# The Influence of Pre-task Planning, On-line Planning and Their Combination on Fluency, Complexity and Accuracy in Foreign Language Performance

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#### ABSTRACT

This study examines how pre-task planning, on-line planning and their combination influence fluency, complexity and accuracy in foreign language performance. Participants are 12 undergraduate and postgraduate students who were studying at University of Essex. The participants conducted three oral narrative tasks either in no-planning, pre-task planning or combination of pre-task planning and on-line planning conditions. No-planning condition does not allow the participants to have any planning time before performing a task, and they are told to conduct the task in 2 minutes. Pre-task planning condition provides the participants with 10 minutes planning time before conducting a task, and they are required to perform the task in 2 minutes. Combination condition allows the participants to have 10-minute planning time before conducting a task without any time pressure when conducting the task. The participants' performance is analyzed in terms of fluency, complexity and accuracy. Results reveal that pre-task planning positively influences fluency, and on-line planning positively affects accuracy. Additionally, combination of pre-task planning and on-line planning fails to achieve balanced development of fluency, complexity and accuracy. Based on these results, this study indicates that different planning time influences different aspects of learners' oral performance. Therefore, careful design of the way of implementing a task is necessary to get learners to achieve balanced development of fluency, complexity and accuracy in their performance. The results also indicate that prudent consideration of task implementation setting in a situation of a speaking test in order to measure learners' performance accurately.

#### **CHAPTER 1**

#### INTRODUCTION

For decades, the importance of meaning-based activities has been widely acknowledged. Many teachers require their students to engage in activities where the content or message of the lesson allows learners to use a target language to speak about their own thoughts and opinions (Harmer, 2001; Richards, 2001). Such activities are totally different from traditional approaches (e.g., audio-lingual method and grammar translation method), which require learners to practice correct use of target structure isolated from any context or meaning.

The importance of such meaning-based activities is strongly posited by Krashen (1985). He claims that comprehensible input is necessary and sufficient for learner to acquire<sup>1</sup> a target language. Comprehensible input refers to input which is slightly more advanced than learners' current level of proficiency. Moreover, explicit knowledge, which is achieved through explicit language teaching, is useful only as a monitor for learners' production error. Additionally, it is mentioned that learners have what Krashen calls an "affective filter" (Krashen, 1985, p. 3). That is, if learners have anxiety and/or if learners are not self-confident or motivated, the affective filter appears and prevents learners from processing

<sup>&</sup>lt;sup>1</sup> According to Krashen, acquisition is distinguished with learning. Whereas acquisition refers to "subconscious process identical in all important ways to the process children utilize in acquiring their first language", learning is defined as "a conscious process' which is achieved through explicit language teaching (Krashen, 1985, p. 1).

comprehensible input. Krashen's hypotheses are often called the "monitor model<sup>2</sup>" (Lightbown and Spada, 2001).

Based on the monitor model, Krashen and Terrell (2000) propose Natural Approach, which aims to foster learners' communicative ability that can be used in the real-world. In Natural Approach, teachers give their students large amount of comprehensible input and the learners' job is to understand them. That is, there are few activities which require them to produce output. Krashen and Terrell (2000) state that "Speech (and writing) production emerges as the acquisition process progresses" (p. 58). That is, they indicate that production ability will be fostered if learners promote their acquisition of target language by means of processing comprehensible input.

Although Krashen's proposal becomes very popular and teachers start to conduct Natural Approach, some researchers begin to claim that for learners to acquire the target language, exposure to comprehensible input is essential but not sufficient. For instance, by targeting for the learners who were joining in immersion program, Swain (1985) compares learners' second language (henceforth, L2) production with that of native speakers in terms of grammatical accuracy, socio-cultural aspect and discourse aspect. Her study shows that immersion learners' production is quite similar to native speakers in terms of socio-cultural and discourse aspects. On the other hand, learners' L2 production is much less accurate than

 $<sup>^2</sup>$  The monitor model consists of the input hypothesis, the affective filter hypothesis, monitor hypothesis, the acquisition-learning hypothesis mentioned above, as well as the natural order hypothesis which claims that learners acquire the target structure in a particular order.

that of native speakers. Given these results, Swain indicates that comprehensible is insufficient for L2 learning, and proposes the importance of learners' output. According to her, output requires deeper processing than input. That is, learners can utilize semantic and/or pragmatic information to process input; they do not necessarily have to process input syntactically or morphologically. However, when learners are required to produce output, they must think of the appropriate expression, usage of grammar, and/or vocabulary to convey the content of their thoughts and opinions. In other words, syntactic and morphological processing is necessary for output, which requires deeper processing than input.

Moreover, Long (1983, 1996) claims the necessity of interaction in L2 learning. According to him, interaction between learners and more proficient speakers contributes to L2 learning because such interaction induces negotiation of meaning, which is said to facilitate L2 learning in terms of following points: First, such negotiation of meaning makes it possible to raise the amount of comprehensible input (Krashen, 1985; Long, 1985), which is essential for L2 learning. Second, negotiation of meaning also elicits negative feedback. For example, suppose that learners produce output with error, they may get some kind of corrective feedback which informs that their production contains some errors. By being exposed by such feedback, it has the possibility that learners may be able to notice the gap between the target language and their own interlanguage<sup>3</sup> (Swain, 1985), and may be able to correct or adjust their interlanguage.

<sup>&</sup>lt;sup>3</sup> Interlanguage refers to L2 knowledge that L2 learners have (Selinker, 1972).

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The proposals claimed by Swain (1985) and Long (1993, 1996) indicate the necessity of simultaneous attention to both linguistic form and meaning of content or intention. Especially, it seems that learners need to pay attention to linguistic form during a meaning-based activity to acquire a target language. This notion is called Focus on Form (Long, 1991; Long and Robinson, 1998). Long (1991) defines Focus on Form as that "…overtly draw(s) students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus in on meaning or communication" (pp. 45-46). Moreover, Ellis et al. (2002) states about Focus on Form as "…in focus on form instruction the primary focus of attention is on meaning. The attention to form arises out of meaning-centered activity derived from the performance of a communicative task" (p. 402).

For learners to focus on linguistic form in the content of meaning, allocation of attentional capacity seems necessary. That is, conducting meaning-based activities, learners need to shift their attention to linguistic form (Long and Robinson, 1998, p. 23). By shifting their attention, they can make the connection between form, meaning and function. This process is considered to be important for L2 learning; By noticing the form-meaning-function connection learners can use appropriate grammatical and/or lexical element to process input appropriately and communicate the intention of their content more clearly and precisely (Doughty and Williams, 1998).

To enable learners to achieve such allocation, various types of instructions or techniques have been considered (see Doughty and Williams, 1998, p. 259). As one way of achieving

allocation of attention to both linguistic form and meaning, task-based language teaching (henceforth, TBLT) is becoming popular and its effectiveness has been widely examined in the field of SLA research (e.g., Takemoto, 2001). Skehan (1998) proposes that tasks are a main unit of teaching material and an assistant for language teaching. In both cases, however, its effectiveness changes with different designs and implementation methods (Willis, 1996; Skehan, 1996, 1998; Ellis, 2003). Therefore, effectiveness of various TBLT techniques has been widely examined.

This study will focus on one technique which is frequently implemented in TBLT: planning time, and examine how different types of planning influence learners' oral performance. This study starts with reviewing theoretical framework of TBLT, including how the concept of "a task" is defined (chapter 2). Then, focusing on planning time, empirical evidence of its influence on learners' L2 performance will be reviewed (chapter 3). Based on the theoretical and empirical evidence of planning studies, this study will conduct an experiment to examine the effects of pre-task planning, on-line planning and their combination. In chapter 4, detailed explanation of experimental design will be reported. The results will be stated in chapter 5. Given the results of the study, chapter 6 will argue the role of each planning time, followed by conclusion and pedagogical implication of the study (chapter 7).

#### **CHAPTER 2**

#### **OVERVIEW OF TASK-BASED LANGUAGE TEACHING**

The last chapter introduced current trend of the research in the field of foreign language teaching. It argued that meaning-based activities are essential for foreign language teaching and that learners need to attend to linguistic form in the content of meaning. Such notion of focus on form has been widely proposed in the field of second language acquisition research. One way of achieving such condition is to use tasks in language teaching. Given these background, this chapter will discuss the theoretical framework of TBLT in detail. It will start with discussing problems with the traditional PPP (Presentation – Practice – Production) approach, then define a "task" and explain its difference from an "exercise". Then theoretical background of TBLT, types of tasks and a systematic framework for its implementation which seem to be valuable for effective L2 development will be investigated.

# 2.1. Problems of the traditional PPP approach

Traditionally L2 had been taught using the PPP approach. In this approach, a specific target structure to be taught is pre-selected, and teachers start their class with "presentation": introducing the target structure either explicitly or implicitly. Then, learners engage in "practice" activities which require them to control or manipulate the target structure. For example, pattern-practice is typically conducted in this phase. The type of practice exploited in this phase aims to get learners to manipulate a target structure correctly, thus attention is paid to linguistic form only. In other words, the meaning of production is less prior to

accurate manipulation of a target structure. Finally, learners conduct more meaningful production activity. That is, learners engage in the activities which require them to use the target structure in meaningful context. This phase is different from activities of the "practice" in that the production phase requires students to use the target structure to convey their meaning to others. This approach is exploited by many teachers because it is easy to conduct classes for them (Skehan, 1997).

This approach has been criticized by many researchers for a number of reasons. Firstly, some SLA research show that learners acquire the target structure along with certain sequences. Pienemanm (1984), for instance, states that "an L2 structure can only be learned by instruction if the learners' interlangauge is close to the point when this structure is acquired in the natural setting" (p. 198). In other words, there are developmental sequences about learning a target structure, and learners cannot acquire the target structure until they have psychological readiness, even though teachers teach them explicitly or implicitly. Since the PPP approach first pre-selects a target structure to be taught, and then teaches it without taking learners' readiness into consideration, there is no guarantee that PPP approach enables learners to fully acquire the target structure.

Secondly and more crucially, this approach fails to foster any real-world communicative ability. Although learners can use the target structure under controlled production practice, most of them cannot learn to use that target structure outside their classroom (Skehan, 1997, 1998; Willis, 1996). In other words, only some learners who have good capacity or special

ability for foreign language can learn to use the target structure in real world. Moreover, for learners to learn to use a target language in real-world situation, they need to negotiate several other factors. For example, management of time pressure, shared knowledge with interlocutors, and context seems necessary for fostering real communicative ability (Batstone, 1994). Since the aim of the PPP approach is to get learners to use a target structure correctly, it can be stated that the situation of PPP is totally different from one which requires authentic language use.

#### 2.2. Theoretical background of TBLT

#### 2.2.1. Definition of tasks

Given these criticism, TBLT has been established and got popular. Since the word "task" has been widely used, many researchers define their own conception of a task. Below are various definitions of a "task" by a number of researchers:

"...the task is a piece of meaning-focused work involving learners in comprehending, producing and/or interacting in the target language, and that tasks are analysed or categorised according to their goals, input data, activities, settings and roles" (Nunan, 1989, p. 11).

" meaning is primary; there is some communication problem to solve; there is some sort of relationship to comparable real-world activities; task completion has some priority; the assessment of the task is in terms of outcome" (Skehan, 1998, p. 95). "a task is an activity which requires learners to use language, with emphasis on meaning, to attain an objective" (Bygate et al., 2001, p. 11)

"a task is a workplan requires learners to process language pragmatically in order to achieve an outcome that can be evaluated in terms of whether the correct or appropriate propositional content has been conveyed. To this end, it requires them to give primary attention to meaning and to make use of their own linguistic resources, although the design of the task may predispose them to choose particular forms. A task is intended to result in language use that bears a resemblance, direct or indirect, to the way language is used in the real world. Like other language activities, a task can engage productive or receptive, and oral or written skills, and also various cognitive processes" (Ellis, 2003, p. 16).

