을 맞춰야 되고 너무 일찍 끝내는 것도 안 좋기 때문에 좀 더 천천히 하면서 생각하자 이렇게 생각했어요. (Translation: <i>And I continuously thought that (I had only) one reason to speak. So, I was attempting to speak slowly to fill the given time and I thought that it wouldn't be good to finish too early)</i>)</p>
<p>15.Thinking ahead: speaker thinking ahead</p>	<p>KP1 class task 1</p> <p>그냥 딱 생각나는 분이 그 분이라서 생각을 하면서 저 때부터는 이제 계속 지 옆에 친구가 얘기하든지 말든지 약간 누굴 얘기하고 있는지를 알았지만 어떤 말을 할까를 계속 계속 생각을 하고 있었어요(Translation: <i>That was the teacher I was only able to think about and I didn't listen to whether the person sitting next to me was speaking or not. from that point I was only thinking about the content I was going to mention)</i>)</p>
<p>16.Elaborating-a: speaker elaborating on the points in order to fill the time</p>	<p>KP1 test task 1</p> <p>대답을 하고 나니까 시간이 생각보다 많이 남아가지고 부가적으로 매거진 이야기를 했던 것 같아요 옛날에 토플 공부를 할 때 이렇게 대답을 경우에 따라서 나눠서.....좋다고 그래가지고(Translation: <i>After answering I found out some more time was left and I added the story about magazine because I</i></p>

	<i>learnt to separate answers (when time is left) when I was studying TOEFL In the past when I was studying TOEFL I should divided the answer)</i>
17.Elaborating-b: Speaker elaborating on the points that might not be relevant to the question in order to fill the time	<p>KP1 test task test 1</p> <p>Because 막 이랬잖아요. 근데 그게 그냥 easy to read 한 다음에 뭔가 할 말이 없어가지고 because 한 다음에 머릿속으로 아 그럼 일단 그냥 생각했던 두 번째 이유를 얘기해야겠다 했는데(Translation: <i>I said, "because" as I had nothing to mention after saying, "easy to read" and I thought that I should mention the second reason I was thinking of</i>)</p>
18.Elaborating-c: speaker elaborating on the points in order to clarify meaning	<p>KP5 test task 1</p> <p>그러구나서 아 health 가 있구나 라고 생각이 들어서 health magazine 이라고 예를 덧붙였구요. (Translation: <i>After that I thought that there was "health" and I add "health magazine" as an example</i>)</p>
19.Pausing: speaker pausing to search for the words or sentence	<p>KP1 TEST TASK 2</p> <p>여기서 약간 멈춘 게 일단 roommate 랑 살면서 얘기할 사람이 있으니까 진짜 편하고 지겹지 않은 걸 바로 생각했는데 사실 help other 는 뭔 그 생각이 다른 생각이 난 게 여기서는 roommate 랑 살면은 영어로 쓰면서 지낼 수가 있으니까 그게 좋다고 얘기하려고 했는데 여기서 말하는 roommate 는 그냥 전반적인 방에 방 친구니까 그건 안 되는데 하면서 다른 걸 생각한 게 그래서 약간 멈췄 했어요 (Translation: <i>I stopped for a while at that moment. I was going to mention that leaving with roommates was good as I could use English, but it wouldn't be right because I thought that roommates meant general (for this question). So I thought about another reason and stopped for a</i>)</p>

	while)
20.Reviewing the text: speaker taking a look at the text	KP4 test task 4 저 때 멈춘 게 그 이 테스트에서 이 말하는 사람을 professor 라고 표현을 했나 아니면 speaker 라고 했나 내가 지금 그게 갑자기 생각이 안 나서 혹시 화면에 professor 라고 써있나 생각을 해서 화면을 보면서 확인했어요 (Translation: I stopped at that time as I couldn't remember who was the speaker, professor or speaker? So I checked the computer screen whether it was written on Professor)
21.Remaining silent: speaker being silent to fill the time	KP1 test task 2 여기서는 딱 보니까 5 초가 남았는데 그냥 아 시간을 잘 못 맞춘다는 생각이 약간 들었지만 5 초 정도는 괜찮겠지 그런 생각으로 가만히 있었어요 (Translation: <i>At this point, I noticed 5 seconds left. I thought that I couldn't manage time, but I didn't do anything as I thought 5 seconds remaining would be ok</i>)

3. Cognitive strategies: Speakers involve manipulating the target language to understand and produce language

Strategy	Excerpts from stimulated recall verbalisation (Strategic processes in Bold face)
1.Attending: speaker directing attention to or concentrating on a specific aspect of the task or content	<p>KP2 class task 3</p> <p>처음 듣는 얘기라 좀 신기했어요. 항상 제가 구사하고 싶은 발음에 대한 인포를 들으니까 신기해 가지고 대답을 어떻게 해야 할 지 생각도 안하고 듣고만 있다가 (Translation: <i>It was marvellous as it was the first to listen to this. I was engaged in the lecture as the lecture was about pronunciation I wanted to use, so I didn't think about how to answer</i>)</p>
2.Attending to peer speech: speaker attending to peer speech	<p>KP6 class task 3</p> <p>근데 지금까지도 잘 모르겠어요. Received 가 표준어인지 사투리인지. 근데 옆에 애 얘기를 들어보니까 또 received 가 사투리인 거 같아요. 옆에 애들 얘기를 들어보니까 그때 나는 received 가 queens라 같은 사투리라고 생각하고 대답을 한 거지 (Translation: <i>but I don't still understand what it is. It seemed that Received (Pronunciation) was a dialect after listening to the peer sitting next to me and I said that Received (Pronunciation) and Queen's (English) were kind of dialects</i>)</p>
3.Anticipating the content: speaker anticipating the content	<p>KP3 class task 3</p> <p>왜 한국도 사투리 쓰는 사람들 왜냐면 본인이 내가 사투리를 많이 쓰니까 저거는 아마 저거</p>

	<p>한국에서도 그렇게 되면은 인제 한국에서도 비슷한 환경에서 저런 얘기 많이 했으니까 저 Barbara 이야기 할때도 class 나 사회적인 장벽이나 얘기가 나오지 않을까 생각을 했는데 (Translation: <i>In Korea, there are people speaking different accents including me, so we talk about this kind of situation often. So, I was guessing that the story would be about class or social barriers (obstruction)</i>)</p>
<p>4.Anticipating the question: speaker anticipating the question</p>	<p>KP1 class task 2</p> <p>Prefer to work on your own 하고선 그 다음에 나오겠지 했는데 어 나는 어 예상 했어요. 혼자 하는거 아니면 같이 하는 거니까 (Translation: <i>I was expecting the following question while listening “prefer to work on your own” because it was usually the case either work individually or work together</i>)</p>
<p>5.Anticipating the turn: speaker anticipating the turn</p>	<p>KP4 class task 3</p> <p>예 이걸 제가 제일 먼저 대답해야 돼서 어 쓰면서 생각해야지 이렇게 했는데 갑자기 저보고 대답하라고 하셔서 바로 생각할 시간 없어서 이때는 좀 당황했어요 (Translation: <i>For this, I had to answer the question first. I was thinking that I had to prepare by taking notes but all of a sudden (the lecturer) asked me to answer and I had no time to think about (the question) and got embarrassed</i>)</p>
<p>6.Anticipating own performance: speaker anticipating the performance</p>	<p>KP1 test task 4</p> <p>그래서 지금 이 예는 대개 확실하게 들어가지고 잘 설명할 수 있었을 것 같은데 왜냐면은 그 찰흙을 만들면서 처음에는 별로여서 실망하고 계속 하면서 성공하고 그게다 다른 상황에도 적용하고</p>

	<p>이런걸 대게 잘 이해를 했는데 했다고 계속 이거를 말을 결국 아예 못해가지고 그냥 내가 일단 이 예를 들었다는 것만 알려 줄려고 when he comes to making a car clay 이런 거를 얘기했고 (Translation: Therefore, for this example, (I expected that) I was going to explain well //because I thought that I understood well about the following: as (children) were making clay (they) were disappointed at the beginning with poor quality of making but as they kept making it they made success and this (process) could be applied into different situation. However, I couldn't mention it, so I attempted to mention about example and I said, "When he comes to making a car clay)</p>
<p>7.Note-taking: speaker taking notes while listening, reading or peers' speech</p>	<p>KP1 test task 3</p> <p>여기서도 example 이라고 해야 될 텐데 왜 explain 이 나왔는지 모르겠는데 그냥 이게 처음 영향을 받아서 계속 막혔는데 이제 listening 을 시작하면서는 적어 논게 있으니까 좀 괜찮아졌던 것 같아요 (Translation: At this time I didn't know why "explain" was used I should have said, "example" //and this made me feel stuck and as the listening (part) began (the situation) became better and I wrote down something)</p>
<p>8.Summarising: speaker making summarises of the target information (mentally or verbally)</p>	<p>KP1 class task 3</p> <p>이때는 선생님 so 하시면서 얘기를 아 내가 들은 거를 도대체 어떤 얘기 였지 정리를 좀 하기 시작해서 (Translation: At this time, when the teacher said, "so" and I started to arrange what I had heard)</p>

<p>9. Translating: speaker seeking to formulate speech by translating from L1 to the target language</p>	<p>KP4 class task 1</p> <p>영어로 옮기다 보니까 좀 그 의미가 잘 전달이 안된다고 스스로 생각을 해서 했던 말을 또하고 또하고 비슷한 말은 계속 반복해서 하는게 이때 의도를 제대로 전달하지 못했던것 같아요</p> <p><i>(Translation: As I translated (my opinion) into English I thought that I couldn't transfer the intended meaning well and said same things repeatedly)</i></p>
<p>10. Inferencing-a: speaker seeking to make up missing information from peers'</p>	<p>KP4 class task 4</p> <p>어떻게 대답하지 하면서 다행히 다른 아이에게 먼저 시키시더라구요. 그래서 이 아이가 UK 부분을 말할 때 유심히 들었어요. 제가 못 알아 들었으니까 이 아이의 답변을 듣고 힌트를 얻어야지 라고</p> <p><i>(Translation: When I was thinking how to answer fortunately another pupil was assigned to answer. While this person was speaking about UK I was listening carefully in order to get hints)</i></p>
<p>11. Inferencing-b: speaker seeking to make up missing information</p>	<p>KP1 class task 4</p> <p>전에 labour 이랑 다른 쪽은 뭐였는지 뭐 놓쳐서 그 단어를 잘 못 들었는데 그냥 약간 그 노동자를 부리는 계층이랑 노동자 계층 아 그런 걸 다 할 수 있었다는 애기구나 애기겠구나 생각을 해서 그 다른 쪽은 못 들어서 놓쳐서 아 뭐지 계속 이렇게 예상을 했던 거 같아요. <i>(Translation: I heard the word, "labour" but not the other one. But I guessed that it might be employers or employees and trying to</i></p>

