# THE INTERACTION OF TOPIC CHOICE AND TASK-TYPE IN THE JAPANESE HIGH SCHOOL EFL CLASSROOM 

John THURMAN ${ }^{1}$<br>Tomo SASAO ${ }^{2}$

## INTRODUCTION

For this research, we were able to conduct surveys and experimental teaching methods in a high school. Our belief is that the motivation of the students to conduct a task can be enhanced by increasing the choice available to the student in a pre-task task topic selection chance and that this increase in students' motivation can have positive effects on students' oral output, as gauged by accuracy, complexity, and fluency in the Taskbased Language Teaching (TBLT) class session.

The first author has always been interested in the motivation a student brings to the language learning classroom. After studying different theories, Dr. David Beglar at Temple University, about a decade ago, suggested he try to relate the students' increase in motivation utilizing increased choice in the Task-based language teaching environment as a topic of his dissertation. Because of this, we decided to utilize the Selfdetermination Theory (SDT) of motivation because it operationalizes choice as part of the construct of intrinsic motivation.

[^0]The first author conducted that research for his dissertation，and found that when choice was introduced as a pre－task implementation method， that the students＇Task Interest and Task Self－Efficacy statistically significantly increased as a psychological construct when choice was part of the treatment，compared to when there was no choice afforded to the students．In addition，students＇Task Complexity，operationalized as a type－ token ratio statistic，increased statistically significantly when choice was part of the treatment，compared to when there was no choice afforded to the students．Interestingly，the students＇Task Interest and Task Self－ Efficacy decreased，albeit statistically non－significantly，when complete choice of task topic was given to the students，as compared to when the students could choose from three different task topics for the same task type．

This original research was conducted in the university setting with university first－year students as participants．From then，he has always wanted to expand this research thread to different environments．He was able to do this，with the help of Mr．Tomo Sasao of Sapporo Keihoku Shogyou High School．

For this research，as detailed in this paper，first a high school was contacted in order to conduct the research．Then，with the permission of the teacher，the students，and the high school，the research was conducted over a month＇s time．The students were very cooperative and the teachers who took part in the research were very helpful．Next，the data was analyzed using SPSS to calculate the differences between the treatments．

## An Overview of This Research

This research，as I previously mentioned，is based on the first author＇s 2008 dissertation research．Although the task topics were different in this case，the research was basically a toned－down version of that dissertation
research. In the 2008 paper (also published in shortened versions in Thurman, 2008; 2009; 2013), three different task types were utilized, as elucidated in Skehan and Foster and in Brown and Yule (1983). These were a static description task, a narrative task, and a decision-making task. For the different levels of choice, there were three-no choice (where the student conducts a task decided by the teacher), limited choice (where the students can choose amongst three different task topics of the same task type) and complete choice (where the student can choose any topic of his or her choice, of that particular task type).

For the research described in the paper, the first two listed above were utilized of either task type, the static task and the narrative task, and level of choice, the no choice level or the limited choice level. It was decided to not conduct both the decision-making task type and the complete level of choice, for three reasons.

First, there were time limits for this research, being conducted in a high school setting where time is already quite limited and we could not take too much time from the stated curriculum without causing concern from the staff or the parents of the students.

In addition, it was felt that the decision-making task was not appropriate for the level of high school students, and that the conduct of the complete level of choice for the decision-making task, as done in the dissertation research, was too involved, where the actual lead up to the treatment of the decision-making task with complete choice required several class sessions.

Lastly, the data collected from the university students for the dissertation research did not show any significant differences in either the two dependent variables of motivation, Task Interest and Task Self-efficacy, in that research for the independent variable of the decision-making task, from either the independent variables of the No Choice treatment or the

Limited Choice treatment．Nor were there significant differences in the students＇oral output in the three dependent variables used for that section of the dissertation，Accuracy，Complexity，and Fluency，again in that research for the independent variable of the decision－making task，from either the independent variables of the no choice treatment or the limited choice treatment．In addition，there were no statistically significant positive differences between the independent variables of Descriptive Task and Narrative Task in the dependent variables of Task Interest，Task Self－ efficacy（from the survey data），Accuracy，Complexity，or Fluency（from the oral output data）when the treatment was for the Independent variable， Compete Choice（of task topic）．Therefore，it was decided to concentrate on the two task－types，the static Descriptive Task and the Narrative Task， with the two different levels of choice，the No Choice and the Limited Choice treatments．

## LITERATURE REVIEW

## Task－based Language Teaching

Task－based teaching language teaching（TBLT）is a vibrant area of second language acquisition research and is an approach to language teaching based on the ideas that language learners can learn the language better by interacting with others and by focusing on the message rather than on the form of the language（e．g．，Duff，1993；Ellis，2003；Long，1985； Nunan，2004；Pica，Kanagy，\＆Falodun，1993；Skehan，1998）．TBLT has much to its advantage，including a natural conversational environment，a focus on the learner and the cognitive abilities inherent in the learner，and the provision of a high degree of learner autonomy．

Task－based language teaching has been utilized since the early 1980s，
evolving from activities used in communicative approaches to language teaching (Skehan, 2003b, p. 1), such as the Notional-Functional Approach (van Ek \& Alexander, 1975, 1976; Wilkins, 1976), which was itself a reaction to the rigid syllabi and the contrived dialogues of the behaviorist approaches popularly used until the mid-1970s and still in use today in some educational contexts (Willis, 2004, pp. 4-5).

Richards, Schmidt, Kendricks, and Kim (2002, p. 540) wrote that taskbased language teaching is a teaching approach based on the use of communicative and interactive tasks as the central units for the planning and the delivery of instruction. Interactive tasks help create meaningful communication, interaction, negotiation, and authentic language use. Larsen-Freeman (2000), however, saw a larger picture in her definition of task-based language teaching:

A task-based approach aims to provide learners with a natural context for language use. As learners work to complete a task, they have abundant opportunity to interact. Such interaction is thought to facilitate language acquisition as learners have to work to understand each other and to express their own meaning. By so doing, they have to check to see if they have comprehended correctly and, at times, they have to seek clarification. By interacting with others, they get to listen to language which may be beyond their present ability, but which may be assimilated into their knowledge of the target language for use at a later time (Larsen-Freeman, 2000, p. 144).

Long (2015, p. 6) outlined a TBLT course in his recent, excellent book. According to Long, the TBLT course starts with a needs analysis. Long emphasizes this needs analysis as the major difference between trueTBLT courses and quasi-TBLT courses, which he terms as not Taskbased Language Teaching, but as task-based (or task-supported) language
teaching．From the needs analysis，pedagogic tasks are collected for use in the classroom．These tasks form the content of the task syllabus，in which the tasks are organized on progressively more complex direction through the syllabus．These pedagogic tasks are what the students work on in the class．Lastly，assessment in the class is based on task－based，criterion－ referenced performance tests．

## Task－Based Language Teaching in Japan

Although task－based language teaching is becoming increasingly popular as a teaching approach，it is not widely used in Japan，in part because of the long history of the use of the methodology known as yakudoku，or Grammar－Translation（Gorsuch，1998）．In high schools and junior high schools，there is strong washback from high－stakes university entrance examinations that is revealed in the English curricula at the high school level by the prevalence of rote memorization that is believed to provide the knowledge needed to pass the university entrance examinations，but little else．

## Tasks in Language Teaching

The word＂task＂has been a part of English since Norman times，coming from the Old French．In modern English，the word＂task＂may at times have a somewhat negative connotation，as in doing something as if it is drudgery （Oxford，2006；Simpson \＆Weiner，1989）．In language teaching，＂task＂can have diverse meanings，but it usually refers to an activity engaged in by learners．In recent years，however，＂task＂has come to have a specific meaning in the second language acquisition research literature：a task is an activity that will promote language learning under conditions of interaction， attention，and negotiation of meaning．Larsen－Freeman（2000，p．146）noted
the difference between tasks in the Communicative Language Teaching method and tasks used in Task-Based Language Teaching. In Communicative Language Teaching, a task is used to engage learners in practicing a communicative function. On the other hand, in TBLT, tasks are activities that get the learners to focus on the completion of the activity.

According to Long (2015, p. 108) tasks done in the class, the pedagogic tasks, are based in the target tasks that were discovered through the needs analysis. In the same book, Long (p. 110) claims that there are five advantages to utilizing pedagogic tasks, based on target tasks, in the language learning classroom: (a) organizing materials and lessons around tasks is compatible with SLA theory on how people learn a language, (b) that tasks as developed from a needs analysis is compatible with learnercentered education, (c) that pedagogic tasks developed from target tasks are more realistic in the everyday world than those developed solely for a textbook, (d) by using tasks developed from a needs analysis, students can get knowledge from the domain of the task as well as knowledge from applied linguists, and (e) tasks are what insiders with domain knowledge refer back to as to how they accomplish their occupation.

## Definitions of a Task in Task-Based Language Teaching

A task in the TBLT context has been defined from various viewpoints and frames of reference. In the short twenty years since the first definition, so many definitions have appeared that some writers have classified the definitions. For example, Kumaravadivelu (1993, p. 70) and Lee (2000, p. 31) have claimed that task definitions can be conceptualized on a continuum; from definitions relating the task to real-world contexts, to tasks in the general education context, and then to tasks in the language teaching
context．
Ellis（2003，p．2），in his review of task definitions，listed six components of a task definition：（a）the scope of a task（general or specific contexts），（b）the perspective from which a task is viewed（the task designer＇s or the task participant＇s），（c）the authenticity of a task，（d）the linguistic skills required to perform a task，（e）the cognitive processes involved in task performance， and（f）the outcome of the task．

Ur（1981）wrote an early definition of a task that is similar to more recent definitions．To Ur（1981，pp．13－14），a task is an activity that，among other things，requires thought（i．e．，engages cognitive processes），has an outcome，entails interaction，and piques the learner＇s interest．

Prabhu（1987）emphasized outcome in his definition when he described a task as：

An activity which required learners to arrive at an outcome from given information through some process of thought，which allowed teachers to control and regulate that process（p．24）．

This definition also emphasized the cognitive processes of the student，a theme that would become more prominent as definitions evolved．

A definition proposed by Breen（1987）focused on the cognitive processes involved in completing the task．As Breen wrote：

The notion of＇task＇is used in a broad sense to refer to any structural language learning endeavor which has a particular objective， appropriate content，a specified working procedure and a range of outcomes for those who undertake the task．＇Task＇is therefore assumed to refer to a range of work－plans which have the overall purpose of facilitating language learning－from the simple and brief exercise type to more complex and lengthy activities such as group problem－solving and or simulations and decision－making．Within this
broad spectrum, a language test can justifiably be seen as a type of task (p. 23).

Candlin (1987) provided a more narrow definition of a language learning task in the context of task-based language teaching. For Candlin, a language-learning task is:

One set of differentiated, sequencable, problem-posing activities involving learners and teachers in some joint selection from a range of varied cognitive and communicative procedures applied to existing and new knowledge in the collective exploration and pursuance of foreseen or emergent goals within a social milieu (p. 10).

Although it seems at first reading that this is also a broad definition, the atmosphere of the language classroom in which task-based language teaching is implemented is also considered in this definition. In addition, Candlin used the terms "cognitive" and "communicative" to again place the task in the task-based language teaching classroom and to differentiate it from what could be accomplished in classrooms in which audio-lingual or the grammar-translation methodologies are implemented.

Skehan (1998) defined tasks from a cognitive perspective. To Skehan, a task is (a) an activity in which meaning is primary, (b) there is some communication problem to solve, (c) there is some sort of relationship to comparable real-world activities, (d) task completion has some priority, and (e) the assessment of the task is in terms of outcome (p. 95). Skehan based this definition on what he believes to be three important criteria for language learning: (a) noticing should occur, (b) learners should analyze the linguistic units that they are using, and (c) the learners should synthesize the language so that it will become a part of their knowledge in a way like that of a first language (Skehan, 1998, p. 91). In the words of Skehan, "the learner needs to be prepared to focus on structure and identify patterns ...
［so that］analyses［will be］reintegrated and synthesized into fluent performance＂（p．92）．Skehan also stated that examples of classroom activities that are not tasks are transformation exercises，most question and answer activities with the teacher，and activities where the materials are conducive to the generation of grammatical rules．

Takashima（2000）developed a notion of a task activity that he claims is more suited to the classroom environment in Japan．The task activity incorporates more of the structure focus that Loschky and Bley－Vroman （1993）advocated．For Takashima，a task should：（a）be message－focused，（b） allow learners to have a sense of completion，（c）invite negotiation of meaning，（d）involve a comparison of structures，（e）include an information gap element，and（f）be of interest to the learners（p．36）．Other than comparison of structures，most of the above features are common in the other definitions of a task．Comparison of structures is manipulated through the design of the task so that the students have to choose a particular form （Takashima，2000，p．37）and thereby notice that there are differences between their existing knowledge and the new knowledge（p．38）．For example，Yamada（1999）developed tasks in which learners must choose between one verb form（the past or present verb forms）over another（the past or present progressive verb forms）in order to complete the task correctly．

Samuda and Bygate（2008），through their research with tasks in general education as well as in language learning，have added a holistic dimension to the definition of a task in TBLT．Their definition consists of five elements．According to Samuda and Bygate，a task：
1．Is a holistic pedagogical activity；
2．Involves language use；
3．Has a pragmatic，non－linguistic outcome；
4. Is used in such a way as to create some challenge aimed at language development; and
5. Is aimed at promoting language learning through process or product or both (p. 69).

In comparing Skehan's definition of a task of with that of Samuda and Bygate's, the latter consider the context in which a task is used to a greater degree. This is also important for this research because, according to some researchers (e.g., Gorsuch, 1998; Takashima, 2000), TBLT may be unfamiliar to many students in the context of the English language classroom in Japan.

