

國立政治大學英國語文學系碩士在職專班碩士論文

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考試導向的學習情境下試題預覽學習單對提升國中生
英語學習動機與學習成就之效益

The Effect of the Test-question Preview Worksheets on Promoting
Junior High School Students' English Learning Motivation and
English Achievement in a Test-oriented Learning Context

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國立政治大學英國語文學系碩士在職專班

碩士論文提要

論文名稱：考試導向的學習情境下試題預覽學習單對提升國中生英語學習動機與學習成就之效益

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論文提要內容：

動機雖被認為影響第二語言及外語學習的因素之一，然而如何在考試導向的學習環境下提升學生內在或自主性英語學習動機的相關研究並不多。本研究依據自我決定理論(the self-determination theory)來設計學習單，用以輔助學生學習學校的一般英語課程，來探討自我決定理論在現行教育環境下使用的效益。此外，學習單的使用是否能幫助學生的成就表現優於其他學生也一併研究。

參與本研究的對象為台灣北部一所公立國中八年級兩個班的六十位學生。這兩個班級有相似的社會背景及英語成就表現，並隨機被指定為實驗組與控制組。實驗組可在考試前預覽印在學習單上的試題，而控制組則直接參與考試。本實驗歷時七週，蒐集資料的工具包含問卷、學習單和該學校所舉辦的英語成就測驗(英語段考)。研究方法含量化及質性分析，主要探討學習單對學生的三個英語學習動機元素(autonomy, competence and relatedness)及英語成就表現的影響。

研究結果顯示高成就學生的主動性(autonomy)及中等成就學生的主動性(autonomy)、自我感知的英語能力(perceived competence)以及與同儕、老師間的

相關性(relatedness)有提升。然而，低成就學生的三個英語學習動機元素則下降。另外，實驗組在該學校所舉辦的英語成就測驗的表現和對照組相比並無明顯差異。本研究最後對使用學習單提升學生內在或自主性學習動機在實際教學上的應用提供建議，以作為參考。



ABSTRACT

Although motivation has been viewed as an important factor that affects second and foreign language acquisition, there isn't much research investigating how to promote students' intrinsic or more self-regulated motivation to learn English in test-oriented classroom settings. This study explores this area by complementing students' regular English classes at school with the worksheets designed based on the self-determination theory. Furthermore, it also investigates whether students with the aid of the worksheets would outperform those not using the worksheets academically.

For this research purpose, two classes of 60 eighth-graders in a public junior high school in northern Taiwan took part in this study. The two classes with similar social background and English academic performances were randomly classified into an experimental group and a control group. The experimental group was given a chance to preview the test questions which were printed on the worksheets distributed to them as the complementary material before the tests. The control group, on the other hand, was given the tests directly without the chance to preview the test questions. The experiment lasted for seven weeks, and the data were collected through three instruments, a questionnaire, the worksheets, and a school administered-achievement test. Both quantitative and qualitative research methods were adopted to probe into the influence of the worksheets upon the participants' three motivational components, namely autonomy, competence, and relatedness as well as their academic performance on the achievement test.

The study results indicate that the worksheets could help promote the high achievers' autonomy and the middle achievers' autonomy, competence perception and

relatedness, but they did not exert positive effects on the low achievers. Furthermore, the experimental group didn't outperform the control group on the school-administered achievement test. Some pedagogical implications were presented at the end of the thesis.



CHAPTER ONE

INTRODUCTION

Background and Motivation

English has long been considered important and taught as a requisite subject matter in Taiwan's compulsory education due to its popularity among international languages. However, students' English learning outcomes in junior high schools are usually evaluated by tests and exams, serving as the preparation for the upcoming English test in the Basic Competence Test for Junior High School Students, a formal senior high school entrance examination held by the Ministry of Education (MOE) in Taiwan. Although a 12-year compulsory education program has been initiated by MOE, and it is expected that, in 2014, 75% of junior high school students can enter senior high schools without an entrance examination, there is still going to be a formal exam used to classify junior high school students into at least three academic achievement levels. The higher levels students can achieve, the better chance they will get to enter a small number of prestigious senior high schools. Therefore, it is still questionable whether the new compulsory education program can truly release students' heavy test pressure in the future.