	<i>think about what the word was)</i>
12. Recalling the previous experience: speaker thinking of the previous experience to complete the task	<p>KP2 class task 1</p> <p>하도 선생님이 많아서 어떤 선생님을 해야 할까 했는데 (Translation: <i>there were plenty of teachers I had to choose reluctantly</i>)</p>
13. Recalling the previous learning: speaker thinking of the previous learning	<p>KP1 class task 3</p> <p>읽으면서 딱 RP 를 딱 봤을 때 Received Pronunciation 어 내가 배운 건데 근데 읽으면서 어 뭔가 내가 배운 거랑 다른가 전에 배운 거라 잊어 버렸나 뭐 이런 생각을 하면서 (Translation: <i>As soon as I read RP I remembered that I learned about it before and I was thinking that it might be different from what I learnt and I might forget about it</i>)</p> <p>KP1 test task 1</p> <p>옛날에 TOEFL 학원에서 시간이 남으면 처음에 말했던 걸 한 번 더 말해가지고 그 생각을 하면서 얘기를 했어요 (Translation: <i>and I recalled (what I learnt from) TOEFL academy (exam preparation class), which I did as I was thinking of (what I learnt)</i>)</p>
14. Recalling own situation: speaker thinking of the his/her	KP1 class task 3

current situation	<p>예를 들면 생각했었던 것은 우리도 방송국을 하는 사람들도 경상도나 전라도 dialect 를 쓰지 않고 standard language 를 쓰는데 그게 입사할 때도 영향을 미치겠다는 생각이 긴 생각이지만 딱 들었는데 그걸 막상 표현하지는 못했어요 (Translation: <i>I was thinking about people working for the broadcasting who don't use dialects, but standard language. So (which language is used) might influence on getting the jobs, but I couldn't express it</i>)</p>
15.Searching : speaker searching the word or expression to say	<p>KP5 test task 1</p> <p>이때 예를 들려고 했는데 medical magazine 이라고 얘기하고 또 다른 예가 뭐가 있을까 바로 생각이 안 나서 아까 15 초 동안 준비할 때는 뭐 여러 가지 practical practical 단어를 적어놔었는데 practical information 을 얻을 거라고 생각했지 뭐 예를 어떻게 들까 생각한 게 아니어서 즉흥적으로 생각해서 하니까 좀 시간적인 gap 이 있었구요 (Translation: <i>At that time, after mentioning "medical magazine" I was looking for another example, but I couldn't think of it right away. While I was preparing for 15 seconds I wrote down "practical" I was only thinking that we could get practical information. There was time gap because I had to think about examples extemporary</i>)</p>
16.Rethinking choices affected by peers: speaker rethinking already made choices as affected by peers	<p>KP1 class task 2</p> <p>애가 나는 혼자가 좋은데 small group 에 대한 장점을 얘기하니까 어 나는 그렇게 생각 안했는데 그렇게 하면서 어떻게 생각을 해야 되지 (Translation: <i>Although I knew that I liked (working) on my own when the person was talking about the good points of small group I started to think what I should</i></p>

	<i>say(affected by peers' opinion to choose the answer)</i>
17.Considering grammar: speaker considering grammatical rules while speaking	KP4 class task 4 예를 들어서 interact with 면 자꾸 interact 뒤에 with 가 붙어야 되는데 그런 식으로 그 뭐지 grammar 이 단어 쓸 때는 이 전치사 써야 되는데 이런 게 자꾸 자꾸 한 번 틀리니까 자꾸 더 많이 틀리게 되더라구요 (Translation: <i>For example, when I was using the phrase, 'interact with' I kept thinking of the</i> grammar and once I made a mistake I tend to make them more)

4. Metacognitive strategies: involving goal setting, planning and appraising

Strategy	Excerpts from stimulated recall verbalisation (Strategic processes in Bold face)
1.Setting the goal: speaker setting a goal for completing a task	KP1 test task 1 뭔가 이유를 두 개 이상은 생각해야 될 것 같은데 이유가 생각이 안 나서 계속 생각하다가 (Translation: I felt that I had to think about at least two reasons but I couldn't think of (them) and kept thinking about (the reasons))
2.Identifying the purpose of the task: speaker identifying the purpose of the task: purposeful listening, reading and/or speaking	KP5 test task 4 이 문제는 앞에 있는 speech 에 대해서 얘기하라는 것 같았는데 인제 그냥 얘기를 하라고 하니까 앞에서 얘기해준걸 그냥 repeat 만 하면 되잖아요. 근데 내 생각이 들어간 게 아니고 앞에 쪽 얘기해준걸 정리해서 얘기만 해주면 되는 거니까 이번 문제 같은 경우는 저 같이 이렇게 좀 나이가 있는 사람들한테는 좋죠. 왜냐면은 어렸을 때 같은 경우는 뭘 하나 던져줘도 할 얘기가 많은데 (speaking 을 하면서 들었던 생각인지 확인, say yes) (Translation: For this question, I had to talk about the speech I had heard, which meant I had to report what I heard. I didn't have to talk about my opinion. I only had to summarise and talk, so I thought that this kind of task would be beneficial for the older like me. This is because the younger have a lot of things to talk even if when they were given a simple topic)
3.Planning: speaker planning the parts,	KP3 test task 4

sequence, or main ideas to be expressed verbally	메모를 하는데 두 개를 다 얘기를 하고 싶었는데 처음에 사실 두 번째께 더 중요하다고 생각했을지도 모르는데 (Translation: <i>While taking notes I wanted to mention both. At first I might have thought that the second one was more important</i>)
4.Changing plans: speaker changing a plan	KP 5 test task 1 뭔가 대답을 하기에 부족한 거 같아서 그래서 매거진으로 바꿨어요.,, (Translation: <i>but there was something lack, so I changed into magazine</i>)
5.Monitoring time: speaker monitoring the time while reading, listening, preparing the answer or speaking	KP4 test task 1 이때가 생각보다 시간이 많이 남아서 다른 대답을 더 생각해내야겠다고 더 생각해내서 그 걸 생각하기 위해서 저도 모르게 말을 끝 끝나지는 않았는데 더 대답을 해야겠다 (Translation: <i>At this time, the time was more remained than I thought and I thought that I should think about more answers. This made me speak hesitant to think about more answers</i>)
6. Self-correcting: speaker correcting errors in his/her own performance (pronunciation,	KP5 class 5 task 3 그게 아니고 문법적으로 그게 아닌데 한 번 더 생각을 해서 아 being educated 라고 얘기를 해야 되겠구나 예 문법적으로 그래 맞구나 한 번 더 생각을 했어요 (Translation: <i>so I thought it again and I decided to say, "being educated" which I thought it grammatically right</i>)

vocabulary, grammar, etc.)	
7.Evaluating the content of what was read/heard: speaker evaluating the content of what was read/heard	<p>KP5 class task 4</p> <p>tiny 하고 할 거면은 tiny country in comparison to compare to USA 이렇게 하면서 사용을 하면 더 좋겠는데 작게만 얘기하니까 그건 좀 아닌 거 같은데 라고 생각했었어요 (Translation: <i>If she wanted to say about the UK as a tiny country it would be better saying that “tiny country in comparison to compare to USA”, but why she mentioned that it was tiny. I thought that it wouldn’t be right</i>)</p>
8.Evaluating performance: speaker evaluating language production while speaking	<p>KP1 test task 1</p> <p>좀 어떻게 말을 하다 보니까 의도 된 얘기였는데 좀 irrelevant 하게 들리는 것 같아서 어떻게 하면 좀 매끄럽게 할 수 있을까 생각을(Translation: <i>While speaking I realised that what I said sounded irrelevant although the speech was intended and I thought how I should make the speech more smoothly</i>)</p> <p>KP2 test task 3</p> <p>이 얘기를 하면 안 되는데 순서가 정해놓은 순서가 있는데 뒤죽박죽 되가지고 아니라고 생각하는거죠 혼자 (Translation: <i>I thought that it wasn’t right to say things not in order. The beginning was all mixed up and I felt so puzzled and confused</i>)</p>

<p>9.Evaluating language production: speaker evaluating language production after completing task</p>	<p>KP5 class task 4</p> <p>너무 천천히 얘기하는 것 같다 그래도 빨리 얘기하면 내가 생각했던걸 다 얘기 할 수 있었을 텐데 더 얘기하고 싶었던 게 조금 더 있었거든요 얘기를 못해서 더 얘기를 좀 더 빨리 했으면 좋았을 텐데 아쉽구나 (Translation: <i>I thought that I spoke too slowly and I thought that if I had spoken fast I would have been able to mention all I wanted to because there was some more to talk about. I was disappointed that I could have said more if I had spoken faster</i>)</p>
<p>10.Evaluating own knowledge: speaker evaluating own knowledge relating with reading/listening passage</p>	<p>KP1 class task 4</p> <p>어 뭔가 저런 거를 미국은 뭔가 다르고 다양성이 많고 이렇게 평소에 생각하고 있었는데 저렇게 newspaper 가 없었고 다 같은 거 듣고 이랬다니까 어 옛날에는 진짜 달랐네 으 그니까 저 lecture 에 계속 집중하면서 내 생각으로 다시 생각해보고 (Translation: <i>Uh (I used to think that) America was something different and there was diversity. But there was no newspaper and (people) listened to the same thing and I thought it was so different in the past. I was engaged with the lecture and rethought about it in my point of view</i>)</p>
<p>11.Evaluating peer's performance: speaker evaluating peer performance</p>	<p>KP3 class task 4</p> <p>저 때는 저 생각을 했지. 저 모하메드 잼아요. 질문을 하면 답하고 이러는 자체가 답답하지 않잖아요. 그런데 모하메드 자체가 생각을 정리할 시간이 필요할 것 같다는 생각을 했어요. 이거는 확실히 develop 하는 과정을 detail 하게 충분히 설명을 하고 이야기를 해보라고 하니까 아마 저거는 뭐랄까 자기가 생각하고 정리할</p>

	<p>시간이 필요하고 아마 모하메드도 그런 시간이 필요하지 않았을까 그런 생각을 했어요 (Translation: At that time I was thinking about the person answering. For me, asking the question and answering it, (the format) was ok. I was thinking that the one answering may have needed more time to prepare the answer. The question was about to explain the process of development and we are asked to answer with more details. So I thought that the person may need more time to answer like that)</p>
<p>12.Evaluating time management: speaker evaluating own time management</p>	<p>KP1 test task 4</p> <p>일단 지금 두 번째 꺼는 너무 시간이 일단 대게 부족하다라는 생각이 들었고 들면서 첫 번째 꺼랑 두 번째 할 때는 task 는 대게 시간이 남았는데 이거는 왜 이리 모자라지 이런 생각이 들었고 (Translation: At first, I thought that time was so limited. I wondered why I was running short of time for this task while there was plenty of time for the first and the second ones)</p>
<p>13.Evaluating task difficulty: speaker evaluating task difficulty</p>	<p>KP5 test task 3</p> <p>첫 번째 두 번째 꺼 하다가 세 번째 꺼를 하니까 세 번째 꺼는 첫 번째 두 번째꺼 하는데는 사실 큰 문제가 없었는데 세번째 꺼 하면서 1 분 동안 얘기하고 좀 더 복잡한 거 였거든요. 그래서 듣고 직접 말하기 전까지만 해도 아 별거 아니겠지 했는데 막상 할려고 하니까 더 복잡한 거예요. 생각했던 것 보다. 기대했던 것 보다 (Translation: After the first and the second (task), the third one was more complicated for one minute. Since the first and the second were not problems at all I wouldn't take the third seriously until listening and speaking</p>

	directly. But when I was preparing (the answer) it was even more complicated)
14.Evaluating own comprehension of reading or listening passages: speaker evaluating own comprehension about listening or reading	<p>KP 1 test task 3</p> <p>일단 전반적인 내용은 다 파악이 됐는데 (Translation: <i>I grasped the overall content</i>)</p>
15.Evaluating interlocutors' comprehension: speaker evaluating interlocutors' comprehension	<p>KP5 class task 4</p> <p>그래서 enough to 하면서 얘기를 하다가 선생님이 이해를 하는 것 같아서 넘어가자 이렇게 해서 넘어가자 두 번째로 넘어가게 됐어요 (Translation: <i>after I said "enough" I thought that the teacher seemed to understand and I moved onto the second</i>)</p>
16.Comparing own performance with peers' performances: speaker comparing his	<p>KP2 class task 4</p> <p>이걸 보면서 제꺼랑 내꺼랑 비교를 하면서 어떻게 정리를 해서 말을 해야 할까 (Translation: <i>I was thinking how I was arranging (things write down) to say as comparing with peers' performance</i>)</p>

or her performance with other's performance	
17.Justifying performance: speaker justifying his or her performance	<p>KP2 class task 2</p> <p>그냥 가장 기억에 남는 분 가장 잘 포장할 수 있을 것 같은 선생님이로 골랐어요 (Translation: <i>Simply I selected a teacher who I could talk about easily</i>)</p>

5. Reported feelings: Speakers feel either positive or negative (Strategic processes in bold face)

1.Positive	Feeling relaxed, comfortable, confident, etc.	<p>KP5 class task 1</p> <p>이때 들었던 생각은 이 선생님이 제가 진짜 좋아했던 선생님이고 동경했던 선생님이라서 그 선생님 얘기 하면서 그 선생님 생각이 드니까 저도 모르게 기분이 또 좋아져서(Translation: <i>At this time I felt good as I really liked and admired the teacher and I was talking about her</i>)</p>
2.Negative	Feeling embarrassed, confused, stuck, etc.	<p>KP4 test task 3</p> <p>이게 처음에 이 이론이 뭔지를 간단히 말을 하고 그 다음에 예시 두개를 얘기해야 되는데 갑자기 이 그 이론을 짧게 뭐라고 설명해야 될 지를 잘 모르겠어서 처음에 그거를 설명하는 부분에서 대게 당황했어요 (Translation: <i>At first, (I was planning) to answer what the theory was and was going to give two examples. But, I didn't know how to explain the theory briefly and I got puzzled</i>)</p>