Although the concept of a task is described in different ways, it seems that the definitions are quite similar in that tasks require authentic language use to achieve their goals or objectives. First, tasks have goals or objectives to be achieved, which may or may not be the ones required in real-world. Second, tasks require learners to use target language authentically. That is, to achieve the goals of tasks, learners have to read, write, speak and listen to the target language.

Tasks are clearly distinguished from exercises. Whereas tasks require learners to use

language to accomplish a goal, exercises require controlled or manipulated language use simply to correctly reproduce a particular target structure (Ellis, 2000; Skehan, 1998). For example, fill-in-blank drills, which require learners to write correct form of a target structure in parentheses, are not considered tasks because in such activities learners do not have to focus on meaning or understand any message; learners do not have to use target language authentically. In other words, exercises get learners to focus on linguistic form rather than meaning and their aim is to get learners to use a specific target structure correctly.

## 2. 2. 2. TBLT from the psycholinguistic and the socio-linguistic viewpoints

The importance of TBLT is supported by research on the psycholinguistic and the socio-linguistic aspects of L2 acquisition (Ellis, 2000). From the psycholinguistic viewpoint, tasks are regarded as a "device" for get learners to experience information processing (Ellis, 2000, p. 197). That is, learners must actually process some information to conduct a given task, promoting L2 use and acquisition.

Information processing model includes the interaction hypothesis, the output hypothesis, and noticing hypothesis. The interaction hypothesis claims that interaction between learners and more proficient speakers facilitates L2 acquisition (Long, 1983, 1996). The output hypotheses propose three roles of output activities: First, output makes it possible to notice the gap between target language and their interlanguage; Second, it gets learners to test their hypothesis about a target language; Third, it promotes conscious reflection. That is, if the hypotheses constructed by learners are wrong, they are required to change them correctly

(Swain, 1995). With regard to noticing hypothesis, Schmidt (1991) states that noticing target structures in the context of meaning promote second language acquisition. Given these information processing models, the psycholinguistic viewpoint claims that tasks are useful tool for language teaching because (1) they promote noticing the target structure in the tasks, (2) they get learners to interact with other speakers, and (3) they get learners to produce output.

On the other hand, the socio-linguistic viewpoint focuses on the way a task is accomplished (Ellis, 2000). This viewpoint especially emphasizes the role of a collaborative activity between learners and teachers, and/or learners and learners. It is proposed that learners acquire L2 by being helped by other proficient learners or teachers. In initial stage, learners need others' help (i.e., scaffolding), and through their help learners internalize a new target structure. As a result, learners learn to perform the target structure without any help. Therefore, in the socio-cultural viewpoint, learners acquire a target language "not through interaction but in interaction" (Ellis, 2000, p. 209).

As well as these intervention which is claimed to be useful for L2 development, timing seems to affect their efficacy. From this point of view, Samuda (2001) argues that timing of intervention affects learners' awareness for linguistic form. She argues that tasks should "create semantic space" (Samuda, 2001). That is, tasks should create a situation in which learners are required to use particular target structure<sup>4</sup> but cannot achieve it completely by

<sup>&</sup>lt;sup>4</sup> This concept of task seems identical to what Loschky and Bley-Vroman (1993) names "task

themselves. In such a situation, they will be aware of linguistic form because learners notice the gap between what they want to say (i.e., target language) and what they can say (i.e., their interlanguage). According to her, teacher's intervention or scaffolding should be given at this time, so that form-meaning connection will be constructed. Samuda summarizes her theory stated above as following;

"...an important role for the *task* may be to attract initial attention to designed areas of meaning, and through task operations, create a need to mean; an important role for the *teacher* may be to complement the task by guiding attention towards form-meaning relationships" (Samuda, 2001, p. 137)

From these points of view, a number of researchers examine how such interaction work for L2 development. For example, Swain and Lapkin (2001) explore how learners acquire a target language in interaction. In their study, learners conduct either a jigsaw task or a dictogloss<sup>5</sup> with other learners. While conducting the tasks, learners interact with their partners. Not only do they talk about the content of tasks, but more importantly, learners interact with other learners while solving the linguistic problem. In other words, negotiation of form occurs in the interaction between learners. As one of the examples of negotiation of form, Swain and Lapkin show following interaction which occurred in a dictogloss task;

essentialness". However, they state that such tasks are difficult to design.

<sup>&</sup>lt;sup>5</sup> Dictogloss is a kind of task which requires learners to listen and reproduce the passage. In Swain and Lapkin (2001), learners were required to listen to the passage twice with taking notes. Then making group with other learners, they reproduced the passage as accurately as possible.

"B: Puis, le cloche a sonné

(Then the bell rang [=the alarm clock rang].)

A: LA cloche?

(The bell [emphasis on feminine form of article].)

B: La cloche, le cloche, je pense c'est LA

[Alternating masculine and feminine forms of article]

A: Oui.

[Yes]

- B: La cloche a sonné
  - (The bell rang)"

(Swain and Lapkin, 2001, p. 109, Italics are done by Swain and Lapkin)

In this interaction learner B produced a sentence which contains a linguistic error. Then learner A noticed B's error, and then they talked about which article (masculine or feminine) should be used in this situation. Finally, B also noticed that his production was wrong and re-produced correct sentence. In other words, it can be said that B learned to use the target structure by means of A's help.

Moreover, in terms of teachers' intervention, Samuda (2001) examines how a teacher scaffolds learners in a communicative task. In her study, making groups, learners conducted a task which required learners to guess the identity of a particular person. Groups were then required to present their opinion to the other groups by oral presentation and posters. While

learners' conducting the tasks, a teacher helped them by using a variety of techniques. First, a teacher joined group-works and introduced the target structure implicitly and preemptively while keeping learners' attention to meaning. She calls such technique implicit focus. Below is an example of implicit focus extracted from Samuda (2001);

- "1. S1: Habits?
- 2. Y: Well first he smokes
- 3. C: But we think uh 50 % we think just 50%
- 4. N: Yes just maybe. We're not sure
- 5. T: Oh yeah? Only <u>50%?</u> Why's that?
- 6. S2: Yes, give proof (laughter)
- 7. N: Because here (showing matchbox). A matchbox
- 8. T: Hmmm, but you're not certain if he smokes, huh? (looking at matchbox)
- 9. A: Look (opens matchbox). Many matches so maybe he just keep for friend, not for him (laughter)
- →T: Mmmmm I- I guess <u>it's possible</u> he might smoke. It's hard to tell just from this
- 11. A: Yeah, not sure
- 12. S2: you have more proof? "

(Samuda, 2001, p. 129)

This kind of preemptive scaffolding has its merit for L2 development in that (1) it gives

learners positive evidence<sup>6</sup> showing form-meaning relationships, and (2) it works as "advanced organizer" or the target form (Samuda, 2001, p. 130). Moreover, following implicit focus, a teacher in her study also explicitly explained how the target form works during the interaction. The following example is extracted from Samuda (2001, p. 131) which shows how the teacher has her students focus on the target structure using explicitly meaningful context;

"Businessman? <u>90%</u>? OK. So you're <u>90% certain</u> he's a businessman, right? Here's another way to say this. You think it's <u>90% certain</u>, so you think he must be a businessman. He must be a businessman (writes it on board). So this (point to <u>must be</u> on board) is showing how CERTAIN how SURE you are. Not <u>100%</u>, but almost <u>100%</u>. (Samuda, 2001, p. 131, underlines, capital letters are dome by Samuda)

The implicit and explicit incorporation of the target structure enables a teacher to, in Samuda's words, "lead from behind" (p. 137). That is, it could be argued that learners, while conducting meaning-based activity, may be able to notice how and when a target structure is actually used, which might be useful for creating form-meaning relationships.

#### 2.3. Pedagogical perspective of TBLT

Although the importance of task-based language teaching is theoretically supported, just conducting tasks does not guarantee effective L2 development. For example, Seedhouse

<sup>&</sup>lt;sup>6</sup> Positive evidence is the information which tells grammaticality of learners' production or input.

(1997) shows that learners do not use syntactically elaborated performance in TBLT to achieve the goal of the tasks. That is, just using strategic ability is often sufficient to accomplish the aim of the task.

Moreover, VanPatten (1990) shows that learners have limited attentional capacity so that it is difficult for them to pay attention to both form and meaning simultaneously. Based on VanPatten (1990), Skehan (1998) proposes that learners have difficulty of focusing on different aspects of their performance simultaneously (i.e., fluency, complexity and accuracy). In his theory, fluency is defined as "the primacy of meaning and the capacity to cope with real-time communication" (Foster and Skehan, 1996). Foster and Skehan (1996) also propose that fluent language use is possible when learners access lexicalized language rather than grammatical, syntactical knowledge. On the other hand, complexity and accuracy are based on accessing grammatical knowledge. However, they are based on different dimensions of grammatical knowledge. Skehan (1996) states that "complexity emphasized the organization of what is said and draws attention to progressively more elaborate language that may be used, as well as a greater variety of syntactic patterning" (p. 304). Such language use, according to Skehan, is possible when learners are willing to take risks, and contributes to foster their interlanguage (Skehan, 1996, 1998). In contrast, accurate language use is possible when focusing on avoiding errors in performance. That is, if learners avoid taking risks out of fear for making mistakes, and if they use only the expressions that they think there is no error, accurate language use would be possible, but in that case it can happen that learners' performance is accurate but not syntactically and lexically complex.

These problems indicate that to conduct a class using tasks effectively to promote learners' L2 acquisition, attention must be paid to the systematic design of tasks and their implementation method (Skehan, 1998). The following section will discuss properties of tasks and how tasks should be implemented.

# 2.3.1. Task Properties

The aim of TBLT is to establish communicative competence which enables learners to use a target language in a real situation. A number of researchers point out the necessity of choosing a task which requires creative language use. By conducting tasks with similar requirements to real-world situations, learners can experience what they will be required in advance "in the security of the classroom" (Nunan, 2004, p. 20). Learners can utilize teachers' and others' comments, advice and feedback, so it is expected that they can learn to deal with the real-world situation better than they would in a traditional classroom situation.

As well as tasks which get learners to experience real-world situation, tasks which require authentic language use but are not related to real-world situations also contribute to L2 development (Nunan, 2004). Such tasks make learners use language more creatively, compared with communicative activities which only require specific target structure. Nunan (2004) states about this rationale as following:

"In performing such tasks, learners begin to move from reproductive language use – in which they are reproducing and manipulating language models provided by the teacher, the textbook or the tape – to creative language use in which they are recombining familiar words, structures and expressions in novel ways" (Nunan, 2004, p. 20).

However, it should be stated tasks that focus on specific target structure also have roles in effective L2 development. It could be argued that such tasks are identical to what Samuda (2001) calls "knowledge constructing task". The role of such tasks may not be to have learners experience real-language use, but to construct new form-meaning relationships (Samuda, 2001; Nunan, 2004). Unlike the tasks mentioned above, these tasks contain pre-selected target structure(s), so they may be suitable for constructing knowledge about target structure rather than improving skills of authentic language use.

# 2.3.2. Task implementation

As well as task properties, systematic implementation of tasks is also essential for effective L2 development (Willis, 1996; Skehan, 1998). That is, tasks should be implemented with activating various dimensions of learners' interlanguage. There are various kinds of techniques used in different phases. For example, teachers can introduce a topic grammatical structures and expressions related to the task before actually conducting tasks (Willis, 1996). According to Skehan (1996, 1998), these introduction activities enable greater opportunity for restructuring to occur, and greater control over processing a load of tasks. That is, learners do not have to process various things if they conduct such pre-task activity, so that they can save their processing capacity during performing tasks (Skehan and Foster, 1997).