In the present test-oriented learning environment in Taiwan, junior high school students are usually passive learners, studying English mainly for better test scores or to outperform their peers instead of valuing what they are learning. Thus, their English learning motivation is low or only triggered by externally-controlling events, like school tests or entrance exams. When the pressure derived from tests is absent, they tend to stop their pursuit of English proficiency because there are no external stimuli pushing them forward. Therefore, it is necessary for students to "value learning, achievement, and accomplishment even with respect to topics and activity they do not find interesting" so that they could be more active in learning (Deci, Vallerand, Pelletier & Ryan, 1991,

p.338). In other words, enhancing the level of self-control in students' learning motivation may release them from the external control of the tests and exams. According to self-determination theory (Deci & Ryan, 1985), if students can gain support for three innate needs, autonomy, competence and relatedness, from their learning environment, their intrinsic motivation for learning could be promoted. Take autonomy support for example, teachers can help students focus on their learning process rather than on how many points they get on tests (Brown, 2001). Thus, students can develop their desire and willingness to pay more effort and persist in their English acquisition. Many other studies have also demonstrated that more self-determined motivation could improve students' academic performances (Deci & Ryan, 1985; Gardner, 1985; Pintrich & De Groot, 1990).

Although it is acknowledged that autonomous forms of motivation could help students become active learners free from the control and pressure of tests, high school teachers have little ideas about practical ways to help students promote such kind of motivation for learning English in the test-oriented and competitive junior high school classrooms in Taiwan. This situation coincides with the dilemma Brophy (2010) have described:

The motivational challenge facing teachers is to find ways to encourage their students to seek to develop the knowledge and skills that learning activities were designed to develop, whether or not they enjoy the activities or would choose to engage in them if other alternatives were available. (p.xii)

Therefore, the present study ventures to motivate the junior high school students who learn English in test-oriented classroom settings by designing worksheets to support their autonomy, competence perception and relatedness.

Purpose of the Study

The study firstly aims to explore whether junior high school students in a test-oriented learning context would promote more self-regulated motivation for learning English with the aid of the test-question preview worksheets. This study investigates how different levels of students (i.e. high, middle and low achievers) are affected by the worksheets, and which aspects of their English learning motivation would be improved. Secondly, the researcher intends to know whether the students who use the worksheets demonstrate better academic performances than those not using the worksheets. The purposes can be briefly stated in the following two questions:

1. Is students' English learning motivation promoted after the use of the test-question preview worksheets in a test-oriented learning environment?
2. Do the students using the test-question preview worksheets outperform those not using the worksheets on a school-administered English achievement test?



CHAPTER TWO

LITERATURE REVIEW

This chapter offers a general review of three traditional perspectives on motivation, and the prominent motivational theories under those perspectives. In addition, the comparison among those theories is also mentioned.

Motivation

Motivation is a psychological construct used to account for the need and purpose(s) of behavior as well as the quality, intensity, and persistence of the behavior (Maehr & Meyer, 1997). Three motivational concepts underlying this mental construct are motives, goals and strategies. According to Thrash and Elliot (2001), motives are general needs or desires that offer people momentum to perform particular actions, but goals and strategies are relatively specific. They are used to describe the immediate objectives of a course of actions (i.e. goals) and the means adopted to realize the goals and satisfy the motives (i.e. strategies). Take the general need for water for example. A person reacts to the feeling of thirst (the need for water) by purchasing a drink in a convenience store (strategy) to quench that discomfort (goal). Much research has investigated into humans' motivation for conducting behavior from different perspectives, and several prominent motivational theories were thus developed. The evolvement of the motivational theories can be seen from three traditional perspectives on motivation.

Three Traditional Perspectives on Motivation

Motivation is interpreted differently from behavioral, cognitive and constructivist perspectives. In the view of behaviorists, behavior is contingent on its consequences (Thorndike, 1898). If the consequences are desirable, the behavior that brings about such

consequences is more likely to be performed. Grounded on this theoretical base, Skinner (1974) proposed behavior reinforcement theory in which by manipulating consequences into reinforcers, like external rewards, or punishments, certain behavior or a sequence of actions would be increased, maintained or decreased. In other words, the outer forces, such as rewards and punishments, serving as an external control, could motivate people to carry out certain actions passively. Skinner further expanded behavior reinforcement theory by introducing the concept of stimulus control in which irrelevant external cues, like ringing sounds, could serve as signals that stimulate people to conduct certain reinforced actions for getting anticipated reinforcers. Thus, motivation to behaviorists is interpreted as a kind of control rather than mental power.

Behavior reinforcement theory is widely applied in classroom settings nowadays, but the effectiveness of the applications is often questionable. The approaches adopting the behavioral view are known as carrot-and-stick approaches which suggest teachers to reinforce students when they perform desired behavior and to take away the positive reinforcers or give punishments when they fail to perform it (Schloss & Smith, 1994). For example, many token economies, systematical ways of behavior shaping, have been developed by classroom teachers to improve or modify students' social or learning behaviors. When students perform the target actions or improve their behavior to a certain degree, they are rewarded with tokens, such as money or extra time for recreation.