Although there are many more definitions of a task in the language learning literature (e.g., Bygate, Skehan, \& Swain, 2001, pp. 11-12; Courtney, 2001, p. 9; Crookes, 1986, p. 1; Krahnke, 1987, p. 57; Lee, 2000, p. 32; Long, 1985, p. 89; Nunan, 2004, p. 4; Richards et al., 2002, pp. 539-540), the above definitions were selected because they include a recognition of the cognitive aspect of language learning and the importance of the output that results from doing the task.

## The Motivational Basis of Language Learning Tasks

Dörnyei (2002) has contributed research that may suggest a connection between TBLT and motivational research. In his article, Dörnyei discovered positive, statistically significant, correlations between high task attitudes and two output measures common in TBLT research, a greater number of turns in the interaction and a greater number of words produced.

Julkunen $(1989,2001)$ claimed that the tasks in which the learners are involved can have an impact of the motivation of the learner. According to Julkunen, the features of the task may increase or decrease the students'
personal involvement in task accomplishment（1989，p．63）and that learners＇ intrinsic or extrinsic motivation and task demands may interact to result in appraisal processes in which a learner will assess his performance after the task and will attribute task success or failure to various attributional processes，such as task difficulty，luck，ability，effort，task attraction，and feelings during the conduct of the task（2001，p．31）．

More recently，Dörnyei and Tseng（2009）tested the model of Dörnyei’s （2003）Motivational Task－processing System using interactional tasks．This system consists of three interrelated mechanisms；task execution，task appraisal，and action control．These researchers found that when the participants were divided by language ability according to vocabulary achievement scores into novice and expert learners，some differences in the task appraisal strategies were evident．In this case，the novice learners could not monitor and evaluate their learning activities and outcomes as proficiently as the expert learners．Because of this，according to the authors，novice learners could not activate effective action control strategies，which，in turn，prevented them from scaffolding their learning and participating in the interaction．

Gilabert $(2004,2007)$ found that students had significantly higher stress with a There－and－Then narrative task，compared to a Here－and－Now（e．g．， Robinson，1995）narrative task，and significantly higher confidence with the Here－and－Now task．However，there were no differences for interest or motivation between the two types of tasks．

Thurman $(2008,2009,2013)$ examined the differences of task interest between different levels of choice；no choice（teacher－chosen task topic）， limited choice（choose one task topic from amongst three），and complete choice（any topic within the parameters of the task），using descriptive， narrative，and decision－making tasks．An after－task survey instrument was
used to compare the differences of the interest students had in conducting the tasks between the different levels of choice. In this research, Thurman found that students had statistically significant greater interest in conducting the task when limited choice was involved than when either no choice was offered, or when the students could choose any topic they wish within the parameters of the task. This pattern was consistent between the different types of tasks.

Lastly, Poupore (2008) conducted a very extensive examination in the motivational aspects of group work dynamics, task topic, and motivational changes in pre-, during--, and post-task surveys. There is much in this paper to recommend it for a very detailed examination of motivation and task-based language teaching. Most important for this current paper were the results Poupore found for the relation of English Use Anxiety with perceived task difficulty and language production, that is the total amount of words (a measure of fluency used in this paper) produced by the groups for the entire task. The comparison of an output variable with anxiety is original.

Poupore also found that while low anxiety and high proficiency produced a high level of production, the opposite was true for learners with high anxiety and low proficiency, In relation to this finding, learners with high motivation and low anxiety also produced a high level of language production while the opposite was true for learners with high anxiety and low motivation. As for perceived task difficulty, Poupore found that anxiety was significantly negatively correlated with motivation and perceived group dynamic, while anxiety was significantly positively correlated with perceived pre-task difficulty. These findings are salient for many teachers and this research is a significant step in examining the motivational antecedents of task-based language teaching.

## Choice

The power of choice to motivate has been shown to exist in several studies（e．g．，Corah \＆Boffa，1970；Geer，Davison \＆Gatchel，1970；Geer \＆ Maisel，1972；Glass，Singer \＆Freidman，1969；Langer and Rodin，1976； Pervin，1963；Reim，Glass \＆Singer，1971）．Even the illusion that there is a choice，such as when gambling（Langer，1975），has been shown to be a powerful motivator．It has also been shown that as long as people believe that they have chosen to do an activity，they will engage in one that is quite possibly an anathema to them．Zimbardo，Weisenberg，Firestone，and Levy（1965），for example，showed that participants could change their attitudes positively towards eating fried grasshoppers when they believed that they had chosen to do so on their own．

Choice was also seen as motivationally beneficial when participants could choose the tasks in some way．In an early study，Stotland and Blumenthal （1964），found that when participants could choose the order in which they took short subsets of a test，they had less anxiety than those who could not choose the order of the sub－tests，even though they all took the same test． Zuckerman，Porac，Lathin，Smith，and Deci（1978）studied university students who were given a choice of a puzzle form to complete and students who were not given a choice．The result was that the students who could choose the puzzle form spent more time completing the puzzle， an indicator of higher intrinsic motivation．Zuckerman et al．（1978）stated， ＂people＇s motivation is greater when they have more rather than less control over their environment＂（p．445）．

However，Iyengar in her research has proposed that individuals from interdependent cultures（e．g．，Markus \＆Kitayama，1991），such as those raised in Asian cultures，value independent choice less and will choose according to the group norms or be more highly influenced by others，such
as a parent or a peer, than those from independent cultures, such as those raised in Western cultures. Iyengar (née Sethi, 1997) and Iyengar and Lepper (1999) found that children from an East-Asian culture (ChineseAmerican) in the San Francisco area were significantly more motivated to engage in an activity when it was chosen by their mothers than children from Anglo-American cultures. In fact, Iyengar and De Voe (2003) stated that individuals from interdependent cultures, which these authors referred to as dutiful choosers, will have little, if any, intrinsic motivation (p. 163).

## Self-Determination Theory

A theory of motivation that operationalizes choice is Self-Determination Theory (SDT). This theory of motivation was begun in the research of Maslow in the 1940s and has as its central axis the concept of will, as philosophized by William James. According to Deci (1987b), selfdetermination involves the utilization of the will, which is the capacity to decide and to have those decisions be a part of one's behavior. According to Ryan and Deci (2000, p. 68), SDT is an organismic metatheory of human motivation centered on the human capacity for inner personality development and behavioral regulation.

Figure 1 shows the continuum of Self-Determination Theory from intrinsic motivation on the top through extrinsic motivation in the center to amotivation on the bottom. Important in this continuum is the perceived locus of causality, from the impersonal locus of causality for amotivation to the internal locus for intrinsic motivation. The important aspect in the figure is the locus of causality. Each new regulation and its constituent components of perceived loci of causality become increasingly internalized as the continuum moves closer to intrinsic motivation. As the continuum moves in the direction of intrinsic motivation, there is an inherent increase
in autonomy；movement in the opposite direction indicates an inherent decrease or absence of autonomy．

| Motivation Type | Regulatory Styles | Locus of Causality | Motivation Type |
| :--- | :--- | :--- | :--- | :--- |
| Intrinsic Motivation | Intrinsic Regulation | Internal | Intrinsic Motivation |
| Extrinsic Motivation | Integrated Regulation | Internal | Extrinsic Motivation |
|  | Identified Regulation | Somewhat Internal |  |
|  | Introjected Regulation | Somewhat External |  |
|  | External Regulation | External |  |
| Amotivation | Non－Regulation | Impersonal | Amotivation |

Figure 1．The Self－determination continuum（from Ryan \＆Deci，2000，p．72）．

## Amotivation

Amotivation is the lack of motivation．In most cases，this occurs when people＂lack either a sense of efficacy or a sense of control with respect to the desired outcome＂（Deci \＆Ryan，2000，p．237），or when＂he／she has not figured out the goals for the behaviors nor the contingencies between their behaviors and outcomes，thus feeling helpless＂（Tanaka \＆Yamaguchi，2000， p．256）．With amotivation，people go through the motions of what they are doing with no personal attachment or intent．Amotivation makes people feel that they cannot achieve a desired outcome or outcomes because of a lack of contingency or perceived competence，or they feel no value to the activity or its possible outcomes（Ryan \＆Deci，2002，p．17）．

## Extrinsic Motivation

In the middle of Figure 1 are four points of extrinsic motivation． Extrinsic motivation is referred to as the Organismic Integration Theory （Deci \＆Ryan，2000；Ryan \＆Deci，2000）．This theory was developed to ＂detail the different forms of extrinsic motivation and the contextual factors that either promote or hinder internalization and integration of the
regulation of these behaviors" (Ryan \& Deci, 2000, p. 72). The information about these different levels of extrinsic motivation in the following four paragraphs, unless otherwise noted, is amalgamated from Deci and Ryan (2000), Ryan and Connell (1989), and Ryan and Deci (2000, 2002).

With external regulation, behaviors are carried out to achieve an external reward, comply with a rule, and avoid punishment. For example, many students who dislike English attend English classes in Japanese universities because they are required to do so. External regulation is in evidence when a person's reason for accomplishing a behavior is to satisfy an external demand or a socially constructed contingency. External regulation is the central focus of operant theories of behavior.

Introjected regulation occurs when a person acts from esteem-based pressures, such as avoidance of guilt or because of public selfconsciousness. These regulations are within the person but are still relatively external to the self, or, in the pithy phraseology of Perls (1973), introjected regulation is akin to swallowing regulations whole without digesting them (pp. 32-33). An example of introjected behavior would be when a person follows a maxim such as "do unto others as they would do unto you," not because he or she believes it but because society accepts such maxims. In this case, the regulation is internalized but is not accepted as one's own and is not part of the integrated self.

A more internal locus of regulation on the extrinsic motivation continuum is identified regulation. With this type of regulation, people recognize and accept the underlying value of a behavior. Although this type of regulation reflects a conscious valuing of a behavioral goal or regulation and is more autonomous, it is still extrinsically motivated because a person will willingly engage in that behavior but without personal attachment. However, although the behavior is more internally
regulated and the person identifies with the behavior and personally endorses it，some of these endorsements can be relatively compartmentalized or separated from one＇s other beliefs and values，in which case they may not reflect the person＇s overarching values in a given situation．

The most internally regulated and autonomous form of extrinsic motivation is integrated motivation．In this case，the regulations are fully assimilated to the self and the person identifies with the importance of the behaviors．An example of identified behavior is when a person will learn a language because it is necessary for them to learn it in order to be able to pursue a hobby or an interest（Dörnyei，1994）．This type of regulation cannot typically become intrinsic motivation because there are still remnants of instrumental reasons for acting．Behaviors are still performed in order to attain personally important outcomes rather than for their inherent interest and enjoyment．However，Ryan and Deci（2002）suggested that this level of regulation should be promoted by enhancing autonomy and relatedness through the use of autonomy－supporting teaching practices．

## Intrinsic Motivation

Lastly，at the top of the continuum，is intrinsic motivation，referred to as the Cognitive Evaluation Theory by Deci and Ryan（1985）．A key characteristic of intrinsic motivation is that the locus of causality lies inside the person．This idea is not new to the thought of man．St．Augustine，in his Confessions，wrote，＂It is clear enough that free curiosity has a more positive effect on learning than necessity and fear＂（Kelly，1969，p．323）． Adler（1930）introduced a＂striving for superiority＂construct that is＂an intrinsic necessity of life itself．It lies at the root of all solutions to life＇s problems，and is manifested in the way in which we meet these problems＂
(Adler, 1930, p. 398). The construct of intrinsic motivation has been studied intensively in many fields, but especially in education. The paragraph below is an amalgamation of statements about intrinsic motivation from de Charms (1968), Deci (1971, 1972, 1975, 1987a), Deci and Ryan (1985, 2000), Reeve (1997), and Ryan and Deci (2000).

Intrinsic motivation is based in the innate, organismic needs for competence and self-determination and as such is the innate propensity to seek out novelty, to master optimal challenges, to extend and exercise one's capacities, and to explore and to learn. Intrinsic motivation occurs when individuals experience themselves to be the locus of causality for their own behavior, when they receive no apparent rewards except the activity itself, or they perform an activity for no apparent reason other than the activity itself. Intrinsically motivated activities are those that are freely engaged in out of interest without the need for external evaluation or reward. More recently, researchers have striven to understand what factors influence intrinsic motivation and the influences that intrinsic motivation exerts on learning and other activities.

## Three Components of Intrinsic Motivation

According to Deci and Ryan (1985), there are three main components to intrinsic motivation: competence, relatedness, and autonomy. The first component, competence (White, 1959), is the feeling that an activity is optimally challenging. Competence is characterized by a degree of selfdetermination (Deci \& Ryan, 1985, pp. 58-59).

The second component is relatedness. Here the person feels a sense of security and the desire to feel connected to others (Deci \& Ryan, 2000). Based on their research results, Deci and Ryan proposed that competence has the second strongest connection to intrinsic motivation and that
relatedness has the weakest．
By far the strongest influence in Deci and Ryan＇s hypothesis of intrinsic motivation is autonomy，which they defined as＂the organismic desire to self－organize experience and behavior and to have activity be concordant with one＇s integrated sense of self＂and is＂the experience of integration and freedom，and it is an essential aspect of healthy human functioning＂ （Deci \＆Ryan，2000，p．231）．Under the theory of self－determination， autonomy occurs when individuals＂act in accord with their authentic interests or integrated values or desires＂（Chirkov，Ryan，Kim，and Kaplan， 2003，p．98），but it can also occur when a person is forced，for example，to accept guidance from a parent or to submit to a traffic policeman，where one sees value in following the commands．Just as importantly，Deci and Ryan（2000）stated what autonomy is not．Autonomy，in their theory，is not ＂equated with ideas of internal locus of control，independence，or individualism＂（p．231）．

In Deci and Ryan＇s conceptualization of autonomy，the most important component is choice．If there is no choice，there is no autonomy，and if there is no autonomy，there is no intrinsic motivation．According to Dworkin（1988），being autonomous，i．e．，human，means to be able to choose on one＇s own．＂What makes a life ours，＂wrote Dworkin，＂is that it is shaped by our choices＂（p．81）．

## Self－Determination Theory and Language Learning Motivation

As written in Chapter 1，there are several competing hypotheses of language learning motivation，one of which is sdt．In this regard，Kimberly Noels has recently been in the forefront of research using SDT to help explain language－learning motivation．

Ramage（1990）investigated who would and would not continue studying
a foreign language among 138 US high school students studying Spanish and French. The author found that the learners who continued were more likely to have intrinsic motivation associated with (a) general interest in the culture, (b) increasing one's knowledge, and (c) learning the language (p. 210). Extrinsic motivations associated with continuing to learn a foreign language were rooted in a perceived usefulness of the language in college and future jobs. In addition, Ramage found that attitudes about the learning situation were influential and that those learners who first took the class at an earlier grade (in high school) were more likely to continue learning the language.