Appendix 4-1. Overall strategic processes in the test

Strategy	Frequency in total	% of total strategy use
Approach (6 types)	28	11.38
Recalling the task type	5	
Recalling the question	2	
Recalling the lecture (or the listening passage)	1	
Generating choices	3	
Making choices	9	
Developing reasons	8	
Compensation (19 types)	47	19.11
Avoiding	2	
Using Korean (L1)	6	
Lexical substitution	3	
Borrowing	2	
Reviewing notes	3	
Referring to notes	1	
Organizing thoughts	1	
Guessing	3	
Repeating	2	
Rehearsing	1	
Stalling	2	
Slowing	1	
Thinking ahead	1	
Elaborating-a	1	
Elaborating-b	4	
Elaborating-c	3	
Pausing	8	
Reviewing the text	2	
Remaining silent	1	
Cognitive (11 types)	38	15.45
Attending	4	
Anticipating the content	2	
Anticipating the question	1	
Anticipating performance	1	
Note-taking	5	
Translating	7	
Recalling the previous experience	3	
Recalling the previous learning	1	
Recalling own situation	3	
Searching for the word or expression	10	
Considering grammar	1	
Metacognitive (14 types)	133	54.07

Setting the goal	7	
Identifying the purpose of the task	3	
Planning	24	9.76
Changing plans	1	
Monitoring time	11	4.47
Self-correcting	3	
Evaluating content of what was read and heard	1	
Evaluating performance	19	7.72
Evaluating language production	34	13.82
Evaluating own knowledge	5	
Evaluating time management	4	
Evaluating task difficulty	4	
Evaluating own comprehension	16	6.5
Justifying performance	1	

Appendix 4-2. Strategies used by levels (good vs. fair) in the test

Strategy	Strategy used by good-level speakers (n=4)	Freq uen cy (% of t otal strate gy use)	Strategy used by fair-level speakers (n=2)	Frequency (% of tot al strate gy use)
Approach	5 types	17 (10. 69%)	6 types	11 (12.64%)
	Recalling the task type Recalling the question Generating choices Making choices Developing reasons	2 1 1 7 6	Recalling the task type Recalling the question Recalling the listening passage Generating choices Making choices Developing reasons	3 1 1 2 2 2
Compensation	17 types	37 (23. 27%)	8 types	10 (11.49%)
	Avoiding Using Korean (L1) Lexical substitution Borrowing Reviewing notes Referring to notes Organising thoughts Repeating Rehearsing Stalling Thinking ahead Elaborating-a Elaborating-b Elaborating-c Pausing Reviewing the screen Remaining silent	1 5 2 2 3 1 1 2 1 2 1 1 3 2 7 2 1	Avoiding Using Korean (L1) Lexical substitution Guessing Slowing Elaborating-b Elaborating-c Pausing	1 1 1 3 1 1 1 1
Cognitive	11 types	24 (15. 09%)	4 types	14 (16.09%)

	Attending Anticipating the content Anticipating the question Anticipating the performance Note-taking Translating Recalling the previous experience Recalling the previous learning Recalling own situation Searching for the word or expression Considering grammar	1 2 1 1 3 5 3 1 3 3 1	Attending Note-taking Translating Searching for the words or expressions	3 2 2 7
Metacognitive	12 types	81 (50.94%)	11 types	52 (59.77%)
	Setting the goal Planning Monitoring time Self-correcting Evaluating the content of what was read/heard Evaluating performance Evaluating language production Evaluating own knowledge Evaluating time management Evaluating task difficulty Evaluating own comprehension Justifying performance	4 14 8 1 1 9 21 5 3 2 12 1	Setting the goal Identifying the purpose of the task Planning Changing plans Monitoring time Self-correcting Evaluating performance Evaluating language production Evaluating time management Evaluating task difficulty Evaluating own comprehension	3 3 10 1 2 3 10 13 1 2 4

Appendix 4-3. Strategies used by task types (independent vs. integrated) in the test

Strategy	Used for independent tasks only	Used for both independent and integrated tasks	Used for Integrated tasks only
Approach	Recalling the question Developing reasons	Recalling the task type Generating choices Making choices	Recalling the listening passage
Compensation	Avoiding Organising thoughts Rehearsing Slowing Thinking ahead Elaborating-a Remaining silence	Using Korean (L1) Lexical substitution Repeating Stalling Elaborating-b Elaborating-c Pausing	Borrowing Reviewing notes Referring to notes Guessing Reviewing the reading passage
Cognitive	Recalling the previous learning	Attending Note-taking Translating Recalling the previous experience Recalling own situation Searching	Anticipating the content Anticipating the question Anticipating performance Considering grammar
Meta-cognitive	Changing plan Justifying performance	Setting the goal Identifying the purpose of the task Planning Monitoring time Self-correcting Evaluating performance Evaluating language production Evaluating time management Evaluating task difficulty	Evaluating the content of what was read/heard Evaluating own knowledge Evaluating own comprehension

Appendix 4-4. All strategy use in the academic classroom

Strategy	Frequency in total	% of total strategy use
Approach (6 types)	31	11.79
Recalling the task type	3	
Recalling the question	9	
Recalling the reading passage (or the text)	2	
Generating choices	4	
Making choices	10	
Developing reasons	3	
Compensation (16 types)	30	11.41
Avoiding	1	
Using Korean (L1)	1	
Lexical substitution	5	
Generalisation	1	
Paraphrasing	1	
Borrowing	2	
Reviewing notes	1	
Organising thoughts	2	
Guessing	2	
Repeating	1	
Rehearsing	2	
Stalling	4	
Slowing	1	
Thinking ahead	4	
Elaborating-b	1	
Elaborating-c	1	
Cognitive (17 types)	85	32.32
Attending	13	4.94
Attending to peer speech	6	
Anticipating the content	7	
Anticipating the question	6	
Anticipating the turn	5	
Anticipating the performance	1	
Note-taking	3	
Summarising	2	
Translating	1	
Inferencing-a	1	
Inferencing-b	3	
Recalling the previous experience	11	
Recalling the previous learning	4	
Recalling own situation	10	
Searching	8	
Rethinking about choice affected by peers	2	
Considering grammar	2	
Metacognitive (15 types)	117	44.49

Setting the goal	10	
Identifying the purpose of the task	2	
Planning	23	8.75
Monitoring time	1	
Self-correcting	1	
Evaluating the content of what was read/heard	5	5.70
Evaluating performance	15	6.84
Evaluating language production	18	4.94
Evaluating own knowledge	13	
Evaluating peers' performance	8	
Evaluating task difficulty	4	
Evaluating own comprehension	9	
Evaluating interlocutor's comprehension	1	
Comparing own performance with peers'	3	
Justifying performance	4	

Appendix 4-5. Strategies used by levels in the academic classroom

Strategy	Individual strategies used by good level (n=5)	Frequency in total (% of total strategy use by good level)	Individual strategies used by fair level (n=1)	Frequency in total (% of total strategy use by fair level)
App- roach	5 types	26 (11.40%)	4 types	5 (14.71%)
	Recalling the task type	2	Recalling the task type	1
	Recalling the question	9	Recalling the reading passage	2
	Generating choices	4	Making choices	1
	Making choices	9	Developing reasons	1
	Developing reasons	2		
Compen- sation	14 types	27 (11.84%)	2 types	3 (8.82%)
	Using L1	1	Avoiding	1
	Lexical substitution	5	Guessing	2
	Generalisation	1		
	Paraphrasing	1		
	Borrowing	2		
	Reviewing notes	1		
	Organising thoughts	2		
	Repeating	1		
	Rehearsing	2		
	Stalling	4		
	Slowing	1		
	Thinking ahead	4		
	Elaborating-b	1		
	Elaborating-c	1		
Cognitive	15 types	73 (32.01%)	5 types	11 (32.35%)

	Attending	11	Attending	2
	Attending to peer speech	6	Anticipating the content	1
	Anticipating the content	6	Anticipating performance	1
	Anticipating the question	6	Recalling the previous experience	1
	Anticipating the turn	5	Recalling own situation	4
	Note-taking	3	Searching	2
	Summarising	2		
	Translating	1		
	Inferencing-a	1		
	Inferencing-b	2		
	Recalling the previous experience	10		
	Recalling the previous learning	4		
	Recalling own situation	6		
	Searching	6		
	Rethinking choice	2		
	Considering grammar	2		
Metacognitive	15 types	102 (44.74%)	8 types	15 (44.12%)
	Setting the goal	10	Identifying the purpose of the task	1
	Identifying the purpose of the task	1	Planning	4
	Planning	19	Evaluating the content	1
	Monitoring	1	Evaluating language production	1
	Self-correcting	1	Evaluating own knowledge	3
	Evaluating the content	4	Evaluating peers' performance	1
	Evaluating performance	15	Evaluating own comprehension	3
	Evaluating Language production	17	Justifying performance	1
	Evaluating own knowledge	10		
	Evaluating peers' performance	7		
	Evaluating task difficulty	4		
	Evaluating own comprehension	6		

	Evaluating interlocutors' comprehension	1		
	Comparing performance	3		
	Justifying performance	3		

Appendix 4-6. Strategy use by task types in the academic classroom

Strategy	Used for independent tasks only	Used for both independent and integrated tasks (frequency, independent/integrated	Used for integrated tasks only
Approach		Recalling the task type Recalling the question Generating choices Making choices Developing reasons	Recalling the reading passage
Compensation	Avoiding Using L1 Borrowing Repeating Elaborating-c	Lexical substitution Rehearsing Thinking ahead	Generalisation Paraphrasing Reviewing notes Organising thoughts Guessing Stalling Slowing Elaborating-b
Cognitive	Translating Rethinking about choices	Attending Attending to peer speech Anticipating the question Anticipating the turn Note- taking Recalling the previous experience Recalling the previous learning Recalling own situation Searching	Anticipating the content Anticipating the performance Summarising Inferencing-a Inferencing-b Considering grammar
Metacognitive	Monitoring	Setting the goal Planning Evaluating performance Evaluating language production Evaluating peers' performance Evaluating task difficulty Justifying performance	Identifying the purpose of the task Self-correcting Evaluating the content Evaluating own knowledge Evaluating own comprehension Evaluating interlocutor's comprehension Comparing own performance with peers' performances

Appendix 4-7. The map of strategy use

[illegible]

[illegible]

[illegible]

Appendix 4-8. The number of strategy use by individual

	KP1 Test					KP1 Class				
	T1	T2	T3	T4	Total	C1	C2	C3	C4	Total
Approach	3	1			4		1			1
Compensation	6	3	5	6	20	1		2	2	5
Cognitive	3	1	6	2	12	3	6	12	10	31
Metacognitive	6	5	16	9	36	1	3	7	2	13
Total	18	10	27	17	72	5	10	21	14	50
	KP2 Test					KP2 Class				
	T1	T2	T3	T4	Total	C1	C2	C3	C4	Total
Approach						1	1			2
Compensation	1		1	2	4			1	1	2
Cognitive				1	1	1		3		4
Metacognitive	5	3	4	2	14	1	1	1	6	9
Total	6	3	5	5	19	3	2	5	7	17
	KP3 Test					KP3 Class				
	T1	T2	T3	T4	Total	C1	C2	C3	C4	Total
Approach	2	2		1	5	4	3	1	1	9
Compensation				1	1					0
Cognitive	1	1	1	2	5	1		3	3	7
Metacognitive	1			6	7		2	2	7	11
Total	4	3	2	9	18	5	5	6	11	27
	KP4 Test					KP4 Class				
	T1	T2	T3	T4	Total	C1	C2	C3	C4	Total
Approach	4	3		1	8	2	2	1		5
Compensation	1	4	4	3	12	1		1	2	4
Cognitive		3	2	1	6	1		3	6	10
Metacognitive	2	4	10	7	23	2	5	12	8	27
Total	7	14	16	13	50	6	7	17	16	46
	KP5 Test					KP5 Class				
	T1	T2	T3	T4	Total	C1	C2	C3	C4	Total
Approach	3		4	1	8	1	2	2	4	9
Compensation	2	3		1	6	8	1	2	5	16
Cognitive	3	3	2	2	10	6	4	7	5	22
Metacognitive	7	7	10	12	36	8	10	10	14	42
Total	15	13	16	16	60	23	17	21	28	89
	KP6 Test					KP6 Class				
	T1	T2	T3	T4	Total	C1	C2	C3	C4	Total
Approach	1		1	1	3	1	1	2	1	5
Compensation	1		2	1	4		1	2		3
Cognitive	3		1		4	1	2	4	4	11
Metacognitive	4	2	4	7	17	1		7	7	15
Total	9	2	8	9	28	3	4	15	12	34