Many studies have proved the effectiveness of token economies in classroom settings (Abramowitz & O'Leary, 1991; Kazdin, 1975; O'Leary, 1978; Williams, Williams, & McLaughlin, 1991). However, several researchers have cautioned that carrot-and-stick approaches, like token economies, might have detrimental effects on behavior modification and learning (Kazdin, 1988; Kazdin & Bootzin 1972; O'Leary & Drabman, 1971). They doubt whether the behaviors would continue when the token economies are no longer offered. In their studies, those encouraged actions or shaped

behaviors often decreased rapidly after the tokens were removed. Furthermore, Harter (1978) in his study has proposed that extrinsic rewards might urge students to choose less challenging tasks because by doing so, it would be easier for them to get the rewards. Eisenberger (1992) has warned that teachers might accidentally foster students' low levels of efforts to achieve a task because it is difficult for teachers to assess how much effort a student should exert on a task is adequate, especially in a large class. Kohn (1993) also claimed that there would be a lasting negative influence on students' motivation to learn if students rely too much on tangible rewards or punishments to perform achievement behavior. For example, praise may interfere with students' intrinsic motivation to learn for it changes students' focus from enjoying learning to winning praise from others.

From cognitive perspective, motivation to perform behavior (or a course of actions) is not entirely controlled by external contingencies. Instead, it's mainly influenced by individual intentions, thoughts and subjective experiences. Cognitive theorists believe that reinforcement could only be effective when external contingencies are responsive to needs, personally valued and considered achievable. Need theory was thus developed to alternate reinforcement theory. In the theory, motivation is derived from individual felt needs, which may be innate, universal or developed through personal experiences, and is self-determined. Thus, people make their own choices about which felt needs to fulfill and how much effort to make for satisfying them. Ausubel (1968), in his drive theory, proposed that human beings have six inherent needs, which are the needs for exploration, manipulation, activity, stimulation, knowledge, and ego enhancement. They give people the driving force, namely motivation, to initiate certain behaviors to meet those inner needs.

The belief of motivation as an internal individual force is not comprehensive from the constructivists' point of view due to its absence of the influence of the social context on human motivation. To be more complete, need theory would have to be expanded to

take social factors into consideration. One of the famous need theories reflecting this point is Maslow's (1970) hierarchy of human needs. He suggested that human beings have a system of needs arranged in a hierarchy from physiological needs as the bottom through safety needs, love needs and esteem needs, and self-actualization as the top. Among them, some needs are interacted with the society, like the need for belongingness in love needs. This expanded view of human needs is more comprehensive to elaborate the conception of motivation for it concerns not only the innate needs and personal choices of which needs to fill, but also the interaction between the needs and the social contexts.

Since constructivist perspective, concerning the influence of both cognitive and social factors on motivation, is more complete than behavioral and cognitive perspectives, the following sections would focus on introducing and comparing other motivational theories under the constructivist framework.

The Motivational Theories Based on Constructivist Perspective

This section introduces and compares five well-known motivational theories that are all developed from constructivist perspective. They are goal theory, self-efficacy theory, expectancy-value theory, attribution theory and self-determination theory.

Goal Theory

Compared with behavior reinforcement theory and need theory, which focus on human reactions toward either external contingencies or internal needs, goal theory emphasizes more on people's proactive tendency to determine the reasons for performing certain behavior and the ways to perform it. People carrying different purposes may develop different goals. When applied in education, goal theory is often related to the distinction between learning goals and performance goals (Ames, 1992; Ames & Archer,

1988; Dweck & Leggett, 1988). Learning goals may be derived from students' interest in the activities, identified values consistent with the objectives of the activities or awareness of the utility of the knowledge or skills the activities aim to teach. Thus, students who bear learning goals in mind place stress upon acquiring knowledge and skills when undertaking activities. To reach their learning goals, they would adopt deep processing strategies, such as comprehending the learning contents by paraphrasing them in their own words and associating their newly-learned knowledge and skills with prior ones (Meece, Blumenfeld, & Hoyle, 1988). When encountering difficulties, they are prone to maintain their efforts and look for appropriate problem-solving strategies to overcome the obstacles (Dweck, 1986).