As for the learners who did not continue, Ramage found that the reason for taking the course in the first place was to fulfill a requirement and the requirement being filled, they decided not to continue. According to Ramage, discontinuing students had an interest in language learning as a means to other goals with weaker traces of some intrinsic interest in learning a foreign language (pp. 211-212).

Noels, Pelletier, Clément, and Vallerand (2000) surveyed 156 Anglophone adults learning French in Canada using the Academic Motivational scale of Vallerand, Pelletier, Blias, Brière, Senécal, and Vallières (1992) based on SDT. Noels et al. (2000) found that an autonomy-supporting classroom atmosphere can enhance students' pleasure in learning the foreign language, therefore supporting the usefulness of the self-determined motivation paradigm in the language classroom. In addition, in this study, strong perceptions of freedom of choice and perceived competence were linked with more self-determined forms of motivation and, conversely, weak perceptions of freedom of choice and perceived competence were linked with amotivation. The authors also found that though some learners may not feel involved in the study of a second language, they nevertheless
find pleasure in it，as in an extrinsic identified regulation orientation（p．75）．
Noels（2009）studied the constitution of SDT of learners studying various languages and found three purposes．In this study，short answers to a question inquiring of the students＇reason for studying the language from 103 participants were analyzed for instances of an intrinsic regulation or one of the extrinsic regulations（external，introjected，identified，integrated）． Results indicated that external regulation was a motivation for studying ESL，that integrated regulation was a motivation for studying a heritage language，and that intrinsic regulation was motivation for studying a modern language．（There was no specification if the students were attending the course to fulfill a university requirement．）

McIntosh and Noels（2004，p．15）studied the interrelation of self－ determined motivation with language learning strategies and the need for cognition in 126 undergraduate students at a university in Canada and found that self－determination is associated with a number of specific language learning strategies identified in the L2 literature（e．g．，Oxford 1990）．These authors wrote that there was a significant relationship between the need for cognition and self－determined motivation，thus introducing the speculation that learners who enjoy effortful thinking for its own sake are likely to begin studying a second language for self－ determined reasons．

## Self－Determination Theory and Language Learning Motivation in Japan

Kamada（1987），an early contributor to the area of sdt and language learning motivation in Japan，wrote about the effects of English language teaching methodology on the more extrinsic forms of motivation found in many Japanese learners．Kamada stated that learners not only took seriously the highly salient extrinsic goal of studying English to pass the
entrance examination (for high school or college), but also the threat that failing imposes. As a result, these students utilized rote memorization as the major learning strategy. Kamada speculated that the most successful English students in Japan are those who are diligent and have high extrinsic motivation; these students pass into the elite universities and large international companies but end up with a mental block against learning English as they struggle to acquire English speaking skills.

Tanaka and Yamaguchi (2000) surveyed 121 undergraduate university students in Japan about learning English using the Academic Motivational scale of Vallerand et al. (1992), which is made up of the categories of intrinsic regulation, identified regulation, introjected regulation, external regulation, and amotivation, in order to assess the students' degree of autonomy. Using structural equational modeling, Tanaka and Yamaguchi found that intrinsic motivation and identified regulation had paths (.32 and .44 , respectively) to a mastery orientation and that identified regulation and introjected regulation had paths (. 23 and .58 , respectively) to a grade orientation. These orientations in turn had paths to deep processing (.52 and .21 , respectively), which was correlated with academic achievement (.22) (p. 266). These authors found that identified regulation played a large positive role in the students' motivational architecture. Tanaka and Yamaguchi proposed that those students with high intrinsic motivation and identified regulation scores were "optimally motivated" and that "reducing feelings of being controlled is as important as enhancing the feelings of autonomy in order for students to achieve higher academic performance" (p. 268). This is the same conclusion reached by Noels, Clément, Pelletier (1999, 2001) as well as Noels et al. (2000).

Also, Nakata (2004) in his extensive research, related the details of five adult learners and the changes in their language learning motivation in
relation to intrinsic motivation over the duration of a language－learning course．There were five main findings．First，the learners became more confident about their English skills．Second，they dealt with anxiety－ provoking situations in more productive ways rather than becoming debilitated by anxiety．Third，they sought out additional learning experiences after the project was completed when compared to their classmates．Fourth，they realized the importance of studying English for personal enhancement and enjoyment．Fifth，and most importantly，they were autonomous and the learners became more self－directed in their learning．

## Autonomy and Language Learning

From the perspective of autonomy in language learning，Dickinson（1995）， Lamb（2004），and Ushioda（1996），have examined the link between the constructs of autonomy and SDT．Dickinson（1995）stresses the teacher＇s role and how the teacher should avoid being an autonomy－controlling teacher and to be one that is autonomy－supporting（p．170）．Also，Lamb （2004）stated that if someone has an internal locus of control，that learner will more likely take responsibility for his own learning，an important behavior in language learning autonomy．

Ushioda $(1996,1997)$ has also theorized the connection between autonomy and motivation through the self－determination theory of motivation．What is new in her research is that Ushioda（1996）claimed that intrinsic motivation can be supported in the collaborative language learning environment．

Ushioda（2004）proposed that researchers investigating the connection between autonomy and motivation have focused too much on the self－ determined theory of motivation and have neglected the sociocultural
paradigm. Ushioda also suggested that Vygotskian sociocultural theory can illuminate motivational dimensions and allow different interpretations of data to be revealed. One example is that the interaction between autonomy and motivation can be revealed as learners pursue optimal challenges through the zone of proximal development during collaborative learning. According to Ushioda:

Above all, collaborative learning in itself can create the appropriate psychological conditions for intrinsic motivation, since it explicitly puts the learning initiatives and control of the learning process in the hands of the students themselves, by harnessing their sense of peer-group solidarity and shared responsibility, and minimizing their perception of external direction and control from the teacher (1996, p. 46).

## Comprehensible Output and Task Production

Swain $(1985,1995)$ proposed an output hypothesis as a response to Krashen's claim that output only makes an indirect contribution to language acquisition (Krashen, 1982, p. 60). Swain based her output hypothesis on findings comparing native speakers of English studying in a French immersion program with native speakers of French and found that although the immersion students had developed good receptive skills in the foreign language, their productive, lexical, and grammatical performances were not equivalent to that of native speakers despite seven years of intensive input in the target language. Swain hypothesized that part of the reason for this was that students could not practice speaking in communicative exchanges that required a precise and appropriate reflection upon meaning (Swain, 1985, p. 251), even though they used the second language almost all of the time in school.

Swain (1985) wrote that output can enhance language acquisition in two
important ways：（a）learners can have meaningful opportunities to use the language and therefore get more practice using the language and（b）output can be＂pushed＂from the learners in situations where the message needs to be conveyed precisely，coherently，and appropriately．Other roles for output included helping learners test hypotheses，move from semantic processing to syntactic processing，and increase attentional focus because of an expected possible future use of language．

A decade later，Swain（1995）expanded the output hypothesis and focused more on the role of noticing and attention，having followed influential articles by Schmidt（1990）and Schmidt and Frota（1986）on noticing．Swain stated that there were three functions of output．The first of these is noticing initiated by output，which provides a trigger for cognitive processes that can generate new linguistic knowledge in learners．A second function of output is that it can provide learners with an opportunity to test hypotheses about the language as they try out new language forms and structures that stretch their interlanguage．A third function of output is that it can enhance metalinguistic knowledge where learners reflect on the viability of their hypotheses about the target language．Through the use of collaborative tasks that can enhance collective scaffolding，which in itself can lead learners to utilize strategies for useful language learning， there is the potential to bring a metalinguistic function to output（Swain， 2000）．The implication of Swain＇s hypothesis for task－based teaching is that output can be stimulated from the use of collaborative tasks．

Skehan（1998，pp．16－19）also discussed six roles of output relevant to language learning based upon Swain＇s output hypothesis：（a）generating more finely tuned input，（b）making learners more aware of syntax，（c） allowing learners to test hypotheses，（d）developing automaticity，（e）aiding learners in developing discourse skills，and（f）helping learners develop a
personal voice, where they find ways of expressing personal meaning and develop a personal manner of speaking. Output is something that students can see and hear as helping them to learn the language.

## Assessing Output

For researchers, output has been important for assessing learner skill and improvement as well as for determining the effects of different tasks in different situations on the language produced. An approach to assessing output that has been especially influential in research into task-based language teaching was developed by Skehan, who examined learners' output by assessing accuracy, complexity, and fluency in different situations and with different types of tasks.

Based on the work of Swain, Skehan (1998, p. 5) speculated that there are three aspects to oral production: accuracy, complexity, and fluency. This proposal has been developed through the work of Skehan and Foster (e.g., Foster \& Skehan, 1996, 1999; Skehan, 1998, 2001; Skehan \& Foster, 1997, 1999, 2001, 2005). A lynchpin in Skehan's conceptualization of spoken language production concerns how well learners attend to one of these aspects over the others under certain conditions. Attentional resources shift, emphasizing one area and de-emphasizing others, in order to better handle the considerable cognitive load required by producing output (p. 73). Skehan (1995, p. 102) categorized these demands for attention, all of which concern the need to keep up with real-time communication, as follows: (a) cognitive demands, which concern the complexity of the message to be conveyed; (b) linguistic demands, which are relevant to the complexity of the language for effective communication in a certain setting; (c) linguistic criteria, which are attempts of the user to strive for greater accuracy; and (d) the need to keep up with on-going communication, which involves time,
pressure，and unpredictability．According to Skehan，these four influences combine to make communication problems more difficult and pose problems for the limited capacity information processor．

Skehan based his proposal that language output is made up of accuracy， complexity，and fluency on the hypothesized existence of rule－based and exemplar－based systems．L2 learners move between these two systems naturally to meet task demands（Ellis \＆Barkhuizen，2005，p．142；Skehan， 1998，p．54）．The rule－based linguistic system is a＂knowledge of abstract rules that can be used to compute an infinite variety of well－formed utterances／sentences ．．．［that］．．．allows complex propositions to be expressed clearly，concisely，and in novel and creative ways＂（Ellis \＆ Barkhuizen，2005，p．142）．A disadvantage of the rule－based system is that it is quite costly in terms of processing effort．In contrast，the exemplar－ based system is based on a very large and redundantly structured memory system．This system operates on memorized chunks of language，such as＂I told you so，＂rather than individual items．These chunks allow learners to conserve processing resources and to formulate speech acts when little time is available for planning．According to Ellis（2001），learners build more and more of these chunks as they use the foreign language．If chunks relevant to the task are available，they help learners to complete a task more quickly than if none relevant to the task are available．

Based on this conceptualization of these rule－based and exemplar－based systems，Skehan（1998，2003b）developed a method of assessing output during task performance through the dimensions of accuracy，complexity， and fluency．First，an initial distinction between meaning，which is termed fluency，and form reflects the tension between getting the task done （fluency）and focusing on language development（form）．Form is further separated into two entities，control，which is the accuracy of the utterances，
and restructuring, which is the complexity of the production that arises from learners' willingness to take risks.

Skehan (2003a, p. 397) also approached assessing output from a different perspective that contrasts not fluency and form, but change and control. Change is seen as complexifying, which is extending new forms and integrating them into the existing interlanguage. Control is separated into two entities, form and access. Form is accuracy and the process of the new form becoming part of the language learner's repertoire. Access concerns fluency and the proceduralization and lexicalization of the new language.

From whatever outlook, this troika of accuracy, complexity, and fluency has been extensively used to measure output in recent TBLT research. The definitions and the information about accuracy, complexity, and fluency in the following three paragraphs, unless otherwise noted, are amalgamated from Ellis (2003), Ellis and Barkhuizen (2005), Skehan (1996, 2003b), and Skehan and Foster (1999).

Accuracy is performance that is native-like through its rule-governed nature and is connected with a learner's capacity to handle the language capabilities at whatever level of interlanguage complexity the learner has acquired at the time. Accuracy is also related to the learner's norms in regards to beliefs about the necessity of accuracy. Accuracy is a relatively conservative communication strategy in the sense that there is a tendency by the learner to avoid a form unless the learner is sure that he or she has a command of the form. Accuracy is desirable because inaccurate language forms can fossilize, stigmatize and demoralize learners, and impair communicative effectiveness. Task characteristics that enhance greater accuracy are tasks that are structurally-based, have familiar information, and are more interactive. Task design features that promote the enhancement of accuracy are contextual support, open tasks, and a clear
inherent structure．Common ways of calculating accuracy are counting the number of errors in the learner＇s output and the target－like use of the language．

Increasing complexity indicates change and development in the interlanguage system and is based on the ability of learners to take risks， use more syntactically complex language，and use more language subsystems with the possibility that such language may not be controlled effectively．Complexity is desirable because it enables a greater degree of acceptance by native speakers．Task characteristics that promote greater complexity are tasks with outcomes that require justifications，interactive tasks，and tasks that have relatively complex outcomes．Task design features that enhance complexity are tasks that have no contextual support，have many elements，involve shared information，pose a single demand，are open with divergent goals，and are narrative tasks．Methods of measuring complexity are interactional（e．g．，turns），propositional（e．g．，idea units），functional（e．g．，frequency of a specific language function）， grammatical（e．g．，subordination），and lexical（e．g．，type－token ratio）．

Fluency is the ability to use linguistic resources to the best of one＇s ability while communication is taking place and to produce speech at a normal rate of speaking．Fluent discourse is characterized by an optimal mix of highly automatized chunks of language and learner creativity （Lennon，2000，p．32）．Fluency is effective when there is an automatization of stored chunks of speech that were restructured on previous occasions． Fluency is desirable because the results of an emerging and developing restructuring of the interlanguage are evident in speech．Poor fluency can lead to more dissatisfaction with the use of the language and therefore fewer opportunities for interaction．A task characteristic that enhances fluency is familiar information．Task design features that enhance fluency
are the provision of contextual support, the presence of few elements, a single demand, closed tasks, and a clear, inherent structure. Fluency in task performance is calculated using temporal variables (e.g., amount of speech and pausing) and hesitation phenomena (e.g., false starts, repetitions and reformulations and replacements).