Appendix 4-9. Sample scripts from KP 1 (test-taking)

Test task 1

Speech production in response to the prompt

I'd like to read the novel when I have free time because firstly it is easy to read because it is based on culture and society at the time. So it's based on the language. So it is easy to read and then secondly I can get a lot of information by reading a novel because as I say before it is based on culture at the times so I can get much information about history as I say I can be I can have much more interest by reading novel this is why I prefer reading novel

Stimulated recall verbalisation

(Right after the task completion)

일단 좀 주제가 너무 예상치 않았던 거라서 사실 책 읽는 걸 별로 안 좋아하는데 뭘 선택해야 될 지 하다가/그나마 좋아하는 게 소설인데 일단 쉽게 읽을 수 있다는 바로 기억이 났는데/뭔가 이유를 두 개 이상은 생각해야 될 것 같은데 이유가 생각이 안 나서 계속 생각하다가/그 저번에 학기에 들었던 수업 중에서 뭐? J(One of authors name) 나 그런 사람들이 사회나 문화 에 배경을 두고 소설을 썼기 때문에 아 그런 지식을 얻을 수 있구나/ 그래서 그냥 그렇게 한국말로 생각을 해도 그냥 일단 정리하니까 시간이 끝나가지고 바로 영어로 말하려니까/easy to read 하고 나서는 별로 그거밖에 할게 없는데 시간이 너무 많이 남아서/ 바로 그냥 그거를 society 로 바로 연결해서 그거를 너무 많이 얘기해서 좀 뭔가 밸런스가 좀 안 맞았다는 이런 생각이 들었어요 (Translation: At first, the topic was so different from what I had expected. I thought what I should choose (to answer the question) as I don't like reading books./It occurred to me that I should choose a novel as they are easy to read and/I felt that I had to think of at least two reasons (for my choice) but I couldn't think of (them) and kept

thinking about (the reasons)./Then (I was asking myself) should I (choose) from one of the subjects I attended last term? I recalled J and (remembered) that such authors wrote novels based on society or culture and (I thought) that I had gained some such knowledge./I was thinking of those ideas in Korean./ As soon as I had (the answer) in my mind the (preparation) time was finished and I attempted to speak my thoughts in English and after I said, “easy to read” I found there was nothing much left to mention and there was much time left, thus I continued to talk about society but I thought that (my speech) wasn’t balanced as I spoke about that too much.

(While watching own performance)

Because 막 이랬잖아요. 근데 그게 그냥 easy to read 한 다음에 뭔가 할 말이 없어가지고 because 한 다음에 머릿속으로 아 그럼 일단 그냥 생각했던 두 번째 이유를 얘기해야겠다 했는데 얘기하면서도 뭔가 안 맞는다 생각이 들었어요. 근데 말하게 생각이 안 나가지고 바로 두 번째 생각했던 이유로 넘어간 다음에 (Translation: I said, “because” as I had nothing to mention after saying, “easy to read”. And I thought that I should mention the second reason that I was thinking of. I was thinking that something was not correct (in my speech). But I couldn’t think of anything to mention, so I moved on to the second part.)

그래서 갑자기 society 를 말했는데 그래서 읽기 쉽다 얘기를 하면은 말이 안 되는데 그것을 알고 있으면서도 그냥 시간이 없으니까 그냥 막 (Translation: all of a sudden I said, “society”. Although I knew that I shouldn’t have said “it was easy to read” I had no choice but to say it as I didn’t have enough time. Finally I began to talk anything)

저기서도 can be 하면서 it can be 를 왜 말했는지 모르겠어요. 내가 더 더 재미를 역사를 배우면서 재미를 얻을 수 있다는 해야 되는데 I can have 라 해야 되는데 be 로 해서 아 문법 실수 또 이러고서는 다시 인제 (Translation: I don’t know why I said “it can be” at that point. I thought that I should have

said that “I can have” but I said “be” and (I realised that) I had made a grammatical mistake.)

저기서도 This is why 한 거도 시간을 봤는데 시간이 한 10 초 정도 남아있어가지고 옛날에 TOEFL 학원에서 시간이 남으면 처음에 말했던 걸 한 번 더 말해가지고 그 생각을 하면서 얘기를 했어요 (At the time I said, “This is why”. That was because I noticed that there were 10 seconds left and I recalled (what I had learnt from) the TOEFL preparation class; which I had to repeat things to fill the time when there was extra time left.)

Test task 2

Speech production in response to the prompt

I prefer to live with roommate to live alone because I can be a very good friend with her and I will not be a very good friend with her. And I will not be bored by staying alone. And secondly we can help each other when need help because if we have roommates we can help by talking because we will know each other when we need help or not and then for example when we have to move very heavy stuff we can help each other when we have to move. So this is that’s why I prefer live with roommate to live alone.

Stimulated recall verbalisation

(Right after the task completion)

일단 some students prefer to live with roommates 를 보자마자 는 그냥 약간 할 말이 많을 거라고 생각이 딱 들었는데 왜냐면은 이런 roommate 랑 사는 게 좋나 아니냐는 평소에 친구들하고 얘기를 많이 해봤던 거라서 어떤 친구들은 혼자 사는 것을 좋아하고 어떤 사람들은 roommate 랑 살고 싶어하는 이유가 더 많아서 이걸 쉽게 얘기할 수 있겠다면서/딱 그냥

질문을 듣자마자 내가 생각했던 것 보다 더 내가 준비했던 건 더 짧은데 시간이 더 많으니까 더 많은 얘기를 해야 되가지고 그땐 일단 좀 더 힘들었었던 것 같고 서로 도울 수 있다는 것을 생각했을 때는 구체적으로 뭘 돕지 해서 지금 당장 이번 주에 이사를 해야 되니까 이사를 할 때 도와줄 수 있다 에게 생각이 나서 그냥 일단 move 할 때 move stuff 를 준비했던 것 같아요 (Translation: As soon as I came across “some students prefer to live with roommates” I was thinking that I would have many things to talk about (this topic). This was because I often talked with friends about whether living with roommates was good or not. (I know that) some people prefer to live by themselves; others have reasons to live with their roommates and I thought that this question would be easy to talk about as I had many reasons to live with roommates./As soon as I heard the question I started to write the reasons I had been thinking of. I only wrote things with the key words and my prepared answer was shorter than the given time and I had to talk more which was difficult. I thought that people could help each other and I thought that we could help in small matters and I was thinking of the situation if I had to move and I prepared the words, “move stuff” to say it.)

(While watching own performance)

그래서 질문이 끝나기도 전에 바로 쓰기 시작했던 게 그래도 내가 평소에 친구들하고 많이 해봤던 얘기라서 첫 번째 질문 같은 경우에는 평소에 전혀 생각해보지 않았던 거라서 긴장했지만 이거는 약간 긴장이 좀 누그러지면서 바로 뭘 얘기해야 할 지를 생각했던 것 같아요 (Translation: therefore, I started to write before the question was finished as I had often talked about this with my friends. I was tense with the first question which I had never thought about, but I felt relaxed with this one and I thought of what I was going to say right away.)

여기서 약간 멈춘 게 일단 roommate 랑 살면서 얘기할 사람이 있으니까 진짜 편하고 지겹지 않은 걸 바로 생각했는데/사실 help other 는 뭔 그

생각이 다른 생각이 난 게 여기서는 roommate 랑 살면은 영어로 쓰면서 지낼 수가 있으니까 그게 좋다고 얘기하려고 했는데 여기서 말하는 roommate 는 그냥 전반적인 방에 방 친구니까 그건 안 되는데 하면서 다른 걸 생각한 게 그래서 약간 멈췄 했어요 (Translation: I stopped for a while at the moment. At first I thought that it wouldn't be boring if I lived with a roommate as I would have someone to talk with. In fact, I said "help other" because I was going to say that living with roommates was good as I could use English, but I understood that roommates might be so general and I thought that this wasn't right to say and I stopped for a while.)

근데 저기서 I'll I'll not be bored 한 다음에 시간을 봤는데 많이 남아가지고 바로 두 번 째 거를 하면은 아 뭔가 좀 모자를 텐데 생각을 했지만 그냥 일단 거셔서 끝내고 두 번 째 꺼가 끝나고서도 좀 시간이 남으면 생각하자고 일단 획 그렇게 생각하고 지나갔어요 (Translation: After I mentioned, "I'll I'll not be bored" I checked the time and I found out that there was enough time left. Then I thought that if I started to talk about the second thing I had prepared the first part (of the speech) wouldn't be good enough. However, I thought that I should finish as I had planned. Also I thought that I should think what I should talk about for the remaining time after I had finished (what I had prepared for the question.)

아 그래서 we can 다음에 멈춘 게 돕긴 돕는데 여기서 뭘 준비할 때는 이사하는 걸 돕자고 썼긴 했지만 we can 한 다음에 뭘 돕지 이러면서 뭔가 그때부터 약간 막힌다는 생각도 약간 들었어요 (Translation: After I said "we can" I stopped because I didn't know what to say although I had prepared to talk about moving and I felt stuck.)

여기서는 딱 보니까 5 초가 남았는데 그냥 아우시간을 잘 못 맞춘다는 생각이 약간 들었지만 5 초 정도는 괜찮겠지 그런 생각으로 가만히 있었어요 (Translation: At this point, I noticed that there were 5 seconds left. I

thought that I couldn't manage the time, but I didn't say anything as I thought 5 seconds remaining would be ok)

(After watching performance)

이런 주제가 만약에 시험에서 나왔다면 진짜 그 iBT 시험에서 어 뭔가 더 잘 말했을 수 있을 것 같아요. 왜냐면 여기서 좀 살면서 더 많이 생각했던 거라서 주제가 좀 뭐랄까 사람들이 많이 생각해 볼 수 있었던 주제 인 거 같아요 (Translation: with this kind of topic in a real test like the iBT I could have done better. This is because I've been thinking about this more when I'd been living here. The topic was the one people think of all the time.)

Test task 3

Speech production in response to the prompt

The reading and listening task explains about the difference in ways people express themselves. It is about actor and observer. Uh, firstly, when a person concerns himself, not others, they think by situation and then when he comes to other people, they consider that person as in person itself like person characteristic. So according to the listening, the professor is giving uh brief explanation, for example, about this actor-observer. So for example, when a person goes to a store and wants to buy something, if he was in a hurry and late for an important meeting, he thought he's not rude or selfish, but he was late for an important meeting so, she, he was in a hurry so there's nothing he did wrong, but when he comes to others, he thought he was a rude and selfish person.