Moreover, when learners actually conduct tasks, teachers' help, feedback and scaffolding will be useful to improve learners' interlanguage. As mentioned before, such teachers' intervention would be useful for learners to construct form-meaning relationships. Moreover, teachers can also set up more challenging task (Willis, 1996; Skehan, 1998). For example, teachers first get learners to conduct tasks in pairs or groups, and then learners can report what they did in public. Since public performance may induce more anxiety for learners, it may be that learners pay more attention to linguistic form while focusing on the content of the tasks (Willis, 1996). In other words, learners may try to perform more accurately when put in front of the entire class than they do in pair or group work (Skehan, 1996).

Even after the tasks are finished, teachers still can do something for their learners — they can get learners to reflect on their language use, while practicing a particular target structure (Willis, 1996). Since "semantic space" has been already created by implementing tasks, this can be good timing for focusing particular linguistic form (Samuda, 2001). Learners can also repeat the same tasks with different partners/groups. Compared with their first performance, learners may focus on different part of the performance when it is repeated in new situations (e.g., Bygate, 2001).

#### 2.4. Summary

This chapter has discussed theoretical background of task-based language teaching. It has been stated that the concept of a task is clearly differentiated from that of an exercise. Whereas tasks focus on more authentic language use, and may involve real-world situations, exercises focus on more manipulated, controlled language use, and tend to be quite form-focused. The usefulness of TBLT has been theoretically supported in the psychological and the socio-linguistic viewpoint. However, to conduct TBLT effectively, the content of the task and the way it is implemented should be carefully considered.

Given the background mentioned above, this study picks up one element which seems to affect learners' performance crucially in TBLT – the influence of planning time. The next chapter will discuss from a theoretical perspective. That is, how planning time theoretically affects learners' oral performance. Then, empirical studies which examined the affects of planning time will be reviewed.

#### **CHAPTER 3**

#### **PREVIOUS STUDIES**

The last chapter discussed theoretical background of TBLT. It argued that tasks are useful for effective L2 development in that tasks can serve as tools for experiencing information processing, which is considered to contribute to L2 development. Moreover, it can induce negotiation of form into interaction. However, for effective L2 learning, systematic construction of tasks and their implementation are necessary. Given this background, the following chapter will focus on one specific implementation technique – planning time, and will discuss how types of planning affect learners' L2 oral performance.

# 3.1. Types of planning time

Planning time can be categorized into several distinct types. According to Ellis (2005), planning time is divided into two types – pre-task planning and on-line planning. Pre-task planning is time for preparing for tasks before learners actually conduct them. This is further divided into two types: One is rehearsal and the other is what he calls strategic planning time<sup>7</sup>. Rehearsal, according to Ellis (2005), is defined as "opportunity to perform the task before the 'main performance'", whereas strategic planning is referred to as "learners preparing to perform the task by considering the content they will need to encode and how to express this content" (p.3). That is, these two planning activities are different in that

<sup>&</sup>lt;sup>7</sup> Although Ellis (2005) divides pre-task planning into two types, in this study, pre-task planning is referred to as what he calls strategic planning.

rehearsal provides learners with additional chances to perform the same task, whereas strategic planning provides learners with the opportunity to focus on the raising the quality of their performance before conducting the tasks.

On-line planning is referred to as time for preparing for tasks during conducting them. This is further divided into pressured on-line planning and unpressured on-line planning<sup>8</sup>. In pressured on-line planning, learners need to plan immediately. In this situation, detailed preparation of production and monitoring is not available. In contrast, unpressured on-line planning allows learners to take time for "careful on-line planning" (Ellis, 2005, p. 4), so that time for planning their speech during tasks and time for monitoring their own production are available. Moreover, these concepts are similar to what Ochs (1979) proposed planned and unplanned language use. Ellis (2005), quoting Ochs (1979), states that "unplanned discourse tends to manifest non-standard forms acquired early whereas planned discourse contains more complex, target-like forms" (p. 4).

## 3.2. Theoretical aspects of planning time

The role of planning time for foreign language learning has been discussed theoretically. Although many researchers have various claims, it seems that the role of planning can be summarized in following three points. First, planning time may reduce the cognitive demand of tasks. That is, it provides learners with opportunities for considering content, grammar and vocabulary which are necessary for performing tasks. Therefore, it is expected

<sup>&</sup>lt;sup>8</sup> In this study, I will call Ellis's unpressured performance as on-line planning.

that learners can elaborate quality of their language use in tasks when given enough planning time (Richards, 2002). Moreover, according to Robinson (2001), planning time is considered as one of what he calls "resource-depleting factor" –the factor which affects learners' processing capacity, such as attention and/or working memory. That is, planning time allows learners to save their processing capacity. As a result, learners who are given planning time may be able to focus on linguistic form during their performance.

Second, it is argued that planning time enables learners to pay their attention to linguistic form in the context of meaning (Orteaga, 1999; Ellis, 2005). According to Ortega (1999), such learner-initiated focus on form is important for learners' L2 development for two reasons. First, such production promotes "noticing a gap" between the target language and learners' interlanguage. By noticing what they can say and what they want to say, learners become "aware of something they need find out about their L2" (Swain, 1995, p. 129). This process may follow to test their own hypothesis about L2 and conscious reflection, which promotes restructuring their interlanguage (Swain, 1995). Second, it is discussed that it contributes to construct form-meaning mapping. As mentioned before, form-meaning mapping is considered an important process for L2 development because it enables learners to encode their thought, opinion and message using appropriate linguistic code. To promote mapping, Yamaoka (2005) proposes that it is necessary for learners to experience form-meaning connection in a receptive and productive way.

Finally, planning time may enable learners to access more advanced levels of interlanguage

(Yuan and Ellis, 2003, Ellis, 2005, Kawauchi, 2005). Learners' L2 interlanguage is considered as dynamic capability rather than static, single capability. Tarone (1983) states learners' interlanguage has its careful style and vernacular style. Careful style refers to learners' performance when their attention is paid to linguistic form, whereas vernacular style is defined as the production where little attention is paid to linguistic form. According to Tarone (1983), these two styles are not considered as dichotomy, but as continuum. Acquisition is considered by this theory to be a shift from careful style to vernacular style. That is, Tarone's theory regards L2 acquisition as the process by which learners become able to learn to achieve their careful production spontaneously by means of their vernacular style.

Based on this Tarone's theory about styles of learners' interlanguage, Ellis (2005) states that planning time gives learners the possibility to access their careful style of interlanguage. In the case of on-line planning, it enables learners to access their careful style of interlanguage during a performance, which may promote shifting to vernacular style. Moreover, in the case of pre-task planning, learners first need to access their careful style of interlanguage and then are required to perform in a real-world type of situation, which promotes careful-vernacular shifting (Ellis, 2005). This would be an important process since learners first need to access their careful style of interlanguage (Tarone, 1983).

#### 3.3. Empirical studies which examined the effects of planning time

#### 3. 3. 1. Variables which affect effects of planning time

Influence of planning time has been empirically examined from various points of view, and it has been argued that its impact changes if the conditions during planning change. So far, previous research show that the variables which affect efficacy of planning time include modality (Ellis, 1987; Ellis and Yuan, 2005), length of time (Mehnert, 1998), types of planning time (Foster and Skehan, 1996, 1999), and the learners' proficiency level (Wigglesworth, 1997; Kawauchi, 2005). This section will review how these variables affect influence of planning time.

As for modality, Ellis (1987) reported that effectiveness of pre-task planning in terms of accuracy was different between task types. In his study, using three narrative tasks, the influence of pre-task planning and on-line planning on accuracy was examined. The results of his study reported that learners who conducted writing tasks produced more accurate use of the target structure (i.e., past tense) than those who carried out oral tasks. In contrast, Ellis and Yuan (2005) examined whether the type of modality of tasks differentiate the efficacy of on-line planning. Participants were divided into three groups. Group 1 conducted an oral task with no-planning, and a writing task with on-line planning. Group 2 conducted an oral task with on-line planning. Group 3 conducted a writing task with no-planning. Their performance was analyzed in terms of fluency, complexity and accuracy. Their results revealed that there was no statistical difference between speaking tasks and writing tasks in terms of fluency, complexity and accuracy. This indicates that whether modality really

influences the effects of planning time or not remains controversial.

Mehnert (1998) examined whether different amount of planning time elicit different effects on language performance. He set up four groups – no planning, 1 minute planning, 5 minutes planning and 10 minutes planning. No detailed instruction was given to the participants. His study reported that learners who were given 1 minute planning time outperformed the ones who did not have any planning time in terms of fluency and accuracy. Moreover, it was revealed that learners who had 10 minutes planning time outperformed no-planning learners in terms of fluency and complexity. Based on these results, Mehnert (1998) concludes that learners' priority is on accuracy when they are given 1 minute planning, and only 10 minutes planning time enables learners to produce more complex language (p. 104). This study clearly indicates that effects of planning will be different if the length of time for planning is different.

It is also reported that different types of planning have different effects. Foster and Skehan (1996) compared detailed planning time with undetailed planning time. In detailed planning time, learners were instructed on how to use their planning time, whereas learners given undetailed planning time did not receive any detailed instructions. Participants conducted three tasks: a personal task, a narrative task and a decision making task. Their performance was analyzed in terms of fluency, complexity and accuracy. This research reveals that learners given detailed planning time produce more complex and accurate language use than the learners who receive undetailed planning time. However, detailed instruction does not

influence fluency.

Foster and Skehan (1999) explored the effects of teacher-initiated planning, group-oriented planning and individual planning time together with focus on planning (i.e., focus on language or meaning). Their results reveal that learners who conduct teacher-initiated planning time produce more accurate language than the other groups. In terms of fluency and complexity, there is no significant difference between teacher-initiated, individual and group oriented groups. Based on these results, Foster and Skehan (1999) respect the role of teachers. That is, teachers can contribute for their learners by getting them to focus on linguistic form. These two studies indicate that teachers' help during planning time clearly bolsters learners' L2 performance.

Research also shows that the influence of planning time differs when learners' proficiency level is different. However, these studies do not provide consistent results. Wigglesworth (1997), conducting one-minute planning time, reports that planning time is effective for high level learners in terms of accuracy, whereas Kawauchi (2005) reveals situations of low level<sup>9</sup> learners improving accuracy with given planning time. Kawauchi (2005) also reports that her advanced level participants do not improve their performance compared with her low-level and high-level learners. Based on these results, she indicates that advanced learners has ceiling effect. That is, learners' declarative knowledge is already automatized,

<sup>&</sup>lt;sup>9</sup> In Kawauchi (2005), participants were divided into three levels; low-level, high-level and advanced-level. Their proficiency level was compared in TOEFL test. She reported that range of TOEFL score was 420-480 in low-level, 510-580 in high-level and 550-610 in advanced level.

so that learners can easily access their procedural knowledge in on-line performance (Kawauchi, 2005, p. 162).

These studies reveal that effects of planning time are caused by learners' internal factors, as well as external factors. Although the effects of some variables are controversial (e.g., learners' proficiency level), these studies indicate that many variables should be taken into consideration when examining the effects of planning time. In the next section, the focus shifts to examine findings regarding the influence of planning time on fluency, complexity and accuracy.

#### **3.3.2.** Effectiveness of planning in terms of fluency, complexity and accuracy

In most of previous studies, the influence of planning time is measured in terms of fluency, complexity and accuracy. In terms of fluency, most of studies report that pre-task planning positively contributes to stretch fluency<sup>10</sup>. Foster and Skehan (1996), for example, show that learners who are provided time for pre-task planning can reduce the amount of repetitions, pauses and the amount of silence compared with the learners who are not allowed any pre-task planning. Skehan and Foster (1997) similarly report that pre-task planning enables learners to achieve more fluent performance than no planning in all personal, narrative and decision-making tasks. Moreover, Ortega (1999) also reports similar results. In her study,

<sup>&</sup>lt;sup>10</sup> As for Yuan and Ellis (2003), one might argue that there is no significant difference between the pre-task planning group and the no-planning group in terms of fluency. However, it should be noted that conditions of the no-planning group in their study is different from the other studies. In the no-planning group of Yuan and Ellis (2003), learners' on-line planning time is controlled, whereas in the other studies it is not. This condition might affect the results regarding fluency.

learners who have the time for pre-task planning also produce more fluent performance than the learners who do not have any pre-task planning time.