## Research on Accuracy, Complexity, and Fluency

Accuracy, complexity, and fluency of task performance can vary when learners engage in different types of tasks. For example, Foster and Skehan (1996) used personal information exchange, narrative, and decisionmaking tasks with 16 pairs of participants with English as the medium. Foster and Skehan recorded the interactions produced by the participants and calculated the participants' accuracy, complexity, and fluency for each task. They hypothesized that the personal information exchange task (i.e., tell your partner how to get to your house and then to turn off the gas) would be the easiest task to do, the decision-making task (i.e., decide the sentences for a list of offenders at a trial) the most difficult, and the narrative task (i.e., construct a storyline from a set of loosely related pictures) somewhere in-between. However, this hypothesis was only partially supported by the results. The researchers found that the personal information exchange task generated the highest degree of accuracy but little complexity. The narrative task engendered the greatest amount of complexity, but little accuracy. The decision-making task did not gain the highest scores for any of the three task performance categories but occupied a level somewhere in-between the other two types of tasks. Often, a trade-off between accuracy and complexity was found depending on the difficulty of a task (Skehan \& Foster, 2001). Skehan terms this the tradeoff hypothesis, as attention is allocated to different performance areas
under different conditions（Skehan，2007）．However，according to Foster and Skehan（1996），the personal task produced much more fluent discourse than the narrative task and the decision－making task（p．317）．

Relating his concept of task complexity with the three task performance characteristics of accuracy，complexity，and fluency，Robinson（2001a） speculated that simple monologic tasks（i．e．，one－way，open－ended tasks focused on fluency）would promote more fluent but less complex and accurate speech，and complex monologic tasks（i．e．，one－way tasks focused on accuracy and complexity）would promote less fluent but more accurate and complex speech．For simple interactive tasks（i．e．，two－way tasks focused on fluency），Robinson predicted that learners would produce more fluent but less accurate speech．For complex interactive tasks（i．e．，two－ way tasks focused on accuracy and complexity），Robinson predicted less fluent but more accurate speech．

For the monologic tasks，Robinson（1995）operationalized a simple task as one in which learners tell a story that is placed in the here－and－now，that is，the students look at the picture story while they tell it．The complex task was operationalized as the same kind of picture story，but the students had to turn over the paper while they were telling the story．Therefore， the story was told in the there－and－then context．For this study，Robinson recorded the conversations of 12 intermediate－level students from Japanese，Korean，Indonesian，and Tagalog L1 backgrounds．The results indicated that the participants produced more accurate and complex speech with the there－and－then task than with the here－and－now task． However，they produced more fluent speech with the here－and－now task．

For the interactive tasks，Robinson（2001b），operationalized a simple task as one in which the information（in a map task）was likely to be known by the participants．The complex task was operationalized as a map task of an
area that was likely to be unknown to the participants. For this study, Robinson recorded the conversations of 44 Japanese university undergraduate participants arranged in pairs. Robinson found that the participants produced more complex utterances when describing the map of the unknown area and they were more fluent when describing the map of a known area.

In general, it seems that the less difficult a task is, the more fluent the performance will be. Skehan and Foster's personal task and Robinson's here-and-now and familiar information tasks were the least difficult tasks and both engendered more fluent performance from the learners. In addition, more difficult tasks appear to increase the complexity of learners' utterances. Skehan and Foster's narrative task and Robinson's there-andthen and unfamiliar information tasks all induced more complex oral production from the learners. Lastly, tasks that promoted learner accuracy were less difficult, as in Skehan and Foster's personal task, or more difficult, as in Robinson's there-and-then and unfamiliar tasks and Skehan and Foster's decision-making task. For this reason, accuracy seems to be more dynamic and unpredictable.

## Would Increased Choice Lead to More Accurate, Complex and Fluent Output?

Supposing that when choice is involved and that greater levels of affect may result, the question now is whether that would play a role in influencing the attentional resources a learner may utilize when conducting a task, and therefore, would have a positive influence on the complexity of the oral output of the students. Some research in the psychological field may help to answer this question.

Dember, Galinsky, and Warm (1992) found that participants were more vigilant (in detecting bar flashes on a computer screen) when they were
told that they had a choice of a difficult or easy task compared to those who had no choice of the difficulty of the task，even though there was no actual difference between the two tasks．Vigilance requires a high level of attention and this study postulated that it was possible choice may have had an influence upon the allocation of attentional resources．

This was a study that indicated the possible effects of choice upon attentional resources．Other researchers have studied the influence that positive affect in general，which includes positive emotions，greater interest， and greater intrinsic motivation，may have upon attention and complexity in general．

Isen（2000；2002）speculated that with greater affect，people would be more willing to take a risks，are more willing to explore and try new things，increase their variety－seeking and cognitive flexibility，well as， effective thinking．Fredrickson（2001）claimed that greater affect would broaden the scope of attention and cognition and would create an urge to explore and take in new information．McDaniel，Waddill，Finstad，and Bourg （2000）stated that greater affect may reduce the costs required to allocate attention to various aspects of text processing and may allow reader to focus on organizational and structural elements and less on extracting meaning．Hidi（1990）stated that greater affect would create greater automaticity of attentional allocation，which would involve attention， concentration，and persistence．Rowe，Hirsh，and Anderson（2007）claimed that greater affect would decrease the capacity to process irrelevant information and would be facilitative in tasks requiring a more global style of information processing．Robinson（2007）claimed that affect plays a greater role on speech production，interaction，uptake，memory and focus on form for complex tasks．

Derryberry and Tucker（1994）made a strong case for the connection
between motivation and the allocation of attention. In their paper, they claimed that "motivational processes recruit attentional mechanisms to adaptively regulate perceptual and conceptual processes" (p. 168). In this case, motivational processes in part control attention which can influence the direction (spotlight) and breadth (zoom lens) of attention. The breadth of attention is the working memory, which, according to Robinson (2001a), is important in the learning of a second language. Derryberry and Tucker also stated that attention to local features requires left-brain usage but that attention to global features requires the right-brain. However, anxiety can enhance left-brain processing, bringing attention to local features, which may not meet the needs of the task. A recent definition of a task (Samuda \& Bygate, 2008) includes a holistic dimension, which attention to local features may not augment. According to Stotland and Blumenthal (1964), on the other hand, anxiety can be reduced by choice, perhaps matching the needs in the task.

## The Outline of This Research

The independent variable in this paper is the two levels of choice-the no choice of topic treatment in which the topic was pre-selected by the teacher, and the limited choice of topic treatment in which the students conducted the same type of task but could chose one task topic from amongst three topics preselected by the teacher. The type of the task does not change.

The dependent variables, mentioned previously, are, for Study 1, Task Interest and Task Self-efficacy, from survey data. These two variables are based on the factor analysis conducted on the survey when it was utilized in Thurman's dissertation research. For Study 2, there are three dependent variables; Accuracy, Complexity, and Fluency. For this study, Accuracy will
be assessed by the number of correct T －units and the ratio between the number of correct T －units to the number of T －units．Complexity will be assessed by ratio of S－nodes to T －units for syntactic complexity，type－ token ratio and type－token ratio with a square root correction，also known as Guiraud＇s ratio，for lexical complexity，and turns and words per turn for interactional complexity．Lastly，Fluency will be assessed by word count． （For comparison，Thurman（2008）used error－free clauses to assess Accuracy，type－token ratio only to assess Complexity，and total word count to assess Fluency．）

## Research Questions

## Study 1

The primary purpose of Study 1 is to examine the participants＇task interest and task self－efficacy．

Research Question 1：To what degree does the level of task interest change across the levels of choice？

Hypothesis 1：It is hypothesized that Task Interest will increase significantly when choice is available．This hypothesis is based on studies comparing the presence and absence of choice when adults are engaged in a task．

Research Question 2：To what degree does the level of Task Self－efficacy change across the levels of choice？

Hypothesis 2：It is hypothesized that Task Self－efficacy will increase significantly when more choice is available．This hypothesis is based on studies comparing the presence and absence of choice when adults are engaged in a task and that more control of the environment increases the ability to do a task（e．g．，Monty，Rosenberger \＆Perlmuter，1973；Stotland \＆ Blumenthal，1964）．

Other than Thurman (2008), there is no data showing how the level of self-efficacy will change in response to different levels of choice, as there is for task interest. There may be a relation, however, because interest and self-efficacy are both affective constructs. A component of self-efficacy is present in Dörnyei's (1994) model of language learning motivation, and in the motivational component of Trembley and Gardner's (1995) revision of the Socio-Educational model of Gardner (1985).

## Study 2

The primary purpose of Study 2 is to examine the students' language production from a qualitative perspective. In this study, the conversations that occurred while participants were engaged in the tasks in this study were recorded, transcribed, and coded for occurrences of accuracy, complexity, and fluency.

Research Question 1: To what degree does the level of Accuracy change across the levels of choice?

Hypothesis 1: It is hypothesized that Accuracy will increase significantly when choice is available. This hypothesis is based on studies comparing the presence and absence of choice when adults are engaged in a task requiring high levels of attention (e.g., Dember, Galinsky, \& Warm, 1992).

Research Question 2: To what degree does the level of Complexity change across the levels of choice?

Hypothesis 2: It is hypothesized that Complexity will increase significantly when more choice is available. This is hypothesized because it is possible when choice is introduced in the implementation stage of a task, attentional resources may be freed and allocated towards complexity (e.g., Dember et al., 1992).

Research Question 3: To what degree does the level of Fluency change
across the three levels of choice？
Hypothesis 3：It is hypothesized that Fluency will increase significantly when more choice is available because increases in Task Interest caused by the introduction of choice can positively affect fluency．This could be an effect of an increased willingness to communicate（e．g．，MacIntyre，Clément， Dörnyei，\＆Noels，1998；Yashima，2002）．In addition，there may be a lessening of anxiety with choice（e．g．，Stotland \＆Blumenthal，1964）causing greater fluency（total number of words produced in this paper）（Poupore，2008）．

## METHOD

## Participants

The participants were 158 11th graders，divided amongst four classes． Each class conducted treatments four times．These participants were located in a high school where the research experiments took place．The classes were labelled 2B $(N=39$ ；Female $=28$ ，Male $=11)$ ， $2 \mathrm{C}(N=40$ ； Female $=30$ ，Male $=10), 2 \mathrm{D}(N=39 ;$ Female $=28$ ，Male $=11)$ and $2 \mathrm{~F}(N=$ 40； Female $=29$ ，Male $=11$ ）．

## Research Setting

## The circumstances of high school English teaching in Japan．

By Mr．Tomo Sasao
Basically，on all the subjects including English，the domestic，formal guidelines named＂The Government Course Guidelines＂have been issued by MEXT，Ministry of Education，Culture，Sports，Science and Technology since 1947，and has been revised many times．

From around 1980 to 1990，although some communication－centered approaches were introduced into the high school classroom，the Japanese

English teaching methods, nevertheless, mainly had depended on a grammar-translation method: the students translated the English sentences in the textbook into Japanese using the grammar rules taught deductively, so teachers guided the class in Japanese. The students hardly had the time to communicate in English, even to read aloud.

With the gradual change toward the communicative use, the guidelines then tended to focus on the aspect of communication. In 1989, the guidelines said that the students must foster the attitude for communication. In the 1999 Guidelines, MEXT stated that the students must acquire the "Practical Communication Ability"-with the "Practical" meaning that the students could use English in some situations, which meant that more communication skills were needed in order to have successful communication.

Currently, some the situations have improved more with the rise of communication-based approaches. Some schools are trying to use authentic materials, so Task Based Language Teaching is useful for English teaching in the Japanese high school in this regard.

In 2002, "The Establishment of an Action Plan to Cultivate Japanese with English Abilities" was issued, where it was discovered that only about 20\% of the high school English teachers conduct the class entirely in English and about $30 \%$ of the teachers would teach more than half the class in English. In addition, a listening test was introduced into the "Center Examination", which is equivalent to the SAT in the United States.

In 2011, the MEXT guidelines were revised to be more communicatively oriented. These guidelines showed a highly-integrated aim of learning English: To develop students' communication abilities such as accurately understanding and appropriately conveying information, ideas, etc., deepening their understanding of language and culture, and fostering a
positive attitude toward communication through foreign languages．It also stated that，when taking into consideration the characteristics of each English subject，classes，in principle，should be conducted entirely in English．That was one of the most important turning points deviating from the previous guidelines．

In closing，TBLT is quite suitable for the today＇s circumstance of English teaching．

## The Keihoku Commercial High School and its students

The subject students are in Keihoku Commercial High School．It is a commercial high school in Sapporo，Hokkaido，Japan．The students＇level seems to be in the middle in the city．Although there is no objective data for their English ability，there seems to be wide range of levels：from the B2 to A0 on the CEFR．

In addition to being a commercial high school，this school is unique in the following four points．First，the students have diverse goals after the graduation．While $30 \%$ of the students go to universities， $30 \%$ go to the technical school，and $20 \%$ will go directly to a full－time job．The students study English with various aims：some students use English as a subject of examination，others do as in business upon graduation．In addition，unlike the other commercial high schools，the teachers encourage them to study English．

Second，the school also has several majors in the school curriculum． From the 11th grade，students are divided into the 3 courses：the Accounting Course，the Information Course，and the International Course． Therefore，some students are highly－motivated to enter this school because they want to be a part of the international course，while others are less－ motivated，so the teachers have to use various ways of encouraging the
students to study English.
Thirdly, there are many English activities in this school, such as a presentation contest, a speech contest, an essay writing contest, and newspaper reporting. Specifically, there are task-based presentations held four times a year in the English conversation class.