Stimulated recall verbalisation

(Right after the task completion)

일단 생각했던 거가 그 시간이 너무 모자라가지고 적었었던 예를 다 설명하지는 못했고/일단 전반적인 내용은 다 파악이 됐는데/그 reading 을 읽으면서 그 용어를 정리를 안 해서 그걸 어떻게 말해야 될 지 계속 애매해서 시간을 보낸 것 같은데/자신 그 내용에 자신에게 있어서는 상황을 더 중시하지만 다른 사람은 그 특성 characteristic 을 더 중시한다 이런 내용인데 그거를 어떻게 어떤 단어를 이용해서 설명할 지를 몰라서 그거 계속 생각하다가 시간을 다 보낸 것 같은데/일단 listening 을 들으면서 메모를 했기 때문에 그 주요 키워드는 다 정리가 되어서 이걸 설명할 때는 어렵지가 않았는데/일단 주요 토픽이 다 자신은 situational 에 base 를 하고 다른 사람은 characteristic 에 base 해서 평가를 한다 뭐 이런 내용인데 적어왔던 대로 different in ways people behave 이렇게 했으면 됐는데 얘기할 때는 생각이 안 나서 이것 때문에 시간 너무 많이 보냈고/나머지는 들으면서 사실 reading 에서 한 60% 정도 이해가 됐다면 listening 을 들으면서 예를 통해서 이렇게 이해가 가가지고 더 쉽게 얘기할 수 있어가지고/ 사실 딱 reading 을 처음에 봤을 때는. 혼자 읽었는데 이게 뭔지 모르겠는 거예요./그리고 psychology class 를 지금 듣고 있는데도 뭔가 psychology 를 했을 때 내가 알고 있는 게 나올까라는 생각을 잠깐 했지만 막상 읽으니까 첫 문장 이랑 두 번째 문장이랑 너무 이해가 안 가서 그 두 문장을 계속 읽다가/막 너무 아 이거 reading 시간은 다 가고 reading 다 못 끝내겠네 불안했어요. 이거 아예 날릴 것 같은 이런 느낌이 들어가지고 (Translation: At first, I wasn't able to explain all that I had prepared as there wasn't enough time left./I grasped the overall content, but I didn't prepare the words and I was uncertain how to speak which wasted time and I kept trying to find a way to speak./Although I understood the content about some (people) seriously consider their own situations (when they do something wrong), but others tend to consider others' characteristics (personality) is more important. But I didn't know how to explain, so I kept thinking about it and I ran out of time./While I was listening (to the listening passage) I took notes . So all the key words were prepared, so it was not difficult to speak (about it)./At first, (I knew that) the topic was about people

who (judge) themselves based on their situation whereas they judge others based on (others' personal) characteristics. Although I wrote down "*different in ways people behave*" I couldn't think about what I wrote down, so I ran out of time. / For the rest, I was able to understand 60 % of the reading passage and (I was able to) understand the examples while I was listening and it was easy to speak./ However, when I looked at the reading passage I didn't understand it well./ While I was reading about psychology I was expecting to listen to something I knew about as I was taking a psychology class. As I read the first and second sentences I couldn't understand them, so I kept reading them/and I felt that time was nearly over. It made me so nervous that I felt that I couldn't finish well.)

(While watching own performance)

일단 거기서 계속 너가 beep 울린 다음에 준비하라고 했을 때는 그 때 또 아까 말했듯이 뭐 어떤 단어를 써서 자신은 situational 이고 다른 사람은 person 다른 사람은 characteristic 이냐 그 키워드만 적어나서 그걸 뭘로 해야 될지를 생각하다가/ 여기에(clarified this is reading passage on the screen) 혹시 있나 그래서 계속 봤는데도 잘 생각이 안 나서 그건 미리 준비를 못했어요./결국에는 일단 쪽 노트필기 한 걸 보면서 어떻게 얘기할 지를 정리하는 과정에서 listening 은 좀 괜찮다 생각이 들었는데 reading 을 읽을 때도 약간 psychology 라서 내가 그래도 이번 학기에 들은 과목이니까 관련된 게 있을까 싶었는데/그게 없어서 reading 할 때 긴장을 좀 했는데 그걸 못 적어서 일단 listening 을 base 로 해서 얘기를 해야겠다 이런 생각을 계속 했어요/ (Translation: At that time, after the beep I was told to prepare. As I said before I was thinking what kind of words I should use (to express): situational for us and characteristics for others. I made note of key words. I kept looking at here (it was clarified that here was the reading passage on the screen), but I couldn't prepare in advance as I couldn't think of it. After reviewing my note taking, I realised that I was ok with the listening (passage) but I was tense about reading it because I expected that something

might be related to the psychology class which I am taking this term, but there was nothing related to the psychology class. I wasn't able to take notes from the reading passage, so I was planning to speak based on listening.)

여기서 계속 people people 이런 게 생각해보니까 내가 the reading passage explains different in way people 하니까 explain 이 또 있는 거예요. 뭐지 왜 explain 이 있지? 아 그때 생각이 잠깐 안 나가지고 사람이 행동하는 거니까 behave 란 단어를 써야겠다 그래서 여기서 약간 막혔어요 (Translation: I kept saying, "people people" here and I realised that there was the word, "explain" after saying that "the reading passage explains different in way people". What? Why is there "explain"? At that moment I wasn't thinking of anything and I was planning to use the word, "behave" as it was about human action, thus I stopped for a while.)

여기서는 말하면서도 그냥 한국말로 계속 이게 자신의 상황에 맞춰서 생각을 해서 다른 사람의 다른 사람이 아닌 지금도 말이 잘 안 나오는데 뭔가 저기는 그냥 망했다고 생각을 했어요. 그래서 자신과 다른 사람 그 단어가 생각이 안 나가지고 그게 한 번 생각이 안 나니까 영향을 받아서 계속 이어지는 것까지 그래서 그냥 consider 이라는 단어가 마침 생각이 나서 그걸로 그냥 쪽 갔어요 안 바꾸고 (Translation: As I was speaking this part I was thinking in Korean that I should say "keep to my own situation and others" and I can't even say that properly now and I thought that I failed. So I couldn't think of the words, "myself" and "others" and it affected the rest of my performance. And the word, "consider" occurred to me and I kept using it without changing.)

여기서도 example 이라고 해야 될 텐데 왜 explain 이 나왔는지 모르겠는데 그냥 이게 처음 영향을 받아서 계속 막혔는데 이제 listening 을 시작하면서는 적어 놓게 있으니까 좀 괜찮아졌던 것 같아요 (Translation: At this time I didn't know why "explain" was used I should have said,

“example” and this made me feel stuck and as the listening (part) began (the situation) became better and I wrote something down.)

여기서 얘기를 하고 나서 시간을 딱 봤는데 거의 10 초 밖에 안 남은 거예요. 나는 이제 하나만 설명을 했는데 listening 에 focus 를 두려고 해서 하나 더 설명하려고 그랬는데 확 어떡하려다가 그냥 첫 줄만 읽어야겠다 이런 생각을 했어요 (Translation: After speaking I checked the time and (found that) there were 10 seconds left. I thought that I had explained one thing and I was planning to explain one more thing based on the listening (part), but I thought that I was going to have to read only the first line (of the reading passage).)

(After watching own performance)

생각났던 것은 reading 에서 집중을 잘 못하니까 그거에서 전반적으로 얘기하는 데서 영향을 받았고 reading 을 조금만 더 잘 읽었으면 더 요점이 맞게 논리적으로 이야기 할 수 있었을 거라는 생각을 말하면서도 계속 했고 그래도 막 엄청 망했다 이런 생각이 들지는 않았어요 (Translation: I was thinking that I couldn't concentrate on reading and it affected my performance overall. I kept thinking that I could have said (things) more in focus and more logically if I had read well before I had to speak. But I didn't think that I performed well.)

Test task 4

Speech production in response to the prompt

The tutor explain about how learning art can impact child's development. According to this one, this passage art skills benefit development of child and she's giving two ways of benefit development of child. First is platform

platform and second is encouraging encouraging par persistence. Firstly, platform platform is to express comfort emotion for children. So when it when someone is young it is difficult to express his his emotion because he has limited vocabulary. So for example when he was to express the emotion of pride he can draw his feeling instead of using vocabulary and second is encouraging persistence because he can keep trying to make certain art work when he comes to clay art when he can make a car.

Stimulated recall verbalisation

(Right after the task completion)

일단 지금 두 번째 꺼는 너무 시간이 일단 대개 부족하다라는 생각이 들었고 들면서 첫 번째 꺼랑 두 번째 할 때는 task 는 대개 시간이 남았는데 이거는 왜 이리 모자라지 이런 생각이 들었고 일단 그 20 초 주면서 준비하는 동안에 전체적으로 쪽 못 훑어 봐가지고 그냥 지금 적은 데로 얘기를 했어야 됐는데 첫 번째 꺼를 얘기하다 보니까 그냥 내가 여기서 platform to express comfort emotion 이라고 했는데 이걸 문장으로 만들려니까 거기서 일단 막히고 그래서 시간이 지체됐고 예를 다 하나씩 얘기했는데 일단 여기서 하늘을 나르고 뭐 positive 랑 negative 를 drawing 으로 표현할 수 있고 이런 건 일단 말을 전혀 못했고 두 번째 꺼 encouraging persistence 하고 나니까 거의 10 초 밖에 안 남은 거예요. 그래서 지금 이 예는 대개 확실하게 들어가지고 잘 설명할 수 있었을 것 같은데 왜냐면은 그 찰흙을 만들면서 처음에는 별로여서 실망하고 계속 하면서 성공하고 그게다 다른 상황에도 적용하고 이런걸 대개 잘 이해를 했는데 했다고 계속 이거를 말을 결국 아예 못해가지고 그냥 내가 일단 이 예를 들었다는 것만 알려 줄려고 when he comes to making a car clay 이런 거를 얘기했고 근데 일단 첫 번째 꺼를 하면서 문법 실수를 너무 많이 만든 거 같다는 생각을 계속 했어요. 그리고 뭐랄까 사실 이 예는 이해를 잘 못했는데 첫 번째 꺼랑 관련된 거에서는 그림 차라리 두 번째 꺼로 넘어가서 두 번째 꺼를 더 잘 설명할 걸 했어요 (Translation: At first, I

thought that time was so limited. I wondered why I was running short of time for this task while there was plenty of time for the first and the second ones. When I was given 20 seconds to prepare because I didn't review the whole text I had to speak as I had written down. The first thing I said, "platform to express comfort emotion". I had to make a sentence and this made me stuck and this again delayed my speaking. I spoke all the examples (I had prepared for the answer) but here I couldn't express 'something flying in the sky' and 'something positive and negative' which could be expressed by drawing. And after saying the second one, "encouraging persistence" I (found out that) there were 10 seconds left. Therefore, for this example, (I expected that) I was going to explain it well because I thought that I understood about the following: as (children) were making clay (they) were disappointed at the beginning with the quality of what they were making but as they kept on they were more successful and this (process) could be applied to different situations. However, I couldn't mention it, so I attempted to talk about the example and I said, "When he comes to making a car clay". When I was mentioning the first thing I thought that I had made too many grammatical mistakes. (I asked myself) What should I say? I was thinking that I didn't understand the first (example) well, so I should have moved on to the second and I should have explained it better.)

(While watching own performance)

준비하면서 처음부터 내가 적은 걸 쪽 봤는데 여기서 너무 들리는 거에 키워드만 적어놔서 그 준비를 하면 또 어떻게 연계를 시켜서 얘기를 해야 되지 그것 땀에 약간 긴장됨이 있었어요. 그래서 자꾸 만지 작 만지 작 하고 그러는 게 좀 긴장이 되가지고 어떻게 설명해야 되지 헛갈리고 아리송하고 그런 거 같아요. 그냥 일단 적은 거라도 키워드를 일단 순간적으로 연결시켜서라도 얘기를 어쨌든 얘기를 해야 되니까 적은 것을 바탕으로 그냥 얘기하면서 생각해보자 이런 심사였어요. 그래서 일단 적은 대로 그대로 일단 얘기를 했구. 그래서 지금 저기서 platform 한

다음에 약간 멈칫하고 있는 게 platform 이라는 그게 그 대게 뭐랄까 그 복잡한 감정을 표현하기 위한 건데 그거를 어떻게 그냥 platform is to express 뭐 이렇게 했으면 될 것 같은데 지금 생각하면 저 때 생각이 안 나서 benefit 여기 딱 benefit 적은 게 보여서 그 동사를 이용해서 했어요 (Translation: When I was preparing I looked thoroughly at the note taking I did and found that I wrote only key words heavily based on listening and I was thinking of how to make a link and I got tense. Thus, I tried to touch something again and again as I was tense and I was confused. I tried to speak based on the key words I had written down because I had to say something and was planning to think about (what to say) while speaking. Thus I spoke what I had written down. I stopped for a while after saying “platform” because I thought that “platform” meant something like complicated emotions, so I should have said that “platform is to express” simply. But I couldn’t think of it and I just used the verb “benefit” as it was seen in here (her notes).)

그래서 약간 긴장을 해가지고 적어논 거 그대로 발음하면 되는데도 그 발음이 잘 안되는게 보이는 거 같아요 (Translation: I seemed to be a bit tense, so I should have pronounced it as it had been written, but I couldn’t.)