The reason why planning time contributes to fluency may be that pre-task planning time enables learners to ease cognitive load. Without planning time, learners have to simultaneously consider the content, their own opinion, and come up with a way of expressing their message. In other words, if planning time is not given, they have to focus both meaning and form at once (Skehan and Foster, 1997, p. 201). Therefore, it can be indicated that pre-task planning enables to reduce cognitive load of tasks. As a result, learners may be able to produce fluent language.

On the other hand, some research shows that on-line planning time does not contribute to fluency. Yuan and Ellis (2003) report that no significant difference is found between the learners who have the time for on-line planning and those who do not in an oral narrative task. Similarly, Ellis and Yuan (2005) report that there is no significant difference between on-line planners and no-planners in oral and written tasks. In addition, Yanagiya and Yokoyama (2005) report that there is no significant difference between pre-task planning condition and no planning condition. Based on these results, as Ellis and Yuan (2005) propose, whether or not fluency is improved may depend on pre-task planning rather than on-line planning.

As for complexity, research clearly shows that both pre-task planning and on-line planning affect syntactic complexity positively. Foster and Skehan (1996) report that learners who

conduct pre-task planning activity produce more syntactically complex performance than the learners who do not engage in the activity. Skehan and Foster (1997) show similar results in regard decision making task. Moreover, Mehert (1998) reports that 10 minutes planning time can help learners achieve more syntactically complex performance. Ortega (1999) reports that pre-task planning enables learners to produce longer performance per utterance. As is the case with pre-task planning, research shows that on-line planning also seems to improve syntactic complexity. Yuan and Ellis (2003) show that pre-task planning and on-line planning significantly outperform learners given time for no planning in terms of syntactic complexity. Similarly, Ellis and Yuan (2005) report on-line planning contributes to syntactic complexity in speaking and writing.

These results may indicate that learners could stretch their L2 interlanguage with restructuring<sup>11</sup>. According to Foster and Skehan (1996), the concept of complexity/restructuring stresses learners' thought and/or message to tell, which draws learners' attention to "the progressively more elaborate language that may be used, as well as a greater variety of syntactic patterning" (p. 304). That is, if learners try to convey a more complex concept, they will use a more complex grammatical structure. In such case, learners' performance would be surpassed in terms of complexity. Foster and Skehan (1996) also state that restructuring fails to occur when (1) learners have no interest in reorganizing their interlanguage system, (2) input is poor and (3) learners do not take risks for fear of

<sup>&</sup>lt;sup>11</sup> Skehan (1996) explains restructuring as "the process by which the interlangauge system becomes more complex, elaborate and structured" (p. 47)
making mistakes. Considering these factors, planning may enable learners to take risks in order to represent a complex intention or concept that they wish to convey. As a result, learners might be able to achieve syntactically more elaborated performance.

However, the effectiveness of pre-task planning time towards accuracy is controversial. Whereas some studies (e.g., Foster and Skehan, 1996 in personal and decision tasks; Skehan and Foster, 1997 in personal and narrative tasks; Ortega, 1999 in non-modifier TLU) reported that pre-task planning contributes to accuracy aspects, other studies (e.g., Foster and Skehan, 1996 in a narrative task, Skehan and Foster, 1997 in a decision task; Ortega, 1999 in article TLU; Yuan and Ellis, 2003) do not reveal any effect.

There are some reported reasons why the effects of planning towards accuracy receive mixed results. One reason may be the use of different measurement methods (Ortega, 1999). There are mainly two types of measurement methods for L2 accuracy: holistic measurement and specific measurement. The former method aims to measure learners' general accuracy without focusing on any particular target structure. Ratio of error-free clauses and counting average number of errors in 100 words are regarded as typical examples of holistic measurement. On the other hand, specific measurement focuses on one or two target structures, and aims to scale whether learners can produce these target structures correctly. For example, Ellis (1987), and Kawauchi (2005) examine the accuracy of past-tense. Ortega (1999) measures target-like use of Spanish non-modifier and articles on accuracy. Both of these two types of measurement have their pros and cons. For example, holistic

measurement does not distinguish types and qualities of errors, so that it cannot account for changes of learners' target-like use (Ortega, 1999). However, holistic measurement is useful in that it can represent a wide range of learners' accuracy. Specific measurement is more useful when teachers want to predict what kind of target form will be frequently used in particular situation (Foster and Skehan, 1996).

Another reason for the controversy over pre-task planning's effectiveness on accuracy may be the regulation of on-line planning. According to Yuan and Ellis (2003), on-line planning is not a controlled variable in many pre-task planning studies. Unlike pre-task planning, the effects of on-line planning on accuracy seem rather clear. Hulstijn and Hulstijn (1984), Yuan and Ellis (2003), and Ellis and Yuan (2005) report that on-line planning positively influences the accuracy of learners' L2 oral performance. They reason that on-line planning time enables learners to access their grammatical knowledge during tasks, so that careful consideration of linguistic aspects becomes possible (Yuan and Ellis, 2003; Ellis and Yuan, 2005).

#### 3.4. Summary

This chapter discussed the role of pre-task planning time and on-line planning, as well as findings of previous studies. It reported that planning time theoretically contributes to L2 acquisition in that (1) it elicits learner-initiated focus on form, which is considered as a crucial process of L2 acquisition, (2) it enables learners to access their maximum level of interlanguage (i.e., careful style in Tarone's (1983) term) and (3) it reduces the processing

load. Based on these theoretical aspects, some empirical studies examined the variables which affect the effects of planning time. At least three variables - length of time, type of planning, and the learners' proficiency level alter the effects of planning time. Moreover, the results of previous studies reveal that pre-task planning may generally contribute to the fluency and complexity of learners' performance, whereas on-line planning may generally contribute to improve accuracy. These results indicate that the role of pre-task planning and on-line planning are complemental. Therefore, it is expected that combination of pre-task planning and on-line planning help to achieve balanced development of L2 performance (Yuan and Ellis, 2003, p. 24).

Given these theoretical and empirical studies on planning time, the present study will examine the influence of pre-task planning, on-line planning and their combination. Based on the review of previous studies, the following hypotheses are constructed:

- Pre-task planning will enable learners to improve the fluency and complexity of their performance.
- 2) On-line planning will enable learners to improve the accuracy of their performance.
- The combination of pre-task and on-line planning will enable learners to improve the fluency, complexity and accuracy of their performance.

# CHAPTER 4

## METHOD

The last chapter reviewed empirical studies examining the effects of planning time as well as studies explaining how planning time theoretically contributes to L2 development. It discussed how the effectiveness of planning time varies according to several conditions. Moreover, how pre-task planning generally contributes to improve fluency and complexity, whereas on-line planning enables learners to improve accuracy. Based on these reviews, this study will examine how several types of planning influence learners' oral L2 performance.

## 4.1. Participants

Participants in this study were Japanese undergraduates and postgraduates studying at the University of Essex (N=12). Their age ranged from 21 to 31, and their average age was 24. 1. They were from various departments (e.g., linguistics, law, sociology and government). They all had been in UK for almost one year. As English learners, the participants had been learning English for 10.9 years on an average, ranging from 8 to12 years. Their average computer-based TOEFL score was 218, ranging from 187 to 253. Their average IELTS (i.e., International English Language Testing System) score was ranged from 6 to 6.6, and the average score was 6.32. In addition, their average TOEIC (i.e., Test of English for International Communication) score was 805, ranging from 760 to 890. Given these proficiency test scores, it can be said that all the participants were advanced learners of English at the time this study was conducted.

## 4.2. Tasks

Three narrative tasks<sup>12</sup> were used in this study. As is the case with Yuan and Ellis (2003) and Ellis and Yuan (2005), these tasks were extracted from Heaton (1975). Each task had six pictures that construct a story. However, these tasks did not contain any linguistic input in either the first language or the target language.

The complexity of these three tasks was compared by means of the criteria for task complexity devised by Robinson (2001), who points out two main factors affecting the complexity of tasks. These are what he calls "resource-directing factor" and "resource-depleting factor". The former factor controls attentional capacity towards use of particular language code, whereas the latter factor regulates processing demands of a learner's working memory and/or attention, which are not directly related to learners' use of specific linguistic form. The former factor includes whether or not (1) a task contains many elements,

<sup>&</sup>lt;sup>12</sup> Here are the examples of stories used for these tasks. 1) In the first task, three boys were waiting for a bus. When the bus came, they could not get in because three other boys squeezed into the cue where the three boys were standing. The three boys had to wait for thirty minutes to get in another bus. Then another bus came and they took it. On the way to their destination, the three boys saw the bus stopping on the road because of a flat tire. That bus was the one which the three boys could not get in. Therefore, they arrived at their destination earlier even though they missed the previous bus. 2) In the second task, a guy was standing at the airport with luggage, and two thieves were trying to steal it. To do so, one of the thieves talked to the guy, and the other thief tried to steal his baggage during the conversation. They successfully stole and opened the luggage. They found a big snake in the luggage, and were very surprised. 3) In the third task, a boy got off a bus. He dropped a piece of his luggage but he did not notice it. Then on his way back to his home, he noticed a man chasing him. The boy became very scared, and tried to run away. However, the man ran faster than he, so the man caught up with the boy. The boy was very scared by this time, but actually the man just tried to give him back the luggage he had dropped when he got off the bus.

(2) a topic is here and now, and (3) a task requires learners to reason. The latter factor consists of (1) availability of planning time, (2) the number of task (i.e., single or multiple) and (3) availability of learners' background knowledge.

Based on these criteria, it can be said that the tasks conducted in this study have equal complexity. In terms of the resource-directing factor, all three tasks are equivalent because they all contains six pictures, and are considered here and now since participants could see the pictures while conducting the tasks (Yuan and Ellis, 2003). Moreover, there is no reasoning demand in any of the three tasks. In terms of the resource-depleting factor, the three tasks are equal because the content of each of the task is to explain the story in as much detail as possible. As for availability of learners' background knowledge, three tasks are equal because learners did not know the story before.

## 4.3. Procedure

Considering the difference of the participants' speaking ability, this study uses a within-subjects design. That is, the participants performed three different tasks in different conditions (i.e., no-planning, pre-task planning, and combination of pre-task and on-line planning). It would be difficult to conduct a between-subjects design examining the effects of a particular instruction, because it would be necessary to hypothesize that learners' level (e.g., levels of speaking ability and proficiency in the case of this study) is same. Otherwise it is difficult to indicate that results of the experiment are attributed to the difference of treatment conducted in each group with any degree of certainty.

Participants in this study were required to conduct each of tasks one by one. Therefore, it had the possibility for practice effects to occur. That is, by conducting each of the three tasks, the participants gain the opportunity to improve their performance. The experimental design was constructed taking such effects into consideration. It is shown in Table 1:

	N = 3	N=2	N=3	N = 2	N = 3	N =2
Task 1	No	No	Pre-task	Pre-task	Pre-task +	Pre-task +
	planning	planning	Planning	Planning	On-line	On-line
Task 2	Pre-task	Pre-task +	No	Pre-task +	No	Pre-task
	planning	on-line	planning	On-line	planning	planning
Task 3	Pre-task +	Pre-task	Pre-task +	No	Pre-task	No
	on-line	planning	on-line	planning	planning	planning

Table 1.Experimental Design

In this experimental design, sequence of conducting tasks is same in all conditions, but the participants conducted three treatments in different phases. By setting up such design, influence of treatments will be measured without practice effect.