Lastly, the school is supplied with nice equipment and staff, including the two excellent ALTs who help the teachers and students all the time, and the CALL room, which enable the students to learn language efficiently.

Any Keihoku student can improve his or her English ability. Our aim is that:

1. The students who want to learn English will improve their English skills through tasks both in classes and in the CALL room.
2. Other students who want to get a job will learn English with a more practical aim that includes authenticity.
3. Students with different motivations will be taught with a variety of tasks through presentations and with some classes focused on communication. We will try to teach English to motivate the student as well as possible.

## The Variables in This Study Dependent Variables

The variables for this study are based on past research. For Study 1, the variables derive from the dissertation research. After conducting a factor analysis of the survey data at that time, it came out that there were two dependent variables with the survey used then and the one used for this research. First, Task Interest was factored out from Items 1, 2, 5, 6, 7, 9, 10 and 11 on the after-task survey. For Task Self-efficacy, Items 3, 4, 8 and 12 contributed to this factor.

For Study 2, there are three dependent variables used in assessing the
oral output of the students．First，there is Accuracy，which is assessed by the number of correct T －units and the ratio between the number of correct T－units to the number of T－units．Second，Complexity will be assessed by ratio of $\mathrm{S}-$ nodes to T －units for syntactic complexity，type－ token ratio and type－token ratio with a square root correction，also known as Guiraud＇s ratio，for lexical complexity，and turns and words per turn for interactional complexity．Lastly，Fluency will be assessed by word count．

There was one independent variable of interest for this research．This is the level of choice．For this variable，there are two levels．The first level is the No Choice treatment．In this treatment，the students conducted the task of which the topic was already chosen by the teacher and not the student．For the next level of choice，the students can choose amongst three different task topics of the same kind of task，a descriptive task or a narrative task．This is the Limited Choice level of choice．Lastly，although done in the dissertation，we will not compare the different types of tasks．

## Materials

## Task Materials

## Task Materials Used for the Treatment Sessions

For the descriptive task，the students conducted a task from Longman＇s Children＇s Picture Dictionary With Sings and Chants by Carolyn Graham （2002）．The task for the descriptive task with no choice of topic for the first round is in Appendix $A$ and the task for the descriptive task with no choice of topic for the second round is in Appendix B．The three tasks for the descriptive task，limited choice treatment for the first round and second rounds are in Appendix C．The goal of this task was for the student with the missing pictures to put the correct number for the space where that picture should have been．

The topics for the narrative task were taken from two sources. These were picture stories from Heaton (1966) and stories by Quino (Lavado, 2009). The task for the narrative task with no choice of topic for the first round and the task for the second round are in Appendix D. The three tasks for the narrative task, limited choice treatment for the first round and second rounds are in Appendix E. For the narrative task treatments, one student had the correct information in the appendices and the other student had the same story with the pictures in a jumbled order. The goal of this task was to have that student put the story in the correct order by listening to his or her partner.

## After-task Survey

A 12-item after-task survey was administered each time that the students finished the task for each round. Some of the items were from published sources and some were originally written for this study. The survey was piloted in the spring of 2006.

English translations of these items and their sources are shown in Table 1. Some of the survey items were written originally for the dissertation, some were taken from original Japanese research (Takashima, 2000), and some were garnered from sources in English (Julkunen, 1989; Robinson 2001b). The questions from Japanese sources were also slightly modified for this study.

Response formats were also piloted. Although different levels of responses were experimented with, a five-level response category was selected: 1 = mattaku so omowanai (I do not think so at all); $2=$ dochiraka to ieba so omowanai (If I were to say, I do not think so); $3=$ dochira tomo ienai (I can not say either way); $4=$ dochira to ieba so omou (If I had to say, I think so); 5 = sono toori dato omou (That is \{exactly\} what I think).

Table 1
After－task Survey Items and Their Sources
Item 1．I liked this task．（original item）
Item 2．I learned from this task．（Julkunen，1989）
Item 3．I told my feelings to my partner while doing this task．（Takashima，2000）
Item 4．I talked with my partner without undue silence．（Takashima，2000）
Item 5．I cooperated with my partner while doing this task．（Takashima，2000）
Item 6．I enjoyed doing this task．（original item）
Item 7．I want to do more tasks like this．（Robinson，2001b）
Item 8．This task was difficult．（Julkunen，1989）
Item 9．I used a lot of time doing this task．（Julkunen，1989）
Item 10．I did the task to the best of my ability．（Julkunen，1989）
Item 11．I was able to concentrate while doing this task．（Julkunen，1989）
Item 12．I am satisfied with my performance doing this task．（Julkunen，1989）

## Procedures

The data collection procedures for the no choice and limited choice sessions are shown in Appendix F．On the left of the figure are the procedures for the no choice of topic treatment sessions and on the right are the procedures for the treatment sessions with limited choice of topic． For the No Choice of topic treatment session，the students did the tasks decided by the teacher．

In the case of the data sessions with a Limited Choice of topic，a single paper with the three task topics（Appendix C for the descriptive task， limited choice treatment，first round and second round；Appendix E for the narrative task，limited choice treatment，first round and second round） printed on it was distributed to the student who would make the choice． This student then chose the topic and the teacher gave this student the task in a large envelope．Upon a signal，the students took the papers out of the envelope and gave the two pages of the missing information to his or her partner and kept the page with the complete information．For the data sessions with the No Choice of topic，the students conducted the task given
to them by the teacher.
To be fairer to the students, each task was conducted twice during each treatment session, each time with different topics. However, the data from the second time the students performed the task was utilized for the oral production data analysis in Study 2 in order to control for planning. Students were asked not to use dictionaries, nor to look at each other's papers.

When the students were ready to conduct the task, they were asked to turn on the recording software in the computer and to say their name. After this, the students were asked if there were any problems in recording or hearing their partner through the headphones. For those who had no problems, they were asked then to conduct the task. This was usual for the sessions. If there were any students who had problems with the hardware, the teachers worked to fix the problem.

## The Design of this Study

The data collection session are detailed in Table 2. This sequencing, both in the order of the task-type and the order of the level of choice, matches a $4 \times 4$ orthogonal latin square design shown in Fisher and Yates (1953, p. 72, Table 16). The tasks for Group B were implemented on a random schedule.

Table 2
Task Sequencing for the Four Classes

| Class | 2B | 2C | 2D | 2F |
| :--- | :--- | :--- | :--- | :--- |
| DTNC | Nov. 26 | Nov. 12 | Dec. 19 | Dec. 10 |
| DTLC | Dec. 10 | Nov. 26 | Nov. 16 | Dec. 17 |
| NTNC | Dec. 17 | Dec. 10 | Nov. 21 | Nov. 12 |
| NTLC | Nov. 12 | Dec. 17 | Dec. 12 | Nov. 26 |

Note: All dates are from 2012.

Importantly，for the calculation of the oral production data，only the first two minutes of the conversation after it started was used for assessing the oral output．This was to be more similar across all pairs in assessing their oral output．

Lastly，in this research，the students used the Language Lab where enough computers were available for each student to control one．The students were asked to record their conversations for the purpose of collecting the data for that needed for the oral output section of this research in Study 2.

## RESULTS

## Results for Study 1

The results of Study 1 concern the data garnered from the after－task survey conducted after the end end of each treatment session．After removing missing students and outliers，who were removed after the statistical calculations of searching for univariate（ $z$ score $=< \pm 3.98$ ）and multivariate（Mahalanobis distance）， 128 participants remained for statistical analysis．

## Descriptive Statistics

Below in Tables 3 and 4 are the descriptive statistics for the two dependent variables of Task Interest and Task Self－efficacy，as explained previously．It can be seen that even though there are differences in the Means generally in favor of the Limited Choice of task topic，the differences are very small．

Table 3
Descriptive Statistics of Task Interest

|  | $N$ | $M$ | $S E M$ | $S D$ | Skew | SES | Kur | $S E K$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DTNC | 128 | 28.84 | .376 | 4.253 | -.083 | .214 | .129 | .425 |
| Interest |  |  |  |  |  |  |  |  |
| DTLC | 128 | 29.06 | .440 | 4.983 | .148 | .214 | -.711 | .425 |
| Interest | 128 | 28.29 | .404 | 4.572 | .444 | .214 | -.299 | .425 |
| NTNC | 128 | 28.34 | .378 | 4.278 | .420 | .214 | -.383 | .425 |
| Interest |  |  |  |  |  |  |  |  |
| NTLC <br> Interest | 128 |  |  |  |  |  |  |  |

Table 4
Descriptive Statistics of Task Self-efficacy

|  | $N$ | $M$ | $S E M$ | $S D$ | Skew | SES | Kur | $S E K$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DTNC <br> Self-efficacy | 128 | 14.66 | .260 | 2.939 | -.388 | .214 | .638 | .425 |
| DTLC | 128 | 14.64 | .264 | 2.990 | .186 | .214 | -.335 | .425 |
| Self-efficacy | 128 | 14.09 | .278 | 3.147 | .009 | .214 | -.305 | .425 |
| NTNC <br> Self-efficacy | 128 |  | 14.47 | .249 | 2.823 | .183 | .214 | -.205 | .425

## Comparison of Means

Next, we examined the differences between the two levels of choice for each type of task using $t$-tests. The results can be seen below in Table 5 and Table 6. Again, as expected from the descriptive statistics, there were no statistically significant differences between the No Choice of task topic and the Limited Choice of task topic, for either the descriptive task or the narrative task.

Table 5
Comparison of the Differences for Task Interest．

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | SEM | 95\％Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| DTNC Interest x DTLC Interest | －． 227 | 4.032 | ． 356 | －． 932 | ． 479 | －． 636 | 127 | ． 526 |
| NTNC Interest x NTLC Interest | －． 047 | 3.930 | ． 347 | －． 734 | ． 641 | －． 135 | 127 | ． 893 |

Table 6
Comparison of the Differences for Task Self－efficacy

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | SEM | 95\％Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| DTNC Self－ <br> efficacy x DTLC Self－efficacy | ． 016 | 2.581 | ． 228 | －． 436 | ． 467 | ． 068 | 127 | ． 946 |
| NTNC Self－ efficacy x NTLC Self－efficacy | －． 383 | 2.770 | ． 245 | －． 867 | ． 102 | －1．564 | 127 | ． 120 |

In summary，there were no statistically significant differences between the No Choice treatment and the Limited Choice treatment for either the descriptive task or the narrative task．

## Results for Study 2

For Study 2，the oral output for various assessments were compared between the No Choice level of choice and the Limited Choice level of choice．We would like to start with the descriptive statistics for each assessments separately．

## Descriptive Statistics

First will be the assessments for Accuracy, (the number of correct T-units (Table 7) and the ratio between the number of correct T -units to the number of T-units (Table 8)), Complexity (the ratio of S-nodes to T-units for syntactic complexity (Table 9), type-token ratio (Table 10) and Guiraud's ratio, for lexical complexity (Table 11), and turns (Table 12) and words per turn (Table 13) for interactional complexity), and Fluency (word count (Table 14)). First will be the results for Accuracy.

## Table 7 <br> Descriptive Statistics of Number of Correct T-units

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | :---: | :---: | :---: | ---: | :---: | :---: | :---: |
| DTNC Correct T-units | 20 | 1.70 | .405 | 1.809 | .854 | .512 | -.209 | .992 |
| DTLC Correct T-units correct | 20 | 1.25 | .362 | 1.618 | 1.289 | .512 | 1.001 | .992 |
| NTNC Correct T-units | 20 | .55 | .198 | .887 | 1.592 | .512 | 1.854 | .992 |
| NTLC Correct T-units | 20 | .80 | .138 | .616 | .120 | .512 | -.207 | .992 |

## Table 8

Descriptive Statistics of Ratio Between the Number of Correct T-units to the Number of T-units

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| DTNC Ratio of Correct T-units | 20 | .371 | .073 | .326 | .169 | .512 | -1.208 | .992 |
| DTLC Ratio of Correct T-units | 20 | .173 | .050 | .221 | 1.255 | .512 | .987 | .992 |
| NTNC Ratio of Correct T-units | 20 | .102 | .037 | .166 | 1.464 | .512 | .867 | .992 |
| NTLC Ratio of Correct T-units | 20 | .209 | .041 | .183 | .337 | .512 | -1.227 | .992 |

For Accuracy, the above two tables, there was less accuracy for the Limited Choice level of choice for the descriptive tasks compared to the No Choice level of choice. However, the opposite was evident in the case for the narrative task, in that the Limited Choice level of choice had greater Accuracy compared to the No Choice level of choice.