저기서는 지금 말하면서도 느껴지는 게 저 때도 들었던 생각이 주어를 he 사람으로 써야 되는데 자꾸 it 그 사물 지칭하는 it 을 써가지고 그게 계속 영향을 미치니까 더 첫 번째 꺼 안 된다 안 된다 이런 생각이 들었어요. 내가 이해했던 것만큼 표현을 못해서 못하고 있구나 이런 생각을 계속 했어요 (Translation: even now I can feel that I was thinking that I had to use the subject, “he” but I used the neuter, “it” and it affected (the rest of my performance) as I kept thinking that I couldn’t do it. I was thinking that I didn’t perform well as I couldn’t express as much as I understood)

저기서 second is encouraging persistence and he can keep trying 하려고 하면서 보니까 한 3 초 4 초 이렇게 남아가지고 아우 완전 하나도 설명

못하겠다 하고 어떡하지 하면서 문득 든 생각이 예로 든 단어라도 얘기하자. 이렇게 생각이 들었어요 (Translation: At that time as I said, “second is encouraging persistence and he can keep trying” I realised that there were 3 or 4 seconds left. And I thought that I wouldn’t be able to explain at all and all of sudden I should say a word from what I had prepared.)

그래서 clay art 하고 he can make a car 한 다음에 나머지 설명하려고 했는데 끝났어요 (Translation: so after saying, “clay art” and “he can make a car” I was going to explain the rest, but the time was over.)

(After watching own performance)

그 느끼는 건 한 20 초 정도 말한 것 같았는데 거의 일분 시간을 어떻게 이용했는지 잘 모르겠고 일단 아까 것에도 느꼈듯이 뭔가 처음에 막히면은 전체가 좀 매끄럽게 못 가는 것 같아요. 그리고 적을 때 내가 그 준비하면서 느낀 게 적을 때 좀 몇몇 중요한 동사들은 적어야겠다 생각이 들었고 첫 번째 건은 일단 listening 에서 일단 이해가 안 가니까 준비하는 과정에 있어서도 좀 문제가 생긴 것 같아요 (Translation: I felt that I had spoken for 20 seconds, but I didn’t know how to spend almost one minute speaking. It seemed that if I felt stuck at the beginning the whole test wouldn’t go smoothly. When I was doing note taking I felt that I should write down some important words. For the first part, I didn’t understand the listening part so I seemed to have a problem with the preparation

Appendix 4-10. Sample scripts from KP5 (Class)

Class task 1

Speech production in response to the question from the lecturer

The lecturer: what about you?

KP5: Ok uh the teacher I wanna say is is is called Hee Sook Son from South Korea and the she was my teacher when I was in high school and she (clearing throat) teach biology which is quite na quite far from my ah my profession coz I study management and but she help me to develop my uh my my goal and my dream and she advise advised me to to to to how to develop my goal and and she eh talk me you have to think about your future because my father always uh always uh reminded always recommended me to be a lawyer but I didn't like it and I wanna be wanna be a manager and and and business man and I didn't know how can I persuade him , but she she uh let me know how to persuade my father and what is the best way to persuade because if I just uh insist my own opinion to be a businessman he wouldn't agreed with me but erm she told me you should show the rezort result of my grades in in business area in in economics so so you could uh you could persuade him you're your to be a businessman better for you. She is also good teacher. She was so qualified so qualified for biology. So I really enjoyed and and erm eh beside she eh she and I lived in a same flat, not the same flat

The lecturer: same block?

KP5: yeah yeah and same block (laugh) she was so friendly whenever I have a problem with my life or something and she always always give her time to to to eh to solve my to help my to solve my problem Yeah so. I'm I've been I've keeping I've been keeping contact her until now. I think only teaching method is not the not only thing to to be a good teacher yeah to advise students' life yeah etcetera. He also good yeah yeah that's why I admire.

The lecturer: yeah I agree completely. Yes it's very true.

KP5: thank you

Stimulated recall verbalisation

옆에 친구가 얘기를 하면서 먼저 시작을 먼저 시작을 안 해서 그런지 그때 옆에 친구가 먼저 하면서 생각을 정리할 시간이 있어서 더 저한테 이로운 점이 있었고/ 그 옆에 친구하는 거 들으면서 했거든요/. 그러면서 아 내가 나는 어떻게 얘기를 풀어놔야겠다 그런 생각했었어요 (Translation: As a friend sitting next to me began (to speak) first and as I wasn't starting I had some time to arrange my ideas which was beneficial to me./I was speaking as listening to a next friend/and was thinking how to develop the story.)

이 얘기 했을 때 이름은 어떻게 아냐 물어봤을 때 아 맞다 그 선생님 이 이름은 어떻게 됐었고 아 그 선생님을 어떻게 소개해야 되겠구나 어떤 과목을 가르쳤던 선생님이고 그 선생님 소개를 먼저 하고 시작을 해야 되겠구나 그런 생각 했었어요 (Translation: When I said that, when I was asked to give the name (of the teacher) right! I was thinking that I should start by introducing the teacher (for example) what the name of the teacher was and how to introduce the teacher and what subject the teacher taught.)

저 때 quite far 하면서 목적어를 어떻게 말해야 되지 이때뿐만 아니라 계속 하면서 계속 문법을 생각했거든요./ 시험이니까 문법에 맞춰서 해야 되니까 (이게 왜 시험이라고 생각하는지 물어봄) 하나하나가 평가를 하는 거라고 생각했어요./ 학생들 셋이서 앉아있고 앞에는 선생님이로 생각되는 분이 하나씩 질문을 하고 대답을 해야 되는 상황이었기 때문에 수업이든 평가든 내가 펍에서 친구랑 얘기하는 게 아니니까 /어쨌든 정확하게 발음을 하고 정확하게 문법적으로 얘기를 해야 되겠다 생각을 해서/ 그때 quite far from my area 어떻게 말해야 될까 생각을 하면서 한 번 머릿속에 거치고 나왔었어요 (Translation: At the time of saying "quite far"

(I was thinking) how to say the object and not only this time I kept thinking about the grammar./ (I was thinking) that this was a test, so (I had to speak) grammatically. Because I thought that this was a test/there were three students sitting in the class and someone like a teacher was questioning which was a different situation from when I was talking to friends in the pub /and that was the situation I had to answer, thus I thought that I had to pronounce correctly and use correct grammar/and I was thinking how to say “quite far from my area”).

이때도 내가 my goals 이 문제에 대해서 이 주제에 질문을 했을 때 저는 전에 옆에 친구가 자기 의견을 얘기하면서 적었던 게 my goals 라는 단어 였는데/이것 보다 좀 부족하니까 이것보다 좀 더 연관된 단어를 얘기해야 되겠다 좀 얘기를 하기 쉽게 그래서 my goals and my dream 그렇게 (Translation: At this time, for this question, when (I was) asked about this topic I (heard) that the peer sitting next to me said, “my goal”/ I thought that wasn’t enough, so I tried to speak more related words to make the story easier and (I said) “my goals and my dream” like that.)

이 때 들었던 생각은 내가 persuade 라는 단어 말고 다른 거를 쓰고 싶었는데 일단 말을 끊고 생각할 수도 없었고 또 머릿속에 생각이 안 나가지고 계속 persuade persuade 이 단어만 썼던 것 같아요. 어휘가 부족해서 그런 생각을 했었어요 (Translation: I wanted to use a different word, not persuade, but I couldn’t make pause and couldn’t think about (any words), so I kept using “persuade”. I thought that my vocabulary was limited.)

이때 들었던 생각은 제가 발음을 할 때 result 라든가 r 발음이 들어갈 때 고질적으로 제 입에서 제가 습관적으로 하는 발음들이 있는데 아 이걸 말하면서도 아 이걸 고치면서 말해야 되는데 그런 생각을 하면서 말을 했어요 (Translation: At that time I was thinking that I pronounced /r/ in my own way habitually, but I couldn’t correct it (into right pronunciation) even if I was thinking of doing it.)

이때 들었던 생각은 이 선생님이 제가 진짜 좋아했던 선생님이고 동경했던 선생님이라서 그 선생님 얘기 하면서 그 선생님 생각이 드니까 저도 모르게 기분이 또 좋아져서/그 선생님 어떻게 좀 질문에 대답하는 것도 있었지만 이 선생님이 대해서 정말 잘 말해야 되겠다 칭찬을 해주고 싶다 그래 가지고 friendly 하다고 표현도 썼고 그렇게 했던 것 같아요. 개인적인 의견 (Translation: At this time I felt good as I really liked and admired the teacher and I was talking about her./I had to answer the question anyway and I wanted to comment about her nicely, so used the word “friendly”).)

이때도 사실 저 질문 했을 때 그 선생님이랑 같은 아파트에 살았는데 물론 층은 달랐지만 영국에서는 flat 이라고 하니까 same flat 이라고 얘기해야 되겠구나 라고 했었는데 /그 선생님이 block 이라고 해서 아 block 이라고 하는구나 이런 단어를 써야겠구나 이런 생각을 하고 block 이라고 고쳐서 다시 말했어요 (Translation: for this question, (I recalled that) I lived in the same apartment, but different floors. I thought that I should say, “same flat” because in England it was called flat./But the teacher said, “block” and I thought that I should use the word, “block” and I corrected it to “block”).)

(to to 에서 시간지체)이때는 다시 한번 볼게요. 이때는 한국 그 뭘 하고 싶은 지를 머릿속에 맴돌았거든요./그 선생님이 항상 자유시간을 내 주면서 까지 학생들한테 저 뿐만이 아니었으니까 학생들 한 테 학생들도 도와주고 헌신을 했다 헌신적으로 자기 시간을 내줬었다 라고 하고 싶었는데/이거를 영어로 어떻게 말해야 될까 생각이 나면서 잘 몰라가지고 영어가 머릿속에서 바로 나오는 게 아니고 한국말로 먼저 한번 생각이 들었다가/그게 이 상황에서는 제가 아는 상황에서는 바로 나왔는데 뭔가 잘 모를 때 단어도 모를 때 어떻게 말해야 될지 모를 때 한국말로 먼저 생각이 나고 그걸 번역 해서 나오는 과정을 거칠 때가 있어가지고 이때는 이런 상황이었어요 (Translation: at this time I was thinking what I wanted to say in Korean./She even spent her free time helping

students not only me, but also other students, so I wanted to say that she was dedicated to spending her own time for students, but the word didn't occur right away and I thought about that word in Korean first. This was the moment when I didn't know the word, so Korean words did occur first and there was a translation process.)

예 이때 사실 들었던 생각이 처음이라서 긴장이 되긴 했지만 질문 자체가 어려운 것을 질문한 게 아니어서 얘기를 하고 싶은 얘기는 다 했었거든요. 대답을 잘했구나 기분이 좋았었어요 (Translation: At this time, I was thinking that I felt nervous as it was the first (task), but the question itself wasn't difficult, so I was able to say everything I wanted. I felt good as I thought that I answered well.)

이때 저 친구가 얘기할 때 발음을 좀 유심히 들었거든요./친구가 프랑스에서 온 친구인 걸 알았기 때문에 아 친구는 어떻게 발음하는구나 새로운 것도 있었고 이때는 자세히 안 들었어요 (Translation: I was careful with that peer's pronunciation./As I knew that she was from France and I learned how she pronounced. (I thought that) I also learned something new. (But) I didn't listen to (the content) carefully).)

Class task 2

Speech production in response to the question from the lecturer

KP5: I prefer to studying also also studying in a group to studying individual eh the first reason is that uh if I study alone I can get lost and the interest of study if I study in a room in my room next to laptop computer yeah suddenly I can I just put it on and I always search internet stuff yah but if I study yeah in a group they can eh thy can encourage(very wrong pronunciation) me to study yeah more and more because sometimes I have to compete with them

and they can give me homeworks and we can we can do together sometimes or we can do individuals after that we can check out answers which which I can't I can't find alone and the second reason is that if I have problem or if I have uh get advice they can uh give me advice they can uh give me advice they can erm they can help me solve my problems yeah it terms of studying

The lecturer: Right, great

KP5: Thank you.

The lecturer: Good answers.