This experiment implemented the following procedures. First, the participants were given six pictures by the researcher, and they were given 20 seconds to understand the story. The researcher asked whether they understood the story or not, but did not ask about the content of the story. If they reported that they could not understand the story by themselves, they were given some hints about the content of the story<sup>13</sup>. After confirming that they understood the story, they were instructed to explain it in as much detail as possible using the target language. Then, the participants conducted each of the tasks either in no-planning, pre-task planning, or combination of pre-task and on-line planning. Then, a retrospective interview was conducted to ask what they actually did during the task, what they thought about while conducting the task. After completing the first task the participants performed the other two tasks following the same structure.

#### 4.4. Treatment

The participants performed tasks in the following three conditions. In the no-planning (henceforth, NP) condition, they were told to start a task as soon as the researcher finished giving them instructions. Therefore, they did not have any pre-task planning time. Moreover, the participants were told to complete the task within 2 minutes<sup>14</sup> with the aim to restrict their time for on-line planning. Therefore, in this condition there is no pre-task planning and no on-line planning.

In pre-task planning (henceforth, PP) condition, the participants were given 10 minutes planning time before conducting a task. The length of this planning time was decided to

<sup>&</sup>lt;sup>13</sup> The time for understanding the story, and the hint for capturing the meaning of the story were given because participants in my pilot study stated that they could not understand what to do during the task if they did not understand the story.

<sup>&</sup>lt;sup>14</sup> The participants in Yuan and Ellis (2003), Ellis and Yuan (2005) were told to do the task within 5 minutes, but the participants in the pilot study pointed out that they did not feel any time pressure in that condition because 5 minutes were considerably long for them.

compare the results of the previous studies (e.g., Foster and Skehan, 1996, 1999; Yuan and Ellis, 2003; Ellis and Yuan, 2005). No detailed instruction for planning time was given to the participants in this condition, so that they could do anything during that time (cf. Foster and Skehan, 1999). The participants could take notes, but they were not allowed to use them when performing the tasks. They also could not refer to other resources such as dictionaries and grammar books during their planning time. When performing the task, as is the case with NP condition, the participants were told to complete the task within 2 minutes, which restricts the time for on-line planning. To summarize, the PP condition contains 10 minutes pre-task planning, but does not include on-line planning.

In combination (henceforth, CP) condition, the participants were given 10 minutes planning time before conducting a task. As is the case with the PP condition, no detailed instructions were given so they could use this 10 minutes freely. They could take notes, but could not see them when performing the task. Unlike the other conditions, the participants in this condition were not given any limit on the amount time allotted to task performance. That is, each participant could take as much time as desired to complete the task, which gives participants in this condition the opportunity for on-line planning during task performance.

## 4.5. Analysis and Coding

All of the participants' spoken data was recorded and transcribed. Following the other studies (e.g., Foster and Skehan, 1996; Skehan and Foster, 1999; Ortega, 1999; Yuan and Ellis, 2003), the data were analyzed in terms of (1) fluency, (2) complexity and (3) accuracy.

Moreover, following Yuan and Ellis (2003), to confirm whether the participants engaged in on-line planning, the length of time and the number of spoken words were calculated. The length of time spoken by participants was calculated by the using stop-watch. To more accurately measure time, the calculation was conducted twice, and the average time of two measurements was used in the study.

With regard to the number of words, two types of criteria were used. One is the number of spoken words which includes repetition, reformulation and replacement (i.e., the number of words A). Examples of these three features are shown as following:

- 1) He he he plays the guitar [repetition]
- 2) He play plays the guitar [reformulation]
- 3) He plays the guitar, the piano [replacement]

Moreover, the production such as *ah*, *eh*, *uh*, *um* were excluded from the words. The other criterion is the number of spoken words excluding repetition, reformulation replacement, and the words such as *eh ah uh* (i.e., the number of words B). The former criterion shows the participants' raw production, whereas the latter is considered as more meaningful production because it contains only the words which are related to the tasks.

Now measurement method of fluency, complexity and accuracy is reported. First, fluency was calculated as the number of words the participants spoke in one minute, which is called

the speech rate. This was calculated by dividing the number of words spoken by the length of time in seconds, then multiplying by 60. Two types of speech rates were calculated. One is the speech rate which includes all of the participants' speech (i.e., speech rate A). That is, the speech which includes repetitions, reformulations and replacement. The other speech rate does not include reformulation, repetitions, and replacement (i.e., speech rate B).

Second, complexity was measured from the viewpoint of grammar and lexis. The number of clauses per T-unit was counted to measure syntactic complexity of the participants' performance. It was calculated by dividing the number of clauses with the number of a T-unit. Foster et al. (2000), reviewing Hunt (1965, 1966), defines a T-unit as "a main clause plus any other clauses which are dependent upon it" (p. 360). It should be noted, however, that there were many simple sentences which do not include any subordinate clauses in this study, so these simple sentences were each counted as one T-unit. Examples of the participants' performance are shown as below. In the example sentences, "|" shows chunks of a T-unit, and ":" shows the separation between clauses.

| they ran away from the airport | (1clause, 1 T-unit) [S2]

- | there are three kids | and they are waiting for the bus | (2 clauses, 2 T-units) [S7]
- | he ah took his luggage :: that Indian guy left on the floor | (2 clauses, 1 T-unit) [S3]

Foster et al. (2000) defines a subordinate clause as "a finite or non-finite verb element plus at least one other clause element (Subject, Object, Complement or Adverbial)" (p. 366). The following examples show phrases which include subordinate clauses:

| so he started :: to run away from him | (2 clauses, 1 T-unit) [S1]
| the little boy know :: that the man was chasing him:: to to return the box to him | (3

clauses, 1 T-unit) [S10]

In terms of lexical complexity, a type-token ratio was calculated to measure this criterion. It was calculated by dividing the number of the types of words spoken with the number of the words participants spoke. The words which were repeated, reformulated and replaced were excluded from the measurement.

Finally, with regard to accuracy, the ratio of error-free clauses was calculated. This was done by dividing the number of error-free clauses by the total number of clauses spoken by a subject in each task. Syntactical and morphological errors were counted as errors, and lexical errors (e.g., word choice) was counted as errors when it has extremely unsuitable for the context.

To analyze these data one-way repeated analysis of variance (ANOVA) was conducted. This was done by means of SPSS 10. 0. Moreover, effect size was also calculated. Effect size is a criterion whose results are not affected by a number of participants. It shows how much impact the difference between conditions has. In this study, Cohen's *d* was calculated by using following numerical formula:

$$d = \frac{\left|M1 - M2\right|}{\left|SD1 - SD2\right|}$$

(M=mean score, SD=standard deviation)

The impact of effect size was judged as following: The impact is considered as large if effect size is more than 1.0, medium if effect size is more than 0.5, and small if it is less than 0.5.

#### **CHAPTER 5**

#### RESULTS

The last chapter reported the experiment design used in this study. This chapter will report the results of the study. The results will be reported in terms of effectiveness of planning time and practice effects. Moreover, the results will be calculated using one-way repeated measure of ANOVA, and Cohen's effect size d.

## 5.1. Effects of planning time

Table 2 shows descriptive statistics and the results of ANOVA for planning conditions in terms of productivity<sup>15</sup>. It seems that CP condition elicited longer production than PP and NP conditions. Indeed, results of the repeated measure ANOVA showed that there was a significant difference between conditions, F(2,22)=7.209, p<.05. A post-hoc analysis of LSD revealed significant differences between NP and CP conditions, and PP and CP conditions. However, there was no significant difference between NP and PP conditions.

With regards to number of words spoken, descriptive statistics showed that CP condition elicited more language than NP and PP conditions. The results of ANOVA actually showed that there was a significant difference between conditions (for number of words A, F(2,22)=9. 700, p<.05, for number of words B, F(2,22)=8.910, p<.05). A post-hoc analysis of LSD revealed that there were significant differences between the NP and CP conditions, and PP and

<sup>&</sup>lt;sup>15</sup> Productivity refers to length of time and the number of words.

	No-planning		Pre-task planning		Combination			
	Mean	SD	Mean	SD	Mean	SD	F	р
Length of time	95.37	30.01	94.20	23.95	146.85	68.57	7.209	.004**
Number of words A	142.33	38.30	156.66	35.90	219.75	77.93	9.700	.001**
Number of words B	120.41	35.45	135.75	32.68	188.16	72.68	8.910	.006**
							**	<i>p</i> <.01

 Table 2. Descriptive statistics and results of ANOVA in terms of productivity

CP conditions in terms of both number of words A and B. However, there was no significant difference between NP and PP conditions. These results seem to be different slightly from previous studies. In Yuan and Ellis (2003), learners who engaged in on-line planning produced longer speech than the learners who conducted pre-task planning or no planning. Moreover, the learners who engaged in pre-task planning group and on-line planning group produced larger amount of speech than those who did not conduct any planning activity. In this present study, the learners produced significantly longer speech when they performed in combination condition than the other conditions. However, although learners produced larger amount of speech when they conducted in CP condition than NP and PP condition, PP condition elicited similar amounts of speech as NP condition.

Next, the effectiveness of planning time in terms of fluency, complexity and accuracy will be reported. Table 3 shows descriptive statistics and the results of ANOVA for planning conditions in terms of fluency, complexity and accuracy. Speech rates in each condition

No-planning		Pre-task planning		Combination			
Mean	SD	Mean	SD	Mean	SD	F	р
92.72	20.80	101.05	14.93	93.86	16.96	1.942	.167
78.92	21.14	87.71	14.95	80.70	18.29	2.473	.107
1.39	0.22	1.45	0.15	1.45	0.28	.268	.767
0.51	0.09	0.50	0.06	0.44	0.06	3.211	.060†
46.23	15.19	43.72	13 46	58.05	18.19	2.779	.084†
	No-pla Mean 92.72 78.92 1.39 0.51 46.23	No-planing           Mean         SD           92.72         20.80           78.92         21.14           1.39         0.22           0.51         0.09           46.23         15.19	No-planning         Pre-task           Mean         SD         Mean           92.72         20.80         101.05           78.92         21.14         87.71           1.39         0.22         1.45           0.51         0.09         0.50           46.23         15.19         43.72	No-planingPre-task planningMeanSDMeanSD92.7220.80101.0514.9378.9221.1487.7114.951.390.221.450.150.510.090.500.0646.2315.1943.7213.46	No-planing         Pre-task planing         Combination of the second se	No-planingPre-task $\exists$ ningCombinationMeanSDMeanSDMeanSD $92.72$ $20.80$ $101.05$ $14.93$ $93.86$ $16.96$ $78.92$ $21.14$ $87.71$ $14.95$ $80.70$ $18.29$ $1.39$ $0.22$ $1.45$ $0.15$ $1.45$ $0.28$ $0.51$ $0.09$ $0.50$ $0.06$ $0.44$ $0.06$ $46.23$ $15.19$ $43.72$ $13.46$ $58.05$ $18.19$	No-planingPre-task $planning$ CombinationMeanSDMeanSDMeanSD92.7220.80101.0514.9393.8616.961.94278.9221.1487.7114.9580.7018.292.4731.390.221.450.151.450.28.2680.510.090.500.060.440.063.21146.2315.1943.7213.4658.0518.192.779

 Table 3. Descriptive statistics and results of ANOVA in terms of fluency, complexity and

 accuracy

**†**. 05< *p* <.1

were quite similar in terms of fluency. The results of the repeated measure ANOVA showed that there was no significant difference between all conditions in both speech rate A and B (for speech rate A, F(2,22)=1.942, p>.05, for speech rate B, F(2,22)=2.473, p>.05). So, in terms of fluency, all conditions elicited similar performance. This indicates that learners produced equally fluent language regardless of amount or type of planning.