Table 9
Descriptive Statistics of The Ratio of S－nodes to T－units

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DTNC Ratio S－nodes to T－units | 20 | .494 | .055 | .246 | .025 | .512 | -.225 | .992 |
| DTLC Ratio S－nodes to T－units | 20 | .774 | .044 | .199 | -.416 | .512 | -1.241 | .992 |
| NTNC Ratio S－nodes to T－units | 20 | .678 | .057 | .257 | -.773 | .512 | 1.490 | .992 |
| NTLC Ratio S－nodes to T－units | 20 | .753 | .049 | .218 | -.730 | .512 | .844 | .992 |

Table 10
Descriptive Statistics of Type－token Ratio

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DTNC Type－Token Ratio | 20 | .413 | .019 | .083 | .391 | .512 | 1.462 | .992 |
| DTLC Type－Token Ratio | 20 | .400 | .017 | .075 | -.123 | .512 | -.104 | .992 |
| NTNC Type－Token Ratio | 20 | .414 | .022 | .099 | .527 | .512 | 1.213 | .992 |
| NTLC Type－Token Ratio | 20 | .458 | .020 | .091 | -.169 | .512 | -.326 | .992 |

Table 11
Descriptive Statistics of Guiraud＇s Ratio

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DTNC Guiraud＇s Ratio | 20 | 3.153 | .117 | .524 | -.143 | .512 | -.668 | .992 |
| DTLC Guiraud＇s Ratio | 20 | 3.366 | .137 | .612 | .247 | .512 | .101 | .992 |
| NTNC Guiraud＇s Ratio | 20 | 2.822 | .106 | .472 | .279 | .512 | -.811 | .992 |
| NTLC Guiraud＇s Ratio | 20 | 3.083 | .123 | .550 | -.400 | .512 | .545 | .992 |

Table 12
Descriptive Statistics of Turns

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| DTNC Turns | 20 | 16.30 | 2.031 | 9.085 | .846 | .512 | -.147 | .992 |
| DTLC Turns | 20 | 17.85 | 1.932 | 8.641 | .506 | .512 | -.074 | .992 |
| NTNC Turns | 20 | 12.25 | 2.198 | 9.829 | 1.084 | .512 | 2.474 | .992 |
| NTLC Turns | 20 | 9.20 | 1.547 | 6.918 | .699 | .512 | -.343 | .992 |

Table 13
Descriptive Statistics of Words per Turn

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| DTNC Words per Turn | 20 | 4.467 | .366 | 1.636 | .634 | .512 | -1.003 | .992 |
| DTLC Words per Turn | 20 | 4.841 | .411 | 1.838 | 1.943 | .512 | 6.075 | .992 |
| NTNC Words per Turn | 20 | 10.725 | 2.819 | 12.609 | 1.643 | .512 | 1.621 | .992 |
| NTLC Words per Turn | 20 | 11.145 | 2.737 | 12.238 | 1.875 | .512 | 2.688 | .992 |

For Complexity in the five tables above, there was greater evidence of this construct in the Limited Choice level of choice compared to the No Choice level of choice for both types of tasks, except for the type-token ratio for the descriptive task and the number of turns for the turns for the narrative task.

Table 14
Descriptive Statistics of Word Count

|  | $N$ | $M$ | SEM | SD | Skew | SES | Kur | SEK |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| DTNC Total Words | 20 | 61.25 | 4.027 | 18.011 | 1.036 | .512 | 1.639 | .992 |
| DTLC Total Words | 20 | 75.05 | 4.989 | 22.310 | -.335 | .512 | .221 | .992 |
| NTNC Total Words | 20 | 52.05 | 4.314 | 19.294 | -.043 | .512 | -.146 | .992 |
| NTLC Total Words | 20 | 46.95 | 2.488 | 11.128 | -.139 | .512 | -1.114 | .992 |

Lastly, for Fluency, there was greater Fluency according to the data for the Limited Choice level of choice for the descriptive task compared to the No Choice level of choice. However, the opposite was evident for the narrative task.

## Comparison of Means

Next, I also conducted $t$-tests to compare the differences of the means parametrically. These tests were conducted not by each assessment variable, but with the same type of task with the same dependent variable,
over the different levels of choice．For example，Accuracy was first compared between the different levels of choice for the descriptive task， then Accuracy was compared between the different levels of choice for the narrative task．This was to control more for the number of analyses in a test，keeping the Bonferroni correction in mind．First are the results for Accuracy for the descriptive task（Table 15），then the narrative task（Table 16），then for Complexity（syntactic）for the descriptive task（Table 17），then the narrative task（Table 18），then Complexity（lexical）for the descriptive task（Table 19），then the narrative task（Table 20），then Complexity （interactional）for the descriptive task（Table 21），then the narrative task （Table 22），then Fluency for the descriptive task（Table 23），then the narrative task（Table 24）．

For Accuracy，there were no statistically significant differences between the No Choice level of choice treatment and the Limited Choice level of choice，for either the descriptive task or the narrative task，although the ratio of correct T －units for every T －unit for the descriptive task does trend somewhat－albeit with the No Choice level of choice somewhat more correct compared to the Limited Choice level of choice．For Complexity， syntactical complexity for the descriptive task and lexical complexity for the narrative task showed statistically significant differences，as hypothesized，with the Limited Choice level of choice showing greater complexity compared to the No Choice level of choice．There was，however， no statistically significant differences between the treatments for the other measures of Complexity．Lastly，for Fluency，there was statistically significant differences with greater Fluency for the Limited Choice level of choice compared to the No Choice level of choice，for the descriptive task （but not for the narrative task）．

## Table 15

Comparison of the Differences for Accuracy (Descriptive Task)

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | SEM | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| DTNC Correct T-units x DTLC Correct T-units correct | . 450 | 2.481 | . 555 | -. 711 | 1.611 | . 811 | 19 | . 427 |
| DTNC Ratio of Correct T-units x DTLC Ratio of Correct T-units | . 199 | . 432 | . 097 | -. 004 | . 401 | 2.054 | 19 | . 054 |

Table 16
Comparison of the Differences for Accuracy (Narrative Task)

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | SEM | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| NTNC Correct T-units - NTLC Correct T-units | -. 250 | 1.070 | . 239 | -. 751 | . 251 | -1.045 | 19 | . 309 |
| NTNC Ratio of Correct T-units - NTLC Ratio of Correct T-units | -. 107 | . 252 | . 056 | -. 225 | . 011 | -1.898 | 19 | . 073 |

Table 17
Comparison of the Differences for Syntactic Complexity (Descriptive Task)

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | SEM | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| DTNC Ratio <br> S-nodes to T-units <br> x DTLC Ratio <br> S-nodes to T-units | -. 280 | . 306 | . 068 | -. 423 | -. 137 | -4.101 | 19 | . 001 |

Table 18
Comparison of the Differences for Syntactic Complexity（Narrative Task）

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | SEM | 95\％Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| NTNC Ratio <br> S－nodes to T－units <br> x NTLC Ratio <br> S－nodes to T－units | －． 075 | ． 302 | ． 068 | －． 216 | ． 067 | －1．109 | 19 | ． 281 |

Table 19
Comparison of the Differences for Lexical Complexity（Descriptive Task）

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | SEM | 95\％Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| DTNC Type－ Token Ratio x DTLC Type－ Token Ratio | ． 013 | ． 070 | ． 016 | －． 020 | ． 046 | ． 840 | 19 | ． 411 |
| DTNC Guiraud＇s Ratio x DTLC Guiraud＇s Ratio | －． 213 | ． 552 | ． 123 | －． 471 | ． 045 | －1．724 | 19 | ． 101 |

Table 20
Comparison of the Differences for Lexical Complexity（Narrative Task）

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | SEM | 95\％Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| NTNC Type－ Token Ratio x NTLC Type－ Token Ratio | －． 044 | ． 093 | ． 021 | －． 088 | －． 001 | －2．118 | 19 | ． 048 |
| NTNC Guiraud＇s Ratio x NTLC Guiraud＇s Ratio | －． 261 | ． 488 | ． 109 | －． 489 | －． 032 | －2．389 | 19 | ． 027 |

Table 21
Comparison of the Differences for Interactional Complexity (Descriptive Task)

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | SEM | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| DTNC Turns x DTLC Turns | -1.550 | 5.414 | 1.211 | -4.084 | . 984 | -1.280 | 19 | . 216 |
| DTNC Words per Turn x DTLC Words per Turn | -. 374 | 1.990 | . 445 | $-1.305$ | . 558 | -. 840 | 19 | . 411 |

Table 22
Comparison of the Differences for Interactional Complexity (Narrative Task)

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | SEM | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| NTNC Turns x NTLC Turns | 3.050 | 7.316 | 1.636 | -. 374 | 6.474 | 1.864 | 19 | . 078 |
| NTNC Words per <br> Turn x NTLC <br> Words per Turn | -. 420 | 12.977 | 2.902 | -6.493 | 5.654 | -. 145 | 19 | . 886 |

Table 23
Comparison of the Differences for Fluency (Descriptive Task)

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | SEM | 95\% Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| DTNC Total <br> Words x DTLC <br> Total Words | -13.800 | 16.045 | 3.588 | -21.309 | -6.291 | $-3.846$ | 19 | . 001 |

Table 24
Comparison of the Differences for Fluency（Narrative Task）

|  | Paired Differences |  |  |  |  | $t$ | $d f$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | SEM | 95\％Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| NTNC Total <br> Words x NTLC <br> Total Words | 5.100 | 16.613 | 3.715 | －2．675 | 12.875 | 1.373 | 19 | ． 186 |

## DISCUSSION

## Study 1

To summarize the results，the dependent variables from the survey， Task Interest did not show any statistically significant differences between the two levels of choice，the No Choice level of choice and the Limited Choice level of choice．This was unexpected because in the original research with university students，both of the treatments for the descriptive task and the narrative task for the Limited Choice level of choice were statistically significantly greater compared to the No Choice level of choice．

For Task Self－efficacy，the results were similar with no statistically significant differences between the two levels of choice for Task Self－ efficacy．In the original research with university students，the narrative task had statistically significant greater results for the Limited Choice level of choice compared to the No Choice level of choice．

It would be hard to speculate upon the differences here．However，one large difference between the original research and this research was that do this research，the students needed to manipulate a computer in order to record their conversations of the data for Study 2．It is possible that the
worries about manipulating the computer and the ability to manipulate the computer might have been reflected in these two constructs for motivation.

## Study 2

## Accuracy

For the dependent variable of Accuracy, calculated in this research using the correct number of T -units and the ratio between that number of correct T -units and the total number if T -units in the students' oral production data. Examine the $t$-tests for Accuracy, there were no statistically significant differences between the two levels of choice in the two types of tasks. Interestingly, the Accuracy for the No Choice level of choice for the descriptive task was very close to being statistically significantly greater when compared to the Limited Choice level of choice. This was also true for the original research in the university as both the descriptive task and the narrative task had lower Accuracy, assessed in this case by error-free clauses, for the Limited Choice level of choice when compared to the No Choice level of choice.

## Complexity

For the dependent variable of Complexity, there were three constructs, syntactic complexity, lexical complexity, and interactional complexity. First, syntactic complexity. This variable was statistically significantly greater for the Limited Choice level of choice compared to the No Choice level of choice. Indeed, the effect size as measured by Cohen's $d$ is .92, which indicates a very large effect size. This variable was not assessed in the university research so there is no comparison with that. However, this is very encouraging in that syntactic complexity helps to expand the learners' interlanguage. Through greater syntactic complexity, learners test their
knowledge to an extra height，helping the students to acquire greater overall complexity．Although the differences between the motivational variables for each level of choice for each task were not statistically significantly greater，it could be that the students felt they could take more risks，important for expanding the interlanguage，with trying out their language knowledge．

For lexical complexity，there was statistically significantly greater lexical complexity for the Limited Choice level of choice compared to the No Choice level of choice，only for the narrative task．There were no statistically significant differences for the descriptive task between the two levels of choice．There was almost a medium effect size for the type－token ratio assessment，$d=.47$ ，but there was a medium effect size for the Guiraud＇s ratio，$d=.53$ ．However，the $p$ value for these two treatments are not within the Bonferroni correction（an alpha value $(p)$ of $.05 \div 2$（the number of $t$－tests）$=p \leqq .025$ to be considered statistically significant）and may not be statistically significant with that correction．

Such results were not seen the first time．In the university research，the type－token ratio was statistically significantly greater for the Limited Choice level of choice，compared to the No Choice level of choice，for both the descriptive task and the narrative task．In a paper in 2010 （Thurman， 2010），it was explained that the possible reason that lexical complexity may be amenable to increases in motivational affect．

Why the effect was so large for the lexical measure may have a connection with a reduced negative bias in lexical access．Mirman， McClelland，Holy，and Magnuson（2008）examined 80 participants in a university in the United States，half assigned to a high lexical attention condition，and the other half assigned to a low lexical attention condition． Each participant was asked to separate words，i．e．，those that contained the
phoneme $/ t /$ or $/ k /$ in a phrase sent out from a speaker, from non-words, i.e., those that did not contain either phoneme. Results indicated that the participants in the high attention condition (with $80 \%$ of the sample being target words) were statistically significantly quicker in recognizing nonwords than the participants in the low attention condition (with $20 \%$ of the sample being target words). Mirman et al. explained that there is a competition at the lexical layer between net input gain and negative bias. According to the authors:
as net input gain $(\alpha)$ is decreased, lexical feedback becomes dominated by the cumulative effects of many words rather than the activity of the single best matching word. At high lexical attention the high activation of a single matching word provided facilitative feedback to phonemes in that word, giving rise to a word advantage, but at low lexical attention, no single lexical item could reach high activation levels (p. 409).

It is possible that with the introduction of choice, which increased somewhat the affective tendencies of the participants in this study, that rather than the net input gain improving, the negative bias was in some cases reduced, allowing greater access at the lexical layer (Mirman et al., 2008). This reduction of the negative bias could be from suppressed levels of anxiety, again promoted through the introduction of choice (Stotland \& Blumenthal, 1964; Thurman, 2008).