Stimulated recall verbalisation

처음에 질문을 했을 때 개인적으로 공부하는 거랑 그룹으로 공부하는 거랑 뭐가 다른 거냐 이 주제에 대해서도 전에 생각해본 적이 있었거든요./다른 토론을 다른 수업이었던 것 같은데 그때 이때 들었던 생각 아 그때 생각해봤던 건데 아 이런걸 미리 생각을 해보면은 나중에 어떤 경우가 닥치더라도 이런걸 미리 여러 분야에 대해서 생각해 보면 좋겠구나/친숙했기 때문에 긴장도 안 들었고 그리고 별로 대답하는데 어려움도 없었고 생각도 정리가 됐었으니까 한 번 아 그걸 어떻게 말해야 되겠구나 그런 생각을 했었어요 (Translation: When I was given the question first which was about difference between studying alone and studying in a group I had thought about this before./I was thinking that I had thought about this before, and if we thought about this kind of thing in advance or in different fields it would be good whenever we had difficulties (answering the questions)/It was familiar, so I wasn't tense and had no difficulties in answering and I organised my thoughts and thought about how to speak.)

이때 처음에 노트 테이킹을 하면서 아 그 노트를 정리를 하면서 아 내가 처음에 시작을 할 때 I prefer 라는 말을 써야 되겠다/그리고 I prefer ing to ing 이게 내가 제가 생각하기에는 맞는 문법인데 이렇게 해야겠다 라고

생각을 했음에도 불구하고 이때 얘기를 하면서 약간 좀 버벅 거리면서 잘 자연스럽게 안 나왔거든요 그때. 항상 이 prefer ing 를 할 때 항상 자연스럽게지 않는데 좀 헛갈려서 아 이때도 그렇게 하면서 아 이거 또 헛갈리네 이런 생각했었어요 (Translation: At this time, as I was doing note taking I thought that I was going to start by saying “I prefer”. And I thought that “I prefer -ing to -ing” was grammatically right, so I thought I was going to say like this, but I stammered and I thought that I was confused again.)

이 때 맞아. I can get lost get lose 중에 뭐가 맞지? 생각을 하면서 뭐가 맞지 하면서 고민을 했었어요(Translation: Right! This time, I was considering what was right? Between “I can get lost or get lose”.)

개인적으로 공부를 할 때 설명을 하면서 개인적으로 공부를 할 때는 흥미를 잃을 수가 있다 얘기를 하면서 예를 들어 설명을 했는데/그 때 제가 말하는 거에 있어서 반응을 아 동의하는 듯한 반응을 보여줘 가지고 아 저도 좀 기분이 좋았어요. 아 공감을 하는구나 이 말에 (Translation: As I was explaining about studying alone I gave an example by saying that we tend to lose interest when we study alone/I felt good as I received positive feedback. I thought that she agreed.)

이때 제가 정리해왔던 것은 we can give homeworks each other 이렇게 정리 말하려고 했었는데/얘기 하다 보니까 그 때 노트 테이킹 한 걸 보지 않고 얘기해서 아 적어왔던 걸로 얘기해야 하는데 얘기하다 보니까 또 자연스럽게 다르게 나오네/왜냐면 제가 얘기를 할 때는 they can give homework to me 이렇게 얘기를 했었고 생각했던 거는 we can give homeworks each other 라고 생각을 해서 예 그래서 다르게 나왔었어요 (Translation: At this time I arranged “we can give homeworks each other” to speak/but as I spoke without reviewing note taking (I realised that) something different came out./This is because I said that “they can give homework to me” and I was going to speak “they can give homework to me”.)

두 번째 task 에서 얘기를 할 때는 대답을 할 때 전반적으로 들었던 생각이 첫 번째는 발음을 잘 생각을 못했는데 두 번째는 악센트를 쓰거나 아니면은 인토네이션 같은 것도 주의를 하면서 그 한국 콩글 코리안 잉글리쉬가 아니라 저 선생님이 사용하는 브리티쉬 잉글리쉬 악센트를 사용해 써야 되겠다/ 왜냐면은 항상 어메리칸 잉글리쉬 만 쓰면서 그 쪽 악센트가 굳어져가지고 저한테 입에 지금 뱀 게 그 쪽 악센트인데 아 이쪽에는 잉글리쉬 악센트니까 쓰려고 노력을 해야 되겠다 라고 쓰면서 악센트에 신경을 많이 쓰면서 생각을 했었어요. 두 번째 task 부터는 (Translation: For the second task I was careful about accents and intonation and I was thinking that I should try to use British English which the teacher used and try not to use Korean English/ this is because I was fixed into American English as I always used it, but I thought that British accent was used here, so I attempted to use British accent and I was much careful with accent.)

두 번째 first reason, second reason 이렇게 했는데 내 의견을 좀 더 잘 표현하려면은 아 내 그냥 친구한테 얘기하는 식이 아니라 첫 번째 이유 두 번째 이유 이렇게 하면서 체계적으로 얘기를 해야 되겠구나 라는 생각으로 이때 그렇게 첫 번째 task 대답할 때 보다 좀 더 이렇게 조직화하는 노력을 했었어요 (Translation: I was trying to speak more systematically not like when I talked to my friends in order to express myself well by using “first reason” and “second reason”).)

이 때 advice 얘기할 때도 첫 번째 task 에서 advice 라는 단어를 썼었는데/ 두 번째 task 에서도 Advice 라는 단어 말고도 분명히 다른 말이 있을 텐데 쓰고 싶었는데 몰랐기 때문에 이때는 어쩔 수 없이 advice 라는 어휘를 썼었어요 (Translation: At this time when I was talking about advice for the first task I used the word, “advice”/I was thinking that there must be a different word for “advice” but I didn’t think about it, so I was forced to use the word, “advice” again.)

Class task 3

Speech production in response to the question from the lecturer

KP5: Ok I think my opinion the one of advantages is that (clear throat) if yah if they eh if they speak and use RP in BBC news or in in in in job they can all of them all of most of British people can understand uh each other and the purpose of news yah is to to to give information to public so =using eh Queen's English yah which is yah formal English yah yah is could form the news to public more easily yah. However, the advantage the disadvantage is as you said if they just push people to people which was from all of all of part part of UK they can they can lose their won accent and they our our son daughter generation they could lose? Their own culture because I think form and language is part of culture so that's base of advantage.

The lecturer: good good.

Stimulated recall verbalisation

이때 그 task 를 읽으면서 들었던 생각이 가끔 내가 영어를 만약에 제대로 이해하지 못하면 대답을 할 때 판소리를 하게 되니까 첫 번째 대화를 하는거에서 인제 지문을 읽고 이해하고 얘기를 해야되니까 좀 더 신경이 쓰였고 좀 더 머리를 잘 굴려야겠다. 다른데 신경쓰지 말고 이때부터는 그런 생각이 들었어요 (Translation: As I was reading the task I thought that I would talk about something else if I didn't understand (the passage) well. so I thought that I shouldn't focus on something different/ so as I was listening to the conversation I was nervous as I had to read the reading passage and had to understand and I thought that I should use my brain and didn't not think about anything else.)

이거 내용도 전에 수업시간에 들었던 적이 있는 내용이었어서 좀 친숙했고 선생님이 얘기를 하면서 아 다른 여러가지 발음이 있다 저도 느껴봤었었고/ 그리고 런던에도 런던 내에서도 발음이 여러개가 있다라고 얘기를 했을때 내가 아는 east London 애들은 cockney 라고 불리는 그런 액센트를 쓰는데 아 이런거 나중에 얘기하면 되겠구나 그냥 그렇게 생각했어요. (Translation: I felt familiar with the content as I had heard about it before in the class and I felt the different accents the teacher commented / When (the lecturer) said that there were several accents in London I was thinking that some of my friends from East London used cockney accents. And I thought that I would mention this later.)

이때 very ex.....(exaggerate) 그 말을 선생님이 했는데 그 말이 뭔지 몰랐거든요. 아 이게 뭐지. 이 단어 때문에 맞아 이해하지 못하면 안 되는데 (Translation: At this time the teacher said “very ex.....” but I didn’t know what that word was. What is this? And I thought that I wouldn’t be able to understand because of this word.)

이때 든 개인적인 생각은 영어랑 웨일즈랑 북아일랜드 잉글랜드 스코틀랜드 각각 다른 언어를 쓰는 건 있는데 다른 액센트를 쓰는 건 이해를 하겠는데 제가 알기로도 도시마다 도 액센트가 따로 있어서 단어도 살짝 씩 다를 때도 있고/ 아 영국이라는 나라는 왜 이렇게 다 다를까 내가 사는 한국 같은 경우에는 지방마다 는 액센트가 있어도 도시마다 는 거의 비슷한데 그리 크지 않은 나라에 왜 이렇게 다를까 이 생각 들었었어요 (Translation: At this time I was thinking personally I knew that Wales, Northern Ireland, England, and Scotland each used a different language and different accents but I knew that each city had different accent and sometimes words were somewhat different/and I was thinking that why the accents in this not so big country (the UK) are so different while the accents in Korea are similar although different cities have different accents.)

이 때는 내가 여기서 티비 프로그램을 많이 안 보아서 그런지 몰라도 저는 RP 라고 하는 퀸즈 잉글리쉬를 티브이에서는 다 쓰는 줄 알았거든요./ 아 그게 아니구나 새로운 정보를 알아서 그게 아니었구나 이때 부터 1960 년대부터 아 다른 자기 악센트를 쓰기 시작했구나 뭐 새로운 정보를 얻었네 뭐 이런 생각을 했었어요 (Translation: At this time I thought that RP, Queen's English was used on all TV programmes as I didn't watch TV programme often/ Ah, it wasn't. I realised that since 1960s different accents had been used and I realised that I learnt something new.)

여기서 마지막에 질문을 하셨거든요 선생님이./Advantage 나 disadvantage 가 있다 아 이렇게 얘기를 하는구나 친숙하게 느껴졌어도 마지막에 Advantage 나 disadvantage 를 말하라고 했을 때 머리가 빨리 돌아갔거든요/사실 이때 생각 사실 이때 몇 초간에 내가 advantage 를 뭘 말해야겠다 disadvantage 를 뭘 말해야겠다 딱 몇 초 만에 정리가 됐거든요./ 아 가장 핵심적인 질문 이었으니까 그때 그런 생각이 들었어요 (Translation: The teacher gave the question at last./ there are advantages and disadvantages and I felt familiar with and I had to think quickly when I was finally told to talk about advantages and disadvantages/I was able to arrange what to say about advantages and disadvantages for a few seconds/ and I thought that that was the core question.)

아 이때도 처음에 I think in my opinion 이라고 얘기했고 if they think and 이렇게 얘기했는데 말을 할 때 정리해서 좀 clear 하게 정리해서 말하는 게 좋은데/ 제가 좀 평소에도 좀 항상 in my opinion 이렇게 시작을 해야겠다 생각을 하면서도 자연스럽게 I think 이게 먼저 나오고 speak 이런 게 먼저 나와서 저 때 들었던 생각이 아 정리를 하면서 말을 해야 되는데 또 이렇게 자연스럽게 습관적인 말투가 나오는구나 습관적으로 쓰는 단어가 먼저 나오는구나 이런 생각 했었어요(Translation: At this time I said that "I think in my opinion" and "if they think and" I should have said that after having arranged it would have been better./Although I was planning

to start to say with “in my opinion” I just said “I think” automatically and I was thinking that I should’ve said what I intended to and I was thinking that my habitual phrases and words came first.)

이 때도 all of them 이라고 얘기를 했는데 all 이라고 하면은 이게 전부 다니까 뭔가 아닌 경우도 분명히 예외인 경우도 있으니까 아 이렇게 말하면 안되겠구나 하면서 most of them 으로 바꿨거든요./너무 내 말이 확실히 전부 다 이렇다 확신을 하면서 말하는 거는 아 이거는 좀 나중에 그거는 아닌 거 같아 라고 나중에 다른 사람이 내 말을 반박을 할 수 있으니까 너무 이렇게 확신하게 말하지 말자 그래서 most of them 이라고 바꿔서 말했었어요 (Translation: After I said “all of them” I was thinking that there must be exceptions, so I thought shouldn’t say this and changed into “most of them”./Later I thought that it wouldn’t be good because someone rebutted what I said if I was too sure about what I was saying. Then I thought that I shouldn’t too sure and changed into “most of them”).)