As for complexity, descriptive statistics showed that learners seem to have produced similarly complex language in PP and CP conditions. Moreover, both in PP and CP conditions learners elicit more syntactically complex performance than learners in the NP. The results of ANOVA showed, however, that these differences were not significant F(2,22)=.268, p>.05, indicating that the learners produced syntactically similar language in each condition. With

regard to lexical variety, NP and PP conditions induced slightly more variety of vocabulary than CP condition. In this case the results of ANOVA showed a significant tendency between conditions F(2,22)=3.211, .05 . A post-hoc analysis of LSD showed that significant difference was found between PP and CP conditions. However, there was no significant difference between NP and CP conditions, and NP and PP conditions in terms of lexical variety.

With regard to accuracy, descriptive statistics showed that CP condition elicited more accurate language use than NP and PP conditions. In addition, learners produced more accurate language in NP condition than PP condition. Indeed, results of repeated measure of ANOVA showed that there was a significant tendency between conditions F(2,22)=2.779, .05 . A post-hoc analysis of LSD showed that significant differences were found between NP and CP conditions, and PP and CP conditions. This indicates that learners' production was more accurate when giving time for both pre-task and on-line planning than when giving time for pre-task planning only or no time to plan at all. Additionally pre-task planning alone did not affect accuracy dimension of learners' L2 performance.

As well as ANOVA, the results were also analyzed using Cohen's effect size measure. Table 4 shows the results of analysis of effect sizes. The numbers that are more than 0.5 are marked by bold print, which means that the impact of effect size is more than medium. First of all, the analysis of effect size for productivity will be reported. With regard to length of time, the results showed that difference between PP and CP conditions, and NP and CP

	NP – PP	PP – CP	NP – CP		
Productivity					
Length of time	0.043	1.138	1.112		
Number of words A	0.386	1.108	1.332		
Number of words B	0.450	0.994	1.252		
Dependent variables					
Speech rate A	0.465	0.450	0.060		
Speech rate B	0.487	0.421	0.090		
Syntactic complexity	0.284	0.008	0.225		
Lexical variety	0.166	0.908	0.921		
% of error-free clause	0.175	0.905	0.708		

 Table 4. Results of Cohen's d for each variable

conditions were quite large. However, the difference between NP and PP conditions was quite small. Similar results were obtained in terms of number of words. The results revealed that the difference between PP and CP, and NP and CP were quite large. However, the difference between NP and PP was relatively small.

Then, the analysis of effect size for fluency, complexity and accuracy will be reported. With regard to fluency, the differences between NP and PP conditions, PP and CP conditions, and NP and CP conditions were all less than medium both in speech rate A and speech rate B. Similar results were found in syntactic complexity. The differences between NP and PP

conditions, PP and CP conditions, and NP and CP conditions were quite small. In terms of lexical variety, quite large impact was found between PP and CP conditions, and NP and CP. However, the difference between NP and PP was relatively small. As for accuracy, the results revealed that there was quite large impact between PP and CP conditions, and NP and CP conditions. However, the difference between NP and PP was small.

#### 5.2. Effects of treatment according to tasks

In addition to the effects of planning time, whether learners' performance differs according to tasks was analyzed. Table 5 shows descriptive statistics and results of one-way repeated measure ANOVA for each task in terms of productivity. With regard to length of time, learners produced the longest speech in task 2. Moreover, task 1 elicited longer speech than task 3. However, results of ANOVA showed that these differences were not significant F(2,22)=1.332, p>.05. Second, descriptive statistics showed that task 2 induced the largest amount of speech in the three conditions. Moreover, task 1 elicited larger amount of speech than task 3. However, the results of ANOVA revealed that these differences were not significant in both number of words A and B (for number of words A, F(2,22)=1.465, p>.05, for number of words B, F(2,22)=2.331, p>.05). To summarize, this indicates that tasks elicited similar performance in terms of productivity.

Then the analysis of practice effect in terms of fluency, complexity and accuracy will be reported. Table 6 shows the descriptive statistics and the results of ANOVA for tasks in terms of fluency, complexity and accuracy. First, with regard to fluency, Table 6 showed that

	Task 1		Task 2		Task 3			
	Mean	SD	Mean	SD	Mean	SD	F	Р
Length of time	113.38	51.85	127.19	64.55	95.85	27.45	1.332	.285
Number of words A	173.33	49.18	193.33	84.66	152.08	44.88	1.465	.253
Number of words B	145.91	37.64	171.33	79.87	127.08	38.59	2.331	.121

 Table 5. Descriptive statistics and results of ANOVA in terms of productivity

learners produced slightly more fluent language in task 1 than task 3 and 2, and task 3 also induced slightly more fluent performance than task 2 for speech rate A. With regard to speech rate B, task 1 induced slightly more fluent language than task 2 and 3, and learners performed slightly more fluently in task 2 than task 3. However, the results of ANOVA showed that these differences were not significant (for speech rate A, F(2,22)=.242, p>.05, for speech rate B, F(2,22)=.110, p>.05). Therefore, although some differences were found, the results indicate that all tasks elicited similar performance in terms of fluency.

Regarding syntactic complexity, task 2 elicited the most syntactically complex language of the three tasks. Moreover, task 3 induced slightly more complex performance than task 1. However, the results of ANOVA showed these differences were not significant, F(2,22)=2.502, p>.05. As for lexical variety, task 3 induced the most variety of language use, and task 2 elicited slightly more variety of language than task 1. The results of ANOVA, however, showed that there was no significant difference between conditions in terms of lexical variety, F(2,22)=.952, p>.05. These results indicate that the three tasks induced similarly complex

	Task 1		Task 2		Task 3			
	Mean	SD	Mean	SD	Mean	SD	F	p
Speech rate A	97.20	18.72	93.95	20.33	96.48	14.74	.242	.787
Speech rate B	83.32	19.78	82.77	19.42	81.24	16.77	.110	.897
Syntactic complexity	1.37	0.22	1.53	0.23	1.39	0.18	2.502	.105
Lexical variety	0.46	0.06	0.48	0.09	0.51	0.06	.952	.401
% of error-free clause	42.06	18.16	44.31	13.73	56.62	16.77	3.261	.057†

 Table 6. Descriptive statistics and results of ANOVA in terms of fluency, complexity and

**†**. 05< *p* <. 1

performance.

accuracy

Finally, in terms of accuracy, Table 6 showed that task 3 elicited the most accurate language use in the three tasks. Moreover, task 2 induced slightly more accurate performance than task 1. The results of ANOVA showed a significant tendency between conditions, F(2,22)=3. 261, .05<p<0.1. A post-hoc analysis of LSD revealed that task 3 outperformed task 1. However, there was no significant difference between task 1 and 2, and task 2 and 3. The results indicate that the three tasks elicited different performance in terms of accuracy.

As well as an analysis by ANOVA, Cohen's effect size d was also used. Table 7 shows the results of effect size measurement. The numbers that are more than 0.5 are marked by bold

	Task 1 – Task 2	Task 2 – Task 3	Task 1 – Task 3
Productivity			
Length of time	0. 237	0. 681	0.380
Number of words A	0. 298	0. 637	0. 451
Number of words B	0. 432	0. 747	0. 494
Dependent variables			
Speech rate A	0. 166	0. 144	0. 042
Speech rate B	0. 028	0. 084	0. 113
Syntactic complexity	0. 715	0. 677	0. 111
Lexical variety	0. 262	0. 283	0.652
% of error-free clause	0. 141	0. 806	0. 833

 Table 7. Results of Cohen's d for each variable

print. First of all, the analysis of effect size will be reported in terms of productivity. With regard to length of time, the results revealed that the difference between task 2 and 3 had middle impact. However, the differences between task 1 and 2, and task 2 and 3 were quite small. As for number of words, the difference between task 2 and 3 was middle. However, the difference between task 1 and 2, and task 1 and 3 were small. These results indicate that there was some difference between tasks. That is, three tasks elicited different performance in terms of productivity.

Now, the analysis of effect size in terms of fluency, complexity and accuracy will be reported.

With regard to both speech rates, it seems that the differences between task 1 and 2, task 2 and 3, and task 1 and 3 were relatively small. As for syntactic complexity, the results revealed that the impact of the difference between task 1 and 2, and task 2 and 3 were middle, whereas a relatively small impact was found in the difference between task 1 and 3. In terms of lexical variety, the results showed a large impact between task 1 and 3. However, the differences between task 1 and 2, and task 2 and 3 were small. Finally, with regard to accuracy, it was revealed that the differences between task 2 and 3, and task 1 and 3, were medium, whereas the difference between task 1 and 2 was quite small.

## 5.3. Summary

This chapter reported the results of this study in terms of effectiveness of pre-task planning alone and combination of pre-task and on-line planning, as well as effects of task types, by means of ANOVA and effect size criteria. The CP condition induced more productivity than either of the other conditions. In terms of fluency and syntactic complexity, there was no statistical difference between conditions. The results also showed that CP condition induced less lexically varied language than NP and PP conditions, though accuracy was much greater in CP condition than the other conditions. Additionally, three tasks elicited different performance in some dimensions. In terms of syntactic complexity, learners produced more syntactically complex language in task 2 than task 1 and 3. As for lexical variety, task 3 elicited more variety of language than task 2. Finally, in terms of accuracy, task 2 and 3 induced more accurate language than task 1. Given these results, the role of pre-task planning, on-line planning and their combination will be discussed with references to the

theoretical background in the next chapter.

## **CHAPTER 6**

## DISCUSSION

The last chapter reported the effectiveness of both pre-task and on-line planning as well as the results of testing for practice effects. This chapter will discuss the reasons why these results occurred in this study, as well as role of pre-task planning, on-line planning, and their combination. Finally, the limitation of the study will be also discussed.

## 6.1. Effects of pre-task planning

There is evidence that hypothesis 1, pre-task planning will enable learners to improve the fluency and complexity of their performance, has been partially supported. Although there was no significant difference between no planning and pre-task planning in terms of both speech rate A and B, effect size between no-planning and pre-task planning was 0.465 in speech rate A, and 0.487 in speech rate B, which are very close to 0.5. Therefore, the results could indicate that pre-task planning had an impact on fluency. With regard to complexity, no significant difference between no-planning and pre-task planning was found in terms of syntactic complexity and lexical variety. Moreover, effect sizes in these two criteria were relatively small (d=0.284 in syntactic complexity and 0.166 in lexical variety). Therefore it is clear that pre-task planning did not contribute to improve complexity in this study. With regard to accuracy, no significant difference was found between the no-planning and pre-task planning and pre-task planning did not contribute to improve complexity in this study. With regard to accuracy, no significant difference was found between the no-planning and pre-task planning conditions, and the effects size of these differences was also small (i.e., d =0.175). Therefore, these results imply that pre-task planning did not affect accuracy in learners' L2

performance.

The reason why pre-task planning affected fluency may be that it provided learners chances to organize and/or elaborate upon the content of their performance, which may have eased their cognitive load (Skehan and Foster, 1997). Before actually performing the tasks, learners were given 10 minutes to plan their performance in pre-task planning condition. Learners could have used this time to organize, summarize, and/or elaborate upon the content of their performance. In other words, they may have focused on meaning, rather than grammar and lexis. In previous studies, it was indicated that if cognitive load is eased by pre-task planning, learners theoretically have increased capacity to pay attention to linguistic form (Takemoto, 2000). However, in the present study, although pre-task planning may have eased cognitive load, learners may have used the capacity to focus on meaning or content more rather than focusing on elements of linguistic form. Therefore, the learners might have been able to improve fluency.