In addition, it is possible that in Levelt's (1989) model of language production, the conceptualizer may be effected by increased attentional control enhanced by an increase in affect promoted by topic choice. According to Gilabert (2004):
[C]onceptualizing the message requires attentional control. That means that the different types of information needed to express the intention
have to be attended to in order for them to be retrieved from long－ term memory（LTM）and instantiated into working memory（WM），a task which is supposed to take up memory resources（pp．28－29）．

The figure below shows Levelt＇s model．Circled are the areas where this research may have had an effect．It is possible that with greater attention， the pool of vocabulary in long term memory was more open to be utilized in the working memory for message generation．It is also possible that monitoring may also have been effected by the increased motivation introduced by choice．

For interactional complexity，turns and words per turn，there was no statistically significantly differences for either level of choice for either task．For the university research，words per turn violated the assumption for sphericity so it was not used in the final analysis．The same goes for turns．Although turns did not violate the assumption of sphericity in the university research the type－token ratio in that research was closer to sphericity．Therefore，turns was also not used in the final analysis．

## Fluency

For this research at the high school，the total word count over the two minutes of the conversation were utilized for the final analysis in this research as well as in the research conducted at the university．In the university research，there were no statistically significant differences between the No Choice level of choice and the Limited Choice level of choice，for either the descriptive task or the narrative task．Of this research at the high school，the Limited Choice level of choice was statistically significantly greater compared to that of the No Choice level of choice．Again，as in syntactic complexity，the effect size was somewhat large，$d=.86$ ．This indicated that the students are willing to use a greater number of words when the only difference was the presence of topic
choice. This is one of the tenants of Task-based Language Teaching, in that the tasks are designed so that the students use the language orally as much as possible to complete the task.


Figure 2: Levelt's (1993, p. 2) Model of Language Production.

## CONCLUSION

To conclude this paper，the utilization of topic choice was able to enhance greater syntactical complexity，greater lexical complexity，and greater fluency for the students．This bodes well for teachers who wish to improve their students＇oral output in these areas．

Many teachers desire increased complexity and fluency in the oral output of their students．However，Robinson（2001a）stated that more complex tasks are more difficult．Some teachers may not wish to increase complexity through task design if it would increase the task＇s difficulty and cause a demotivating affect．However，through choice，complexity and fluency can be increased with no loss to intrinsic motivation and with the provision of choice，even relatively difficult tasks may not adversely affect students＇intrinsic motivation．

In this study，the results indicated that choice is a viable procedure to implement previous to conducting lessons utilizing tasks based on task－ based language learning guidelines．

## REFERENCES

Adler，A．（1930）．Individual psychology．In C．Murchison（Ed．），Psychologies of 1930 （pp．395－405）．Worcester，MA：Clark University Press．
Breen，M．P．（1987）．Learner contributions to task design．In C．N．Candlin \＆D．F． Murphy（Eds．），Language learning tasks（pp．23－46）．Englewood Cliffs，NJ： Prentice－Hall．
Brown，G．，\＆Yule，G．（1983）．Teaching the spoken language．Cambridge： Cambridge University Press．
Bygate，M．，Skehan，P．，\＆Swain，M．（2001）．Introduction．In M．Bygate，P．Skehan， \＆M．Swain（Eds．），Researching pedagogic tasks：Second language learning， teaching and testing（pp．1－20）．Harlow，UK：Longman．
Candlin，C．N．（1987）．Towards task－based language learning．In C．N．Candlin \＆D． F．Murphy（Eds．），Language learning tasks（pp．5－22）．Englewood Cliffs，NJ：

Prentice-Hall.
Chirkov, V., Ryan, R. M., Kim, Y., \& Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. Journal of Personality and Social Psychology, 84(1), 97-110.
Corah, N. L., \& Boffa, J. (1970). Perceived control, self-observation, and response to aversive stimulation. Journal of Personality and Social Psychology, 16(1), 1-4.
Courtney, M. (2001). Tasks, talk, and teaching: Task-based language learning and the negotiation of meaning in oral interaction (Research Report, Volume 1). Hong Kong: The Hong Kong University of Science and Technology, Language Centre.
Crookes, G. (1986). Task classification: A cross-disciplinary review (Technical Report, Number 4). Honolulu, HI: University of Hawai'i.
de Charms, R. (1968). Personal causation: The internal affective determinants of behavior. New York: Academic Press.
Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. Journal of Personality and Social Psychology, 18(1), 105-115.
Deci, E. L. (1972). Intrinsic motivation, extrinsic reinforcement, and inequity. Journal of Personality and Social Psychology, 22(1), 113-120.
Deci, E. L. (1975). Intrinsic motivation. New York: Plenum Press.
Deci, E. L. (1987a). Intrinsic motivation. In R. J. Corsini (Ed.), Concise encyclopedia of psychology (pp. 619-620). New York: John Wiley \& Sons.
Deci, E. L. (1987b). Self-determination. In R. J. Corsini (Ed.), Concise encyclopedia of psychology (p. 1015). New York: John Wiley \& Sons.
Deci, E. L., \& Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.
Deci, E. L., \& Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227268.

Dember, W. N., Galinsky, T. L., \& Warm, J. S. (1992). The role of choice in vigilance performance. Journal of the Psychonomic Society, 30(3), 201-204.
Derryberry, D., \& Tucker, D. M. (1994). Motivating the focus of attention. In P. M. Neidenthal \& S. Kitayama (Eds.), The heart's eye: Emotional influences in perception and attention (pp. 167-196). San Diego, CA: Academic Press.
Dickinson, L. (1995). Autonomy and motivation: A literature review. System, 23(2), 165-174.
Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. The Modern Language Journal, 78(3), 273-284.
Dörnyei, Z. (2002). The motivational basis of language learning tasks. In P. Robinson (Ed.), Individual differences and instructed language learning (pp. 137157). Amsterdam: John Benjamins.

Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. In Z. Dörnyei (Ed.), Attitudes, orientations, and motivations in language learning (pp. 3-32). Malden, MA:

Blackwell Publishing．
Dörnyei，Z．，\＆Tseng，W．－T．（2009）．Motivational processing in interactional tasks． In A．Mackey \＆C．Polio（Eds．），Multiple perspectives on interaction：Second language research in honor of Susan M．Gass（pp．117－134）．Mahwah，NJ： Lawrence Erlbaum．
Duff，P．（1993）．Tasks and interlanguage performance：An SLA perspective．In G． Crookes \＆S．Gass（Eds．），Tasks and language learning：Integrating theory and practice（pp．57－95）．Clevedon，UK：Multilingual Matters．
Dworkin，G．（1988）．The theory and practice of autonomy．Cambridge：Cambridge University Press．
Ellis，N．C．（2001）．Memory for language．In P．Robinson（Ed．），Cognition and second language instruction（pp．33－68）．Cambridge，UK：Cambridge University Press．
Ellis，R．（2003）．Task－based language learning and teaching．Oxford：Oxford University Press．
Ellis，R．，\＆Barkhuzien，G．（2005）．Analyzing learner language．Oxford：Oxford University Press．
Fisher，R．A．，\＆Yates，F．（1953）．Statistical tables for biological，agricultural and medical research（4th ed．）．New York：Hafner．
Foster，P．，\＆Skehan，P．（1996）．The influence of planning and task type on second language performance．Studies in Second Language Acquisition，18，299－323．
Foster，P．，\＆Skehan，P．（1999）．The influence of source of planning and focus of planning and task－based performance．Language Teaching Research，3（3），215－ 247.

Fredrickson，B．L．（2001）．The role of positive emotions in positive psychology． American Psychologist，56（3），218－226．
Gardner，R．C．（1985）．Social psychology and second language learning：The role of attitudes and motivation．London：Edward Arnold．
Geer，J．H．，Davison，G．C．，\＆Gatchel，R．I．（1970）．Reduction of stress in humans through nonverdical perceived control of aversive stimulation．Journal of Personality and Social Psychology，16（4），731－738．
Geer，J．H．，\＆Maisel，E．（1972）．Evaluating the effects of the prediction－control confound．Journal of Personality and Social Psychology，23（3），314－319．
Gilabert，R．（2004）．Task complexity and L2 oral narrative production．（Doctoral dissertation，University of Barcelona，Spain）．Retrieved from http：／／www． tesisenxarxa．net／TDX－1220105－085713／index＿an．html．
Gilabert，R．（2007）．Affective perception of task complexity In oral narratives．In M． Amengual（Ed．），Aprendizaje y uso del lenguaje en la sociedad de la información y la comunicación．Mallorca，Spain：Servei de Publicacions de la Universitat de les Illes Balears．
Glass，D．C．，Singer，J．E．，\＆Friedman，L．N．（1969）．Psychic cost of adaptation to an environmental stressor．Journal of Personality and Social Psychology，12（3）， 200－210．
Gorsuch，G．J．（1998）．Yakudoku EFL instruction in two Japanese high school classrooms：An exploratory study．JALT Journal，20（1），6－32．

Heaton, K. B. (1966). Composition through pictures. London: Longman.
Hidi, S. (1990). Interest and its contribution as a mental resource for learning. Review of Educational Research, 60(4), 549-571.
Isen, A. M. (2000). Some perspective on positive affect and self-regulation. Psychological Inquiry, 11(3), 184-187.
Isen, A. M. (2002). Missing in action in the AIM: Positive affect's facilitation of cognitive flexibility, innovation, and problem solving. Psychological Inquiry, 13(1), 57-65.
Iyengar, S., \& DeVoe, S. E. (2003). Rethinking the value of choice: Considering cultural mediators of intrinsic motivation. In R. A. Dienstbier (Ed.), Nebraska symposium on motivation (pp. 129-174). Lincoln, NE: University of Nebraska Press.
Iyengar, S., \& Lepper, M. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. Journal of Personality and Social Psychology, 76(3), 349-366.
Julkunen, K. (1989). Situation- and task-specific motivation in foreign language learning and teaching. Joensuu: University of Joensuu.
Julkunen, K. (2001). Situation- and task-specific motivation in foreign language learning. In Z. Dörnyei \& R. Schmidt (Eds.), Motivation and second language acquisition (pp. 29-41). Honolulu: University of Hawaii Press.
Kamada, L. D. (1987, September). Intrinsic and extrinsic motivation learning processes: Why Japanese can't speak English. Paper presented at the Japan Association of Language Teachers International Conference on Language Teaching and Learning, Hamamtsu, Japan. (ERIC Document Reproduction Service No. ED285408)
Kelly, L. G. (1969). 25 centuries of language teaching. Rowley, MA: Newbury House.
Krahnke, K. (1987). Approaches to syllabus design for second language teaching. Englewood Cliffs, NJ: Prentice-Hall.
Krashen, S. D. (1982). Principles and practice in second language acquisition. New York: Prentice Hall MacMillan.
Kumaravadivelu, B. (1993). The name of the task and the task of naming: Methodological aspects of task-based pedagogy. In G. Crookes \& S. Gass (Eds.), Tasks in a pedagogical context: Integrating theory and practice (pp. 69-96). Clevedon, UK: Multilingual Matters.
Lamb, T. (2004, June). Motivated to learn? Relationships between motivation and learner autonomy. Autonomy and Language Learning: Maintaining Control, Hong Kong and Hangzhou, China.
Langer, E. J. (1975). The illusion of control. Journal of Personality and Social Psychology, 32(2), 311-328.
Langer, E. J., \& Rodin, J. (1976). The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting. Journal of Personality and Social Psychology, 34(2), 191-198.
Larsen-Freeman, D. (2000). Techniques and principles in language teaching (2nd
ed．）．Oxford：Oxford University Press．
Lavado（Quino），J．S．（2009）．Esto no es todo（6 ed．）．Buenos Aires，Argentina： Edieiones de la Flor．
Lee，J．F．（2000）．Tasks and communicating in language classrooms．Boston： McGraw－Hill．
Lennon，P．（2000）．The lexical elements in spoken second language fluency．In H． Riggenbach（Ed．），Perspectives on fluency（pp．25－42）．Ann Arbor，MI：University of Michigan Press．
Levelt，W．J．M．（1989）．Speaking：From intention to articulation．MIT Press： Cambridge，MA，USA．
Levelt，W．J．M．（1993）．Language use in normal speakers and its disorders．In G． Blanken，J．Dittmann，H．Grimm，J．C．Marshall \＆C．W．Wallesch（Eds．）， Linguistic disorders and pathologies（pp．1－15）．Berlin：de Gruyter．
Long，M．H．（1985）．A role for instruction in second language acquisition：Task－ based language teaching．In K．Hyltenstam \＆M．Pienemann（Eds．），Modelling and assessing second language acquisition（pp．77－99）．Clevedon，UK：Multilingual Matters．
Long，M．（2015）．Second language acquisition and task－based language teaching． West Sussex，UK：Wiley Blackwell．
Loschky，L．，\＆Bley－Vroman，R．E．（1993）．Grammar and task－based methodology． In G．Crookes \＆S．Gass（Eds．），Tasks and language learning：Integrating theory and practice（pp．123－167）．Clevedon，England：Multilingual Matters．
MacIntyre，P．D．，Clément，R．，Dörnyei，Z．，\＆Noels，K．（1998）．Conceptualizing willingness to communicate in a L2：A situational model of L2 confidence and affiliation．The Modern Language Journal，82（4），545－562．
Markus，H．R．，\＆Kitayama，S．（1991）．Cultural variation and self－concept．In J． Strauss \＆G．R．Goethals（Eds．），The self：Interdisciplinary perspectives（pp．18－ 48）．New York：Springer．
McDaniel，M．A．，Waddill，P．J．，Finstad，K．，\＆Bourg，T．（2000）．The effects of text－ based interest on attention and recall．Journal of Educational Psychology，92（3）， 492－502．
McIntosh，C．N．，\＆Noels，K．（2004）．Self－determined motivation for language learning：The role of need for cognition and language learning strategies， Zeitschrift für Interkulturellen Fremdsprachenunterricht，9（2）．Retrieved October 16， 2005 from http：／／zif．spz．tu－darmstadt．de／jg－09－2／beitrag／Mcintosh2．htm．
Mirman，D．，McClelland，J．L．，Holt，L．L．，\＆J．S．Magnusona．（2008）．Effects of attention on the strength of lexical influences on speech perception：Behavioral experiments and computational mechanisms．Cognitive Science，32：398－417．
Monty，R．A．，Rosenberger，M．A．，\＆Perlmuter，L．C．（1973）．Amount of locus of choice as sources of motivation in paired－associates learning．Journal of Educational Psychology，97（1），16－71．
Nakata，Y．（2004）．Motivation and the learning environment：A study of Japanese learners of English．Unpublished Doctoral Dissertation，University of Dublin， Trinity College，Dublin，Ireland．