이때도 queen’s English 우리말로 치면 표준어라고 얘기를 하는데 queen’s English 이 쪽은 아 queen’s English 라는 말을 더 많이 쓰니까 아 이것을 표준어라는 말을 어떻게 해야 되지 그래서 약간 그 생각을 하고 약간 좀 그래서 pause 가 있었고 formal English 이렇게 쓰면 되겠구나 그리고는 생각을 한 번 하고 나가서 약간 버벅 거렸어요 (Translation: At this time, I was saying that “Queen’s English” which was Standard English in our language, but here “Queen’s English” was used more often./ Therefore, I was thinking how to say Standard English and paused for a while, and found how to say that, and thought about it again, and stammered little bit.)

아 이때 들었던 생각이 자꾸 people people 이라는 말을 쓰는 것 보다 아 뭔가 좀 specific 하게 지정을 해서 대중이면 public 영국 사람이니까 British 해서 말하는 게 더 좋다고 생각을 잠깐 그 때 순간적으로 들어서 아 British people 이라고 말하면 좋겠구나 British people 이라고 바꿔서 말했어요 (Translation: I was thinking that it would be better if I said something more

specific rather than keeping saying the word, people, so I thought of ‘public’ and ‘British’ and finally said “British people”).

아 이때도 our father generation 이라는 말을 쓰잖아요./아 우리 자녀세대는 어떻게 말하지?/그냥 한국말로 자녀, 우리 아들이나 반대로 그러면 son, daughter generation 이렇게 말하면 되겠구나 확실치는 않았는데 이렇게 말하면은 이렇게 하는 수 밖에 없겠구나 그래서 son and daughter generation 이라는 표현을 선택해서 썼었어요 (Translation: I was thinking how say our children’s generation./I asked “how can I say our children’s generation?/I simply thought of them in Korean, “janyu” or “woor adl” and then thought that should say “son, daughter generation”. Although I was sure about them I said “son and daughter generation”).

이 때 마지막으로 대답을 하면서 들었던 생각이 advantage 나 disadvantage 특히 disadvantage 할 때 발음이 자꾸 안 나오는 거예요 자꾸/. 처음에도 그랬고 아 이게 발음이 안 나오지. 긴장해서 그런가 그런 생각이 들었어요 (Translation: when I answered for the last time, I couldn’t pronounce “advantage” and “disadvantage” well/ Then I was thinking of the reason why I couldn’t pronounce them well. I thought that I might have been tense.)

Class task 4

Speech production in response to the question from the lecturer

KP 5: Yah eh I think the most obvious differences between radio development in UK and in USA is the main reason why they develop the radio program in those country yah eh the first step in in USA the first the first step to the develop radio program was that they want it to-erm make their big country rather society to be one nation as a united states so uh they use uh radio program to broadcast of the huge and massive yah land massive cu massive

yah so because before development of radio program in USA they all of the society use they own newspaper won broadcasting system and that was not good to be united into one nation to America. However, in UK British people they had they had to be united into one nation because it's the the land itself is smaller than USA so it's it's enough to to to the (?) yah so they started to uh develop radio programme to give uh information and to give uh information and education yah things like that= the second reason the second difference between them is how they sponsored how they (?) sponsored by whom eh in USA since they uh since uh advertised company sponsored radio programme they had they had to develop erm entertainment programme and that is why USA citizens are uh have developed (their?) concept.

Stimulated recall verbalisation

이 때 잠깐 들었던 생각이 저의 옆에 왼쪽에 있는 친구는 저 처럼 정리를 하고 쓰는데 오른쪽에 있는 친구는 뭘 적는 게 안보였거든요./아 이걸 적으면서 듣는 게 좋을 텐데 나중에 대답을 할 때 이 친구는 안 적지? 그러면 안될 텐데. 이렇게 생각했었어요 (Translation: At that time, I was watching the other two and saw one writing down like me and the other not writing anything down./I thought that it would be better writing down while listening in order to answer later. I thought that "why isn't that person writing anything?".)

이때 using the phrase 라고 말했는데 저 말이 뭐지? 내가 아는 거는 뭐 phrasal verb 이라는 말만 아는데 비슷한 말인가? 뭘까 이런 생각 했었어요 (Translation: I was wondering what 'using the phrase' meant and I thought that I only knew 'phrasal verb' and wondered "are they similar?".)

이 어떻게 라디오가 미국 USA 에서 발달이 됐던가는 상당히 처음이어서 재미있고 흥미로운 주제 이어서 아 재미 흥미롭구나 생각을 했었는데 하면서/ 지금 그 엔터테인먼트 먼트 프로그램이 발달이 됐다 근데 그 이유가 어드버타이즈 컴퍼니 그 스폰서 프로그램에 스폰서 하는게 어드버타이즈

컴퍼니 였는데/그러면서 미국사람들이 돈에 관한 컨셉을 변하기 시작했다 머니 라는 얘기를 했는데 아 monetary concept 이라고 내가 나중에 얘기를 하면은 어 이 단어를 쓰면 되겠구나 선생님이 말한 거와는 조금 다르게 좀더 평소에 잘 안 쓰지만 덜 쓰지만 덜 쓴다기 보다 좀 더 어휘가 어휘가 풍부해 보이게 아 이렇게 해서 monetary concept 이라고 말을 하면 되겠구나 정리를 했었어요 (Translation: I was thinking that the topic was interesting as it was the first time (I had listened to) exciting topic about how to radio developed in the USA./Now entertainment programmes are developed as advertising companies sponsor the programmes/ While I was listening about American people changed the concept of money I thought of the word, 'momentary concept', which I hardly used in general but I tried to use the word differently from the word the teacher used in order to show my vocabulary proficiency.)

잠깐 들었던 생각이 tiny tiny country 라고 했는데 그렇게 작은 것 같지는 않은데 영국도내가 보기엔 큰 나란데/ 크기 영토를 비교했을 때 한국이랑 비교하게 되니까 큰 나라는 아닌데 미국에 비해서는 작지만 작은 나라인데 왜 저렇게 얘기하지/tiny 하고 할 거면은 tiny county in comparison to compare to USA 이렇게 하면서 사용을 하면 더 좋겠는데 작게만 얘기하니까 그건 좀 아닌 거 같은데 라고 생각했었어요 (Translation: I was wondering why (the lecturer) defined the UK as a tiny country and I assumed that the UK is a big country/when comparing with the size of Korea it wouldn't be a big country but comparing with the USA it would be a small country. Why (is she) saying that?/ If she wanted to say about the UK as a tiny country it would be better saying that "tiny country in comparison to compare to USA", but why she mentioned that it was tiny. I thought that it wouldn't be right.)

이때 한 몇 초 동안 선생님이 얘기하는 것 들으면서 다 이해가 안 갔거든요 사실./뭐 영국에서 1922 년이라는 말을 언급할 때부터 지금까지 그 목적이 educational 이었다. 이런 거 얘기 할 때까지 다 이해가 안 갔는데/

informative and educational 뭐 이런 얘기를 하면서 아 이해가 안 갔더라도 아 여기서 중요한 것은 내가 두 개를 비교하는 거니까 중요한 것은 아 이 말이 중요하니까 적어야 되겠구나 다른 거는 이해를 못했지만 괜찮을 것 같다 이런 생각 했었어요 (Translation: In fact, I didn't understand all that the teacher spoke about for a few seconds./ Since 1922 the purpose of it was educational things which I couldn't understand./ As listening to "informative and educational" I thought that although I couldn't understand the important thing was to do here was that comparing two things and those two words were important, so I thought that I had to write down (those two words) I thought it would be ok although I couldn't understand the rest of it.)

이때 제가 note taking 을 하면서 어떤걸 얘길 해야 되겠다 라고 정리를 했었는데 UK USA 비교를 잘 했는데 공간이 부족하고 여기저기 중구난방 내용이 많아서 중구난방으로 써서 아 정리를 잘하면 말하기 좋을 텐데 나중에 말하기 힘들지 않을까 말할 때 그런 생각 했었어요 (Translation: I did note taking and I realised that note taking was messy. So I thought that I should have arranged (note taking well. Then I wouldn't have difficulty saying things later.)

이때 들었던 생각이 the development in UK radio programme development in UK and 여기서 and 해서 and 하고 radio development in USA 라고 해야 될까 아니면 그냥 in USA 이렇게 해도 될까 한 번 생각을 하다가 아 그냥 in USA 앞에 부분 생략하고 그렇게 말했어요. 뭐가 맞을까 고민을 한 번 하기는 했었어요 (Translation: I was thinking that I should say "radio development in USA" or just "in USA" and I omitted things in front of "in USA" and I said, " the development in UK radio programme development in UK and".)

이때 첫 번째 이유를 설명을 했는데 선생님이 다른 친구들 얘기를 들을 때보다는 제가 이 얘기를 딱하니까 아 맞아 그 말이야 공감을 하셨거든요/ 아 이렇게 반응을 해주니까 내 말이 맞는구나 아 생각을 잘했구나 이야기

잘 했구나 라고 좀 자극이 돼서 격려가 된다고 해야 되나, 그래서 좀 더 자신을 얻고 얘기를 할 수 있었어요 (Translation: When I explained the first reason the teacher seemed to agree with me more than the others/ With this reaction I was sure that what I said was right and what I thought was right and I spoke well which encouraged me. So I was able to speak with more confidence.)

이때 좀 버벅거린게 그들이 그 큰 나라를 하나로 결합을 시키려고 원했었다라는 걸 얘기를 하고 싶었는데 이게 단어가 생각이 안 나가지고 그래서 좀 버벅 거렸어요 (Translation: I wanted to say that the big country would like to be united, but I wasn't able to think about the word and I was hesitant.)

그때 그들이 결합 한나라가 되고 결합하는데 enough 라고 하면서 제 머릿속에 들었던 생각은 그들이 한나라가 되기에는 땅이 땅 크기가 충분히 크기가 충분했다 크지가 않았다 얘기하고 싶었는데/enough to 하고 이걸 어떻게 얘기해야 되지 enough to enough to small? 생각이 안나 서 좀 버벅거렸어요. 그래서 enough to 하면서 얘기를 하다가 선생님이 이해를 하는 것 같아서 넘어가자 이렇게 해서 넘어가자 두 번째로 넘어가게 됐어요 (Translation: Something in my mind was that to become one nation and I wanted to say that the size of land wasn't enough to be united into one nation/I was thinking how to say "enough to" but the teacher seemed to understand and I moved onto the second point.)

이 때 제가 information 이랑 educational 제가 이때 하고 싶었던 게 educational 이게 informative purpose 라고 얘기를 했어야 했는데 informational 했으면은 그 education 도 같은 명사로 얘기해야 되잖아요./하나는 information 이라고 얘기하고 educational purpose 라고 말하고 싶었고 이게 두 개를 하나로 묶어가지고 얘기를 해야 되는데 이걸 다시 앞에 켄 고칠까 이걸 다시 education 이라고 할까? 그게 좀 머릿속으로 생각을 하느라고 좀 버벅 거렸었고 그러다가 결국에는

educational 이라고 얘기를 했어요 (Translation: At this time I said, “information” and “educational” and in fact I’d like to say that “educational was informative purpose”, but if I said “informational” and I (should have said) the noun form of education./However, I wanted to say one as “information” and “educational purpose (for the other) and I thought that I should say these two combined and I was thinking of changing “educational” to “education”.)

이때도 how they were sponsored 라고 수동태로 얘기하는 게 맞는데 아 얘기를 할 때 문법을 생각을 하면서 아 자연적으로 말하는데 왜 또 틀렸지? 말하고 나서 느끼거든요 말하면은 느끼거든요. 아 이거 아닌데(Translation: At this time, After I was saying “how they were sponsored” I wondered why I made a wrong (sentence) even if I was thinking of grammar?.)

이때 stop 해야 된다고 얘기 했을 때 얘기를 하면서 계속 천천히 얘기 한다고 생각했거든요./너무 천천히 얘기하는 것 같다./그래도 빨리 얘기하면 내가 생각했던걸 다 얘기 할 수 있었을 텐데 더 얘기하고 싶었던 게 조금 더 있었거든요./얘기를 못해서 더 얘기를 좀 더 빨리 했으면 좋았을 텐데 아쉽구나 (Translation: At this time, when (the teacher asked us) to stop I kept thinking that I should speak slowly/I thought that I spoke too slowly/and I thought that if I had spoken fast I would have been able to mention all I wanted to because there was some more to talk about./I was disappointed that I could have said more if I had spoken faster.)