Moreover, pre-task planning failed to affect syntactic and lexical complexity in learners' performance. One of the possible reasons for this may be the situation in which the experiment was conducted. This study was conducted in one-on-one situation. That is, learners met a researcher individually to conduct the experiment. Therefore, it was laboratory study rather than a classroom situation. Moreover, learners voluntarily cooperated with the author in the experiment, but obviously their purpose to join the experiment was not to improve their English ability. In other words, the situation was totally

different from an English class where learners meet with a teacher with the specific aim to improve their English ability. Therefore, it may be that learners interpreted that their job in the experiment was simply to complete the tasks rather than work to L2 skills. That is, learners might not have intended to improve their interlanguage. It is proposed that learners may fail to improve their interlanguage unless they have interest to do so (Foster and Skehan, 1996). Another reason may be that the participants' level could affect the results of the study. The participants' level in this study was regarded as advanced. Focusing on learners' level, Oikawa and Yokoyama (2006) reported that advanced learners tended to produce less syntactically complex structure. Although their study was based on writing, it could be argued that their results can be applied to speaking as well.

The results of complexity may imply the necessity of external resources to improve learners' interlanguage. In the PP condition, learners could not use resources such as grammar books or dictionaries. Moreover, scaffolding, feedback and input from others were not available. To this point, some research revealed that teachers' guidance worked positively for improving complexity in learners' performance (Foster and Skehan, 1996, 1999). Comparing with the previous research, it can be argued that learners may be able to improve their interlanguage by means of some help from external input. In other words, it could be that pre-task planning does not always contribute to develop learners' interlanguage.

With regard to accuracy, there was no significant difference between the PP condition and the NP condition. One of the reasons for this may be the nature of pre-task planning. As

mentioned earlier, learners may have focused on content or organization of their performance rather than linguistic dimension. Therefore, attention might have not been paid to linguistic form, which may have resulted in less effectiveness on accuracy. Another reason for this may be restricted opportunity for on-line planning (Yuan and Ellis, 2003). In the PP condition, learners were asked to complete the tasks in 2 minutes, so that the opportunity for on-line planning time was limited. Therefore, it could be that learners did not have the time to encode their concept syntactically because they were busy processing other L2 components. According to Levelt's (1989) speaking model<sup>16</sup>, lexical factors are processed first, and then morphological, syntactical dimensions are processed when learners transform their concept into actual performance by using target structures. Given this theoretical model, it may be that learners could only prepare their speech lexically but not syntactically or morphologically, because of limited time for on-line planning.

## 6.2. Effects of on-line planning

Hypothesis 2, on-line planning will enable learners to improve the accuracy of their performance, was clearly supported. The comparison of the PP condition and the CP condition revealed that the CP condition outperformed the PP condition in terms of accuracy, and its effect size was quite large (d=0.905). Since learners participate in pre-task planning

<sup>&</sup>lt;sup>16</sup> Levelt (1989) proposes computational speaking model. He divided the process of speaking into three phases; conceptualization, formulation and articulation. In conceptualization, learners create their content or concept to say. However, in this phase they have not verbalized yet. Through formulation stage, learners' non-verbal content is encoded into target structure. They first encode their message lexically and then morpho-syntactically. The formulation is done by means of mental lexicon. Mental lexicon consists of lemma, which manages grammatical aspect, and lexeme, which deal with lexical encoding. Formulated speech is actually produced through articulator, which manages phonological dimension of speech.

in both conditions, the difference can be attributed to the on-line planning dimension of the CP condition.

There are several reasons why the CP condition achieved higher accuracy. One reason may be that learners accessed grammatical knowledge during on-line planning, which may have possibly enabled them to (1) pre-plan actual speech and (2) monitor their actual performance (Yuan and Ellis, 2003). That is, by accessing grammatical knowledge, learners could pay more attention to the structural dimension when they encoded their concept (i.e., "formulation stage" in Levelt's (1989) model), thereby making preparation of an accurate performance possible before learners actually delivered their performances. This means that it would have been possible for these participants to monitor their performance by accessing grammatical knowledge. Thus, they might have been able to correct their errors. It should be noted that accessing grammatical knowledge is considered a time consuming process (Skehan, 1996, 1998; Yuan and Ellis, 2003), and that monitoring is possible when learners have (1) grammatical knowledge, and (2) enough time to do so (Krashen, 1985). In the present study, the CP condition alone did not set up any time pressure, so the participants were afforded sufficient time to access grammatical knowledge as much as necessary. In other words, pre-task planning does not enable learners to access grammatical knowledge so that accuracy dimension fails to be improved.

Although on-line planning enabled learners to focus on accurate language use, it should be noted that it did not affect other aspects of performance (i.e., fluency and syntactic complexity). The results actually showed that there was no significant difference between conditions in terms of both speech rates, and the effect size between the PP condition and the CP conditions was small. In terms of syntactic complexity, there was also no significant difference between the PP condition and the condition, and the effect size was also small.

The reason why on-line planning did not influence fluency may be that learners performed the tasks by means of rule-based knowledge rather than exemplar-based knowledge. As mentioned before, on-line planning may have enabled learners to access grammatical knowledge, which promoted pre-planning internal speech and monitoring their performance morphosyntactically. Alternatively, Skehan (1998) suggests that fluency is achieved when learners access exemplar-based knowledge. Reviewing all of this information indicates the possibility that on-line planning creates trade-off between fluency and accuracy (Yuan and Ellis, 2003).

Syntactic complexity was not improved in the CP condition compared with the PP condition. As mentioned in previous section, the reason for this may be that the situation where the experiment was conducted was totally different from a classroom environment, so that the participants may not have intended to improve their interlanguage. Also the participants in this study all had an advanced learners' proficiency level, which may have affected the results. In addition to these two reasons, there is one more reason to be considered in the case of combination condition. To improve syntactic complexity, it is proposed that focusing on linguistic form seems necessary. Skehan (1998) proposes that whereas fluency is related to attention paid to meaning or content, complexity and accuracy are related to focus on linguistic form. In the case of the CP condition, successfully improving of accuracy implies that learners could focus on linguistic form. However, there is a possibility that learners only paid attention to specific parts of the linguistic form. That is, learners may have simply focused on linguistic accuracy to avoid the errors or mistakes in their performance, so that they may not have attempted to exploit a difficult or complex syntactical/lexical structure. In other words, more conservative language use may explain why the accuracy dimension could be improved but not complexity. As mentioned in previous section, this may imply that some techniques or intervention may be necessary to get learners to challenge themselves by engaging in the type of risk-taking language use to foster high complexity.

It may be worth reporting that the CP condition elicited more productivity (i.e., length of time, the number of words spoken by participants) than the PP condition. This may be because of time pressure. Both the PP and the CP conditions provided learners with 10 minutes planning time before conducting the tasks. As mentioned before, learners could organize and/or elaborate upon the content of their performance during this time. These two conditions differ from each other in the production phase: in the CP condition, the time for performing the task was not restricted whereas the PP condition got learners to complete the tasks in 2 minutes. Therefore, learners in the CP group were able to produce more elaborated content since the amount of production was significantly different. In the PP condition, although participants could focus on meaning during their planning time, the time for actual performance was restricted, so that they may have been required to choose the

content they said in the tasks. In other words, time pressure may have prevented learners from producing more elaborated message in their performance.

## 6.3. Effects of combination of pre-task planning and on-line planning

Hypothesis 3, the combination of pre-task and on-line planning will enable learners to improve the fluency, complexity and accuracy of their performance, was not supported. The results showed that the CP condition elicited less variety of vocabulary and more accurate language use compared with the NP condition, and their effect sizes were more than middle (d=0.921 in lexical variety, d=0.708 in accuracy). However, there was no significant difference between the NP and the CP conditions in terms of fluency and syntactic complexity, and their effect size was relatively small (d=0.06 in speech rate A, d=0.09 in speech rate B, d=0.225).

These results indicate that it is difficult to achieve balanced development even though learners conduct both pre-task planning and on-line planning. This may be because of learners' limited attentional capacity. As mentioned in chapter 2 and 3, if learners pay attention to one aspect of language, they cannot always focus on the other parts as well (Skehan, 1998). In other words, trade-off between fluency, complexity and accuracy occurs. In this study, it seems that learners tried to produce more accurate language, which sacrificed fluent and complex language use.

#### 6.4. Limitation of this study

Before going onto conclusions, limitations of this study and suggestions for further research will be reported. As mentioned above, all of the participants who joined in this study were advanced learners. Research reporting the effects of planning time varies according to level of participants (Wigglesworth, 1998; Kawauchi, 2005; Oikawa and Yokoyama, 2006). Therefore, the influence of planning time should be examined using various levels of learners.

This study also relied upon a relatively small number of participants (N=12). To generalize the results of the study, more participants would be necessary. It is proposed that the number of participants affects the likelihood of observing significant difference (Urano, 2006). Considering that fact, this study employed other criterion that is not influenced by the number of participants (i.e., effect size). However, it is impossible to truly generalize the results of the study because the participants were all learning English in a similar setting. Therefore, more research is necessary, and it should employ large number of participants at various proficiency levels who have experience a variety of different environment of L2 lessons.

Finally, this study showed that learners' performance was influenced by tasks themselves. The results showed that task 3 elicited more accurate language than task 1 and 2, and task 3 also elicited more variety of lexis than task 1. Moreover, task 2 elicited more syntactically complex performance than task 1 and 3. Foster and Skehan (1996) and Skehan and Foster (1997) also reported that type of task elicited learners' performance differently. It should be noted that type of task used in this study were the same type (Yuan and Ellis, 2003) – a so

called narrative task. However, since the same type of tasks elicited different performance, it would be advisable to set up more theoretically and empirically reliable tasks; otherwise there may be a danger that the effects of treatment can not be elicited reliably.

#### 6.5. Summary

This chapter discussed the reasons underlying the results of this study. It was revealed that pre-task planning elicited more fluent performance, whereas on-line planning elicited more accurate language use. In other words, the opportunity for different types of planning affects different dimensions of learners' oral performance. In the PP condition, learners paid attention to organize and/or elaborate upon the concept before engaging in actual performance, so that they could improve fluency. On the other hand, the CP condition allowed for on-line planning which allowed learners to access grammatical knowledge while actually delivering their performance, providing learners with the chance for monitoring and correcting their L2 use, so that accurate language performance might have been possible. Although the chance for focusing both on form and meaning were provided, learners could only afford to focus on form in this study. In other words, balanced L2 production failed to occur in this study. One reason for this may be learners' limited attentional capacity; so although pre-task planning is said to ease the cognitive load and on-line planning may have provided with opportunity for focusing on linguistic form, it can be difficult for learners to exploit both of them effectively at the same time.

Limitations of this study were also reported. First, this study exploited only advanced learners,

which may have affected the results of the study. Second, small number of participants may have affected the results of the statistical analysis. Finally, it was revealed that even same type of tasks elicits learners' performance differently, so that careful design of task is essential for reliable elicitation of performance.

#### **CHAPTER 7**

## **CONCLUSION AND IMPLICATION**

Reviewing theoretical and empirical research related TBLT, the present study has investigated the influence of pre-task planning, on-line planning and their combination on learners' L2 performance. The results showed that different planning time influenced different aspect of learners' L2 performance. In this study, pre-task planning positively affected fluency aspect of learners' L2 performance, which indicates that learners may have focused on meaning rather than linguistic form during the pre-task planning time. In contrast, on-line planning positively influenced accuracy. That is, it seems that on-line planning enabled learners to focus on linguistic form; grammatically elaborate internal pre-planning and monitoring of their performance may have been achieved when given the time for free capacity to conduct the task. It was expected that the combination of pre-task planning and on-line planning would elicit well-balanced L2 performance. However, in the present study, the combination of pre-task planning and on-line planning did not elicit well-balanced L2 performance. It positively affected productivity and accuracy dimensions, but not fluency and syntactic complexity. In addition, this combination negatively influenced variety of language use. These results clearly indicate the difficulty of achieving well-balanced performance in terms of fluency, complexity and accuracy by a simple means of planning time intervention.