Noels, K. (2009). The internalization of language learning into the self and social identity. In Z. Dörnyei \& E. Ushioda (Eds.), Motivation, language identity and the L2 self (pp. 295-313). Bristol, UK: Multilingual Matters.
Noels, K. A., Clément, R., \& Pelletier, L. C. (1999). Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. The Modern Language Journal, 83(1), 23-34.
Noels, K. A., Clément, R., \& Pelletier, L. C. (2001). Intrinsic, extrinsic, and integrative orientations of French Canadian learners of English. The Canadian Modern Language Review, 57(3), 424-442.
Noels, K. A., Pelletier, L. G., Clément, R., \& Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. Language Learning, 50(1), 57-85.
Nunan, D. (2004). Task-based language teaching. Cambridge: Cambridge University Press.
Oxford, R. (1990). Language learning strategies: What every teacher should know. Boston, MA: Heinle \& Heinle.
Oxford, R. L. (2006). Task-based language teaching and learning: An overview. Asian EFL Journal, 8(3), 94-121.
Perls, F. (1973). The Gestalt approach and eyewitness to therapy. Palo Alto, CA: Science and Behavior.
Pervin, L. A. (1963). The need to predict and control under conditions of threat. Journal of Personality, 31, 570-585.
Pica, T., Kanagy, R., \& Falodun, J. (1993). Choosing and using tasks for second language instruction and research. In G. Crookes \& S. Gass (Eds.), Tasks and language learning: Integrating theory and practice (pp. 9-34). Clevedon, England: Multilingual Matters.
Poupore, G. (2008). Socio-affective dimensions of small group EFL tasks: Motivation, group dynamic, and the effect of task topic. Doctoral dissertation, University of Birmingham, Birmingham, England.
Prabhu, N. S. (1987). Second language pedagogy. Oxford: Oxford University Press.
Ramage, K. (1990). Motivational factors and persistence in foreign language study. Language Learning, 40(2), 189-219.
Reeve, J. (1997). Understanding motivation (2nd ed.). Forth Worth, TX: Harcourt Brace College Publishers.
Reim, B., Glass, D. C., \& Singer, J. E. (1971). Behavioral consequences of exposure to uncontrollable and unpredictable noise. Journal of Applied Social Psychology, 1(1), 44-56.
Richards, J. C., Schmidt, R., Kendricks, H., \& Kim, Y. (2002). Longman dictionary of language teaching \& applied linguistics (3rd ed.). London: Longman.
Robinson, P. (1995). Task complexity and second language narrative discourse. Language Learning, 45(1), 99-140.
Robinson, P. (2001a). Task complexity, cognitive resources, and syllabus design: A triadic framework for examining task influences on SLA. In P. Robinson (Ed.), Cognition and second language instruction (pp. 287-318). Cambridge, UK:

Cambridge University Press．
Robinson，P．（2001b）．Task complexity，task difficulty，and task production： Exploring interactions in a componential framework．Applied Linguistics，22（1）， 27－57．
Robinson，P．2007，September．Rethinking－for－speaking and L2 task demands：The cognition hypothesis，task classification and sequencing．Paper presented at the 2nd Biennial International Conference on Task－Based Language Teaching， 21 September 2007，Honolulu，HI．
Rowe，G．，Hirsh，J．B．，\＆Anderson，A．K．（2007）．Positive affect increases the breadth of attentional selection．Proceedings of the National Academy of Sciences， 104（1），383－388．
Ryan，R．M．，\＆Connel，J．P．（1989）．Perceived locus of causality and internalization： Examining reasons for acting in two domains．Journal of Personality and Social Psychology，57（5），749－761．
Ryan，R．M．，\＆Deci，E．L．（2000）．Self－determination theory and the facilitation of intrinsic motivation，social development，and well－being．American Psychologist， 55（1），68－78．
Ryan，R．M．，\＆Deci，E．L．（2002）．Overview of Self－Determination Theory：An organismic dialectical perspective．In E．L．Deci \＆R．M．Ryan（Eds．），Handbook of self－determination research（pp．3－33）．Rochester，NY：University of Rochester Press．
Samuda，V．，\＆Bygate，M．（2008）．Tasks in second language learning．New York： Palgrave MacMillan．
Schmidt，R．W．（1990）．The role of consciousness in second language learning． Applied Linguistics，11（2），129－158．
Schmidt，R．，\＆Frota，S．（1986）．Developing basic conversational ability in a second language：A case study of an adult learner of Portuguese．In R．Day（Ed．）， Talking to learn：Conversation in second language acquisition（pp．237－326）． Rowley，MA：Newbury House．
Sethi，S．（1997）．Choice and its discontents：A new look at the role of choice in intrinsic motivation．Unpublished Doctoral Dissertation，Stanford University．
Simpson，J．A．，\＆Weiner，E．S．C．（1989）．The Oxford English Dictionary（Vol．17， pp．655－656）．Oxford：Oxford University Press．
Skehan，P．（1995）．Analysability，accessibility，and ability for use．In G．Cook \＆B． Seidlhofer（Eds．），Principle and practice in applied linguistics：Studies in honor of H．G．Widdowson（pp．91－106）．Oxford：Oxford University Press．
Skehan，P．（1996）．A framework for the implementation of task－based instruction． Applied Linguistics，17（1），38－62．
Skehan，P．（1998）．A cognitive approach to language learning．Oxford：Oxford University Press．
Skehan，P．（2001）．Tasks and language performance assessments．In M．Bygate \＆ P．Skehan \＆M．Swain（Eds．），Researching pedagogic tasks：Second language learning，teaching and testing（pp．167－185）．Harlow，UK：Longman．
Skehan，P．（2003a）．Focus on forms，tasks，and technology．Computer Assisted

Language Teaching, 16(5), 391-411.
Skehan, P. (2003b). Task-based instruction. Language Teaching, 36, 1-14.
Skehan, P. (2007, September). Tradeoff and Cognition: Two hypotheses regarding attention during task-based performance. Paper presented at the International Conference on Task-Based Language Teaching, Honolulu, HI.
Skehan, P., \& Foster, P. (1997). Task type and task processing conditions as influences on foreign language performance. Language Teaching Research, 1(3), 185-211.
Skehan, P., \& Foster, P. (1999). The influence of task structure and processing conditions on narrative retellings. Language Learning, 49(1), 93-120.
Skehan, P., \& Foster, P. (2001). Cognition and tasks. In P. Robinson (Ed.), Cognition and second language instruction (pp. 183-205). Cambridge: Cambridge University Press.
Skehan, P., \& Foster, P. (2005). Strategic and on-line planning: The influence of surprise information and task time on second language performance. In R. Ellis (Ed.), Planning and task performance in a second language (pp. 193-216). Amsterdam: John Bejamins.
Stotland, E., \& Blumenthal, A. L. (1964). The reduction of anxiety as a result of the expectation of making a choice. Canadian Journal of Psychology, 18(2), 139145.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass \& C. Madden (Eds.), Input in second language acquisition (pp. 235-253). Cambridge, MA: Newbury House.
Swain, M. (1995). Three functions of output in second language learning. In G. Cook \& B. Seidlhofer (Eds.), Principle and practice in applied linguistics: Studies in honor of H. G. Widdowson (pp. 125-144). Oxford: Oxford University Press.
Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), Sociocultural theory and second language learning (pp. 97-114). Oxford: Oxford University Press.
Takashima, H. (2000). Jissenteki komyunike-shonnoryoku no tame no Eigo no tasukukatsudo to bunposhido [Structure-based tasks and grammar instruction for practical communicative competence]. Tokyo: Taishukan.
Tanaka, K., \& Yamaguchi, H. (2000). Influence of autonomy on perceived control beliefs and self-regulated learning in Japanese undergraduate students. North American Journal of Psychology, 2(2), 255-272.
Thurman, J. (2008). The interaction of topic choice and task-type in the EFL classroom. (Doctoral dissertation, Temple University, Philadelphia).
Thurman, J. (2009). The effect of choice upon task affect and task output. Bulletin of Hyogo University of Education, 34, 77-90.
Thurman, J. (2010). The Influence of Choice on Lexical Complexity in TBLT. In R. M. Millar \& M. Durham (Eds.), Applied Linguistics, Global and Local: Proceedings of the 43rd Annual Meeting of the British Association for Applied Linguistics 9-11 September 2010 (pp. 325-338). London, UK: Scitsiugnil Press.

Thurman J．（2013）Choice and Its Influence on Intrinsic Motivation and Output in Task－Based Language Teaching，The Asian EFL Journal Quarterly，15（1），202－ 245.

Tremblay，P．F．，\＆Gardner，R．C．（1995）．Expanding the motivation construct in language learning．The Modern Language Journal，79（4），505－520．
Ur，P．（1981）．Discussions that work：Task－centered fluency practice．Cambridge： Cambridge University Press．
Ushioda，E．（1996）．Learner autonomy 5：The role of motivation．Dublin：Authentik Language Learning Resources，Ltd．
Ushioda，E．（1997）．The role of motivational thinking in autonomous language learning．In D．Little \＆B．Voss（Eds．），Language centres：Planning for the new millennium（pp．38－50）．Dresden：CERCLES．
Ushioda，E．（2004，June）．Motivation，autonomy and sociocultural theory．Paper presented at the Autonomy and Language Learning：Maintaining Control，Hong Kong and Hangzhou，China．
Vallerand，R．J．，Pelletier，L．G．，Blias，M．R．，Brière，N．M．，Senécal，C．，\＆Vallières， E．F．（1992）．The academic motivation scale：A measure of intrinsic，extrinsic and amotivation in education．Educational and Psychological Measurement，52， 1003－1017．
Van Ek，J．A．，\＆Alexander，L．G．（1975）．Threshold level English．Oxford：Pergamon Press．
Van Ek，J．A．，\＆Alexander，L．G．（1976）．The threshold level for modern language learning in schools．London：Longman．
White，R．W．（1959）．Motivation reconsidered：The concept of competence． Psychological Review，66（5），297－333．
Wilkins，D．A．（1976）．Notional syllabuses．Oxford，England：Oxford University Press．
Willis，J．（1996）．A framework for task－based learning．Harlow，England：Longman．
Willis，J．（2004）．Perspectives on task－based instruction：Understanding our practices，acknowledging different practitioners．In B．L．Leaver \＆J．Willis （Eds．），Task－based instruction in foreign language education（pp．3－44）． Washington，D．C．：Georgetown University Press．
Yamada，F．（1999）．Task－based instruction in second language learning：An experimental study focusing on the progressive form．Unpublished Master＇s Thesis，Hyogo University of Education，Yashiro，Japan．
Yashima，T．（2002）．Willingness to communicate in a second language：The Japanese EFL context．The Modern Language Journal，86（1），54－66．
Zimbardo，P．G．，Weisenberg，M．，Firestone，I．，\＆Levy，B．（1965）．Communicator effectiveness in producing public conformity and private attitude change． Journal of Personality，33，233－255．
Zuckerman，M．，Porac，J．，Lathin，D．，Smith，R．，\＆Deci，E．L．（1978）．On the importance of self－determination for intrinsically－motivated behavior． Personality and Social Psychology Bulletin，4（3），443－446．

## APPENDIX A



Left-Hand Student, page 1 Your partner has some people in the picture below missing. Please tell your partner where the people are.

Thank You

Right-Hand Student, page :
Please put the number of the missing place where the small pictures on the right should go in the big picture. Thank You


The Descriptive Task with No Choice of Topic; First Round. Left Student (top) and Right Student (bottom)

## APPENDIX B

## Right－Hand Student，page 1

Your partner has some people in the picture below missing．Please tell your partner where the people are．

Thank You


RenalwipuetA

\＃ $\qquad$ \＃ $\qquad$

\＃

\＃

$\qquad$


Left－Hand Student，page 1
Please put the number of the missing place where the small pictures at the top of the page should go in the big picture．
Thank You
The Descriptive Task with No Choice of Topic；Second Round．Right Student （top）and Left Student（bottom）

## APPEDIX C

Please write your name for the picture you chose


Letalust，
 in wiscrewtion等 swe willy putimectiow Thed los

1．名前 $\qquad$


2．名前

Tetiknt， Batiat per： Dispuraer as wospory
 Howevel you pution ublar Thastion

Leflitiand
Stadent，joger
Your partmer
Ynet parther
a wine pogig
in thepiture
pelow minaing
News tall yue
puitner whier
In jeople are．
名前
Theni Mive
Please write your name for the picture you chose

Your partner has some people in the pisture below missing．Please tell your partner where the people are．

2．名前

Right－Hand Student．page 1
Your partner has some people in the picture below missing．Please tell your partner where the people are．

Thank You


3．名前

The Descriptive Task with Limited Choice of Topic；First Round（top）and Second Round（bottom）．

## APPEDIX D

Please help your partner put the story below in correct order．Please use English as much as you can！


Please help your partner put the story below in correct order．Please use English as much as you can！
（1）

（5）



The Narrative Task with No Choice of Topic；First Round（top）and Second Round（bottom）

## APPENDIX E


（1）

（2）

（3）

（4）

（5）

Please write your name for the story you chose

2．名前


名前


Narrative Task with Limited Choice of Topic；First Round（top）and Second Round（bottom）．

## APPENDIX F

Procedures Diagram


Note：Asterisks（＊）indicate from what student the data for Study 1 was taken from after what task．


[^0]:    1 Otaru University of Commerce
    2 Sapporo Keihoku Shogyo High School
    This work was supported by JSPS KAKENHI Grant Number JP24520600