Based on these conclusions, implication for pedagogic situation will be discussed. First, teachers should conduct speaking activities in various conditions to activate different
dimensions of learners' interlanguage. This study showed that planning time, to some extent, could manipulate learners' attentional resources. Based on findings from the present study, it can be said that teachers should get learners to focus on (1) fluency if they conduct pre-task planning activity, and (2) accuracy if they conduct on-line planning. Moreover, it can be implicated that learners need both pre-task planning and on-line planning if they want to produce large amount of speech.

Second, this research indicates that careful control of variables in a speaking test would be necessary to achieve on accurate and reliable measurement. The present research showed that different planning time influenced different dimensions of L2 performance. In other words, learners' production will vary if the situation for performance changes. Moreover, this study also showed that even same type of tasks elicits learners' performance differently. Without controlling such variables, it is difficult to measure learners' L2 performance validly and reliably.

To investigate the influence of planning time further, the following aspects should be examined. First, the process of planning time should be explored. Most of planning studies, including this study, only investigated product of planning time. That is, how planning time affects learners' L2 performance has only been explored. However, few studies examined what learners actually do in planning time (Ortega, 1999, 2005).

Second, the influence of planning time should be explored with learners who have various

proficiency levels. As stated, learners' proficiency affects the way planning time works. This study has conducted with advanced learners only. Therefore, the influence of planning time, especially on-line planning and the combination of pre-task and on-line planning towards lower level and intermediate level learners should be examined to see if it is possible to generalize how planning time affects learners' L2 performance.

Third, efficacy of planning time in different conditions should be also examined. Most of the planning studies, including present studies, examined the influence of planning time without external resources such as dictionaries and/or grammar books. In other words, learners could only make use of their internal resources. It has the possibility that use of external cues contributes to the development of learners' L2 performance since they may be able to get the information they need during planning time, especially during pre-task planning time. Considering the timing of giving input or help as Samuda (2001) proposes, giving input in such situation may be beneficial. This should be further investigated.

Finally, it would be also interesting to examine whether learners learn to produce the performance which they can do in pre-task planning in the situation where planning time is not available. As Tarone (1983) indicates, if acquisition is defined as the shift from "careful style" to "vernacular style", planning activity has possibility that it promotes such shift (Ellis, 2005). This issue also should be examined in further research.

As mentioned, for effective implementation of TBLT, careful consideration of tasks and their

implementation method is essential. Given the theoretical needs, this study examined the influence of different types of planning time on learners' oral performance. However, this study is a small part of research in the field of TBLT. That is, to explore whether TBLT really works in pedagogic context, more empirical research needs be conducted. Such empirical studies would contribute to foster development of teaching styles which is capable of training learners to speak more like native speakers.

## References

Batstone, R. (1994). Grammar. Oxford: Oxford University Press.

- Bygate, M. (2001). Effects of task repetition on the structure and control of oral language. InM. Bygate., P. Skehan., and M. Swain (eds.), *Researching pedagogic tasks second language learning, teaching and testing*. Essex: Pearson Education.
- Bygate, M., Skehan, P., and Swain, M. (2001). Introduction. In M. Bygate., P. Skehan., and M. Swain (eds.), Researching pedagogic tasks second language learning, teaching and testing. Essex: Pearson Education.
- Crookes, G. (1989). Planning and interlanguage variation. *Studies in Second Language* Acquisition, 11, 3. 367-383.
- Doughty, C. and Williams, J. (1998). Pedagogic choices in focus on form. In C. Doughty andJ. Williams (eds.), Focus on form in classroom second language acquisition.Cambridge: Cambridge University Press.
- Ellis, R. (1987). Interlanguage variability in narrative discourse: Style shifting in the use of the past tense. *Studies in Second Language Acquisition*, *9*, 1. 1-20.
- Ellis, R. (2000). Task-based research and language pedagogy. *Language Teaching Research*, 4, 3. 193-220.
- Ellis, R. (2003). Task-based language learning and teaching. Oxford: Oxford University Press.
- Ellis, R. (2005). Planning and task-based performance: Theory and research. In R. Ellis (ed.), *Planning and task performance in a second language*. Philadelphia: John Benjamins.
- Ellis, R., Basturkmen, H. and Loewen, S. (2002). Doing focus on form. System, 30, 4,

419-432.

- Ellis, R., and Yuan, F. (2005). The effects of careful within-task planning on oral and written task performance. In R. Ellis (ed.), *Planning and task performance in a second language*. Philadelphia: John Benjamins.
- Foster, P. and Skehan, P. (1996). The influence of planning and task type on second language performance. *Studies in Second Language Acquisition, 18,* 3. 299-323.
- Foster, P., and Skehan, P. (1999). The influence of source of planning and focus of planning on task-based performance. *Language Teaching Research*, *3*, 3. 215-247.
- Foster, P., Tonkyn, A., and Wigglesworth, G. (2000). Measuring spoken language: A unit for all reasons. *Applied Linguistics*, 21, 3. 354-375.
- Harmer, J. (2001). The practice of English language teaching. Essex: Longman.
- Heaton, J.B. (1975). Beginning composition through pictures. Essex: Longman.
- Hulstijn, J. H., and Hulstijn, W. (1984). Grammatical errors as a function of processing constraints and explicit knowledge. *Language Learning*, *34*,1.23-43.
- Hunt, K. (1965). *Grammatical structures written at three grade levels*. Champaign: National Council of Teachers of English.
- Hunt, K. (1966). Recent measures in syntactic development. *Elementary English*, 43. 732-739.
- Kawauchi, C. (2005). The effects of strategic planning on the oral narratives of learners with low and high intermediate L2 proficiency. In R. Ellis (ed.), *Planning and task performance in a second language*. Philadelphia: John Benjamins.

Krashen, S. D. (1985). The input hypothesis: Issues and implications. Essex: Longman.

Krashen, S. D., and Terrell, T. D. (2000). The natural approach. Essex: Longman.

- Levelt, W. J. M. (1989). Speaking: From intention to articulation. Cambridge, Mass: MIT press.
- Lightbown, P. M., and Spada, N. (2001). *How languages are learned* (2<sup>nd</sup> ed). Oxford: Oxford University Press.
- Long, M. H. (1983). Native speaker/non-native-speaker conversation and the negotiation of comprehensible input. *Applied Linguistics*, *4*, 2. 126-141.
- Long, M. H. (1991). Focus on form: A design feature in language teaching methodology. In K. de Bot, R. Ginsberg, and C. Kramsch (Eds.), *Foreign language research in cross-cultural perspective* (pp.39-52). Amsterdam: John Benjamins.
- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. InW. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp.413-468). New York: Academic Press.
- Long, M. H. and Robinson, P. (1998). Focus on Form: Theory, research, and practice. In C. Doughty., and J. Williams. (Eds.), *Focus on Form in Classroom Second Language Acquisition* (pp.15-41). Cambridge: Cambridge University Press.
- Loschky, L. and Bley-Vroman, R. (1993). Grammar and task-based methodology. In Crookes G., and Gass, S. (eds.), *Tasks and Language Learning: Integrating theory and practice*. Clevedon, North Smerset: Multilingual Matters.
- Mehnert, U. (1998). The effects of different lengths of time for planning on second language performance. *Studies in Second Language Acquisition*, 20, 1. 83-108.

Nunan, D. (1989). Designing tasks for the communicative classroom. Cambridge: Cambridge

University Press.

Nunan, D. (2004). Task-based language teaching. Cambridge: Cambridge University Press.

- Ochs, E. (1979). Planned and unplanned discourse. In T. Givon (ed.), *Syntax and semantics, vol 12: Discourse and semantics*. New York: Academic Press.
- Oikawa, T., and Yokoyama, Y. (2006). The effects of planning and proficiency in EFL writing. Annual Review of English Language Education, 17. 81-90.
- Ortega, L. (1999). Planning and focus on form in L2 oral performance. *Studies in Second Language Acquisition, 21,* 1, 109-148.
- Ortega, L. (2005). What do learners plan? In R. Ellis (ed.), *Planning and task performance in a second language*. Philadelphia: John Benjamins.
- Pienemann, M. (1984). Psychological constraints on the teachability of languages. *Studies in Second Language Acquisition*, *6*, 2, 186-214.
- Richards, J. C. (2001). Approaches and methods in language teaching: A description and analysis. Cambridge: Cambridge University Press.
- Richards, J. C. (2002). Accuracy and fluency revisited. In E. Hinkel and S. Fotos (eds.), *New perspectives on grammar teaching in second language classrooms*. Mahwah:Lawrence Erlbaum Associates.
- Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied Linguistics*, *22*, 1. 27-57.
- Samuda, V. (2001). Guiding relationships between form and meaning during task performance: The role of the teacher. In M. Bygate, P. Skehan & M. Swain (Eds.), *Researching pedagogic tasks second language teaching and testing.* Harlow, Essex:

Pearson Education Limited.

- Schmidt, R. (1990). The role of consciousness in second language learning. Applied Linguistics, 11, 2. 129-158.
- Seedhouse, P. (1997). Combining form and meaning. *English Language Teaching Journal*, 51,4. 336-344.
- Selinker, L. (1972). Interlanguage. International Review of Applied Linguistics in Language Teaching, 10. 209-231.
- Skehan, P. (1996). A framework for the implementation of task-based instruction. *Applied Linguistics*, 17, 1. 38-62.
- Skehan, P. (1997). Second language acquisition research and task-based instruction. In J. Willis and D. Willis (eds.), *Challenge and change in language teaching*. Oxford: Macmillan ELT.
- Skehan, P. (1998). A cognitive approach to language learning. Oxford: Oxford University Press.
- Skehan, P., and Foster, P. (1997). Task type and task processing conditions as influences on foreign language performance. *Language Teaching research*, *1*, 2. 185-211.
- Swain, M. (1985). Communicative competence: some roles of comprehensible input and comprehensible output, In S. Gass., and Madden, C. (eds.), *Input in second language* acquisition. Rowley, Mass: Newbury House.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook and B.
  Seidlhofer (Eds.), *Principle and practice in applied linguistics* (pp.125-144). Oxford: Oxford University Press.

- Swain, M., and Lapkin, S. (2001). Focus on form through collaborative dialogue: Exploring task effects. In M. Bygate, P. Skehan & M. Swain (Eds.), *Researching pedagogic tasks* second language teaching and testing. Harlow, Essex: Pearson Education Limited.
- Takemoto, T. (2001). An empirical study of effective classroom activities and procedures to enhance learners' practical communicative competence. *Unpublished MA thesis* presented to Fukui University.
- Tarone, E. (1983). On the variability of interlanguage systems. *Applied Linguistics*, *4*, 2. 142-163.
- Urano, K. (2006, June). *p*-ti no imisurukoto shinaikoto [what *p* means and what *p* does not mean]. Paper presented at 36<sup>th</sup> meeting of Chubu English Language Education Society, Wakayama, Japan.
- VanPatten, B. (1990). Attending to form and content in the input: An experiment in consciousness. *Studies in Second Language Acquisition*, *12*, 3. 287-301.
- Wigglesworth, G. (1997). An investigation of planning time and proficiency level on oral test discourse. *Language Testing*, *14*, 1. 85-106.
- Willis, J. (1996). A framework for task-based learning. Essex: Longman.
- Yamaoka, T. (2005). From item-learning to category-learning: A learning process of procedural knowledge of language. *Annual Reviews of English Language Education in Japan*, 16. 21-30.
- Yanagiya, M., and Yokoyama, Y. (2005). Nareshontask ni okeru puranning no koukani tuite: jizen puranning katudou to jikanseigen niyoru aturyokuga ryuuchousa ni ataeru eikyou [The effects of planning time in narrative task: The influence of pre-task planning and

time pressure on fluency]. The Bulletin of Hokkaido English Language Education Society, 5. 49-63.

Yuan, F., and Ellis, R. (2003). The effects of pre-task planning and on-line planning on fluency, complexity and accuracy in L2 monologic oral production. *Applied Linguistics*, 24, 1. 1-27.