In contrast, students who emphasize on enhancing and protecting their self-perceptions and social reputation often set performance goals (Butler, 1992). They participate in the activities mainly for displaying their ability and intelligence or preventing themselves from being considered incompetent. In order to reach performance goals, they tend to adopt surface-processing strategies, such as memorizing the learning contents, to meet the basic demands of the activities more easily and effectively (Meece, Blumenfeld, & Hoyle, 1988). If allowed to choose tasks, unlike learning-oriented students, they would avoid challenging tasks because they couldn't afford the risk of failure (Ames & Archer, 1988; Elliott & Dweck, 1988; Smiley & Dweck, 1994). For performance-oriented students, failure often indicates low ability, and it impairs students' self-perceptions and social approval. Therefore, they would strive to shun away from such situations as much as possible. However, when confronting unavoidable difficulties, performance-oriented learners would be more likely to be affected by their fear of failure and reduce their efforts exerted on the tasks. They may easily give up or conceal their incompetence by taking self-defeating strategies, like not studying much or leaving the answer sheets blank (Dweck, 1986).

Much research has proposed that learning goals would be more beneficial than performance goals in classroom settings because students with learning goals focus on developing ability rather than displaying ability or worrying about failure (Dweck, 1986; Kaplan & Maehr, 2007; Linnenbrink & Pintrich, 2002; Wolters, 2004). However, other studies have found that performance goals which emphasize on achieving success (also called performance-approach goals) could complement learning goals (Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000; Valle et al., 2003). Learning goals have been found correlated with some desirable learning features, like interest in school materials and activities, deep processing strategies, long-term retention of learned knowledge and skills, and future involvement in relevant learning fields. Nevertheless, they place less stress upon short-term achievement performance evaluated based on the criteria set by teachers or schools. This could be complemented by performance-approach goals. Thus, a multiple-goal perspective is developed and supported by some goal theorists for it combines the merits of learning goals and performance-approach goals (Entwistle & Tait, 1990; Senko & Harackiewicz, 2005; Senko & Miles, 2008).

Although such complement seems more complete and beneficial, Midgley, Kaplan, and Middleton (2001) cautioned that the negative effects of performance-approach goals couldn't be ignored. They may divert students' attention from learning to competition and orient students toward taking less challenging tasks to avoid failure. Even worse, if students consistently experienced failure, their performance goals might only focus on avoiding failure rather than achieving success. Shim, Ryan, and Anderson (2008) have advised that by modifying instruction or school curricula to increase students' value of the agenda set by teachers and schools, students with learning goals could improve their class performance. This is better than promoting students' performance-approach goals as a complement to their learning goals. For the long-term learning profit, learning goals are still more preferable than performance goals.

Goal theory places its attention on individuals' purposes for their goal-oriented behavior, the features of such behavior and the possible consequences of it. The next motivational theory, on the other hand, not only considers the purposes (i.e. value) but also the possibility of success or failure in reaching the purposes (i.e. expectancy).

Expectancy-value Theory

Expectancy-value theory is another prominent motivational theory developed from constructivist perspective. It especially concerns two motivational constructs, expectancy and value, which are believed to be able to predict achievement performance, persistence and choice. Atkinson (1957) proposed the first formal expectancy-value model. In the model, achievement-related behaviors are determined by two stable unconscious factors, motive for success and motive to avoid failure, and two situational conscious factors, expectations for success/failure and incentive values. Motives for success and to avoid failure are viewed as stable dispositions that unconsciously lead individuals either to engage in tasks for success or to evade tasks for avoiding failure in achievement contexts. Such tendencies are gradually formed in childhood according to the ways parents use to raise their children. If parents encourage children to make efforts to achieve success in achievement tasks and give them opportunities to apply their competence to reach the goals, motive for success would develop. On the contrary, if children are forced to perform well in tasks, or they will be punished, motive to avoid failure would be established.

Besides the two motives that influence individuals' tendency to approach or avoid an achievement-related activity, the other two situational conscious factors, expectancy beliefs and incentive values could also affect individuals' decisions to strive for success or avoid failure in an achievement situation. Expectancy beliefs are individual judgments of the possibility of success in achievement tasks and thus include expectations for success

and for failure. If people expect the chance for success in a task is high, they are more likely to approach it rather than avoid it. As for incentive values, they refer to the expectations of pride and shame and have an inverse relationship with expectations for success and failure. Atkinson postulated that people would experience greater pride if they succeed in an achievement task with a low possibility of success. On the other hand, greater shame would be experienced if people fail in an achievement task with a high possibility of success.

Though Atkinson's model provides a way to explain individuals' achievement-related behaviors, there are several problems in the model. First, the two unconscious factors, motive for success and motive to avoid failure, are hard to measure. Second, the inverse relationship between expectancy for success or failure and incentives values may be questionable. Some studies have presented that both factors are positively related and thus suggested that individuals value the tasks that they have great possibility to succeed (Eccles & Wigfield, 1995; Wigfield & Eccles, 1992). Third, the definition of incentive values is too narrow because the values are solely determined by the height of the expectancy for success without considering other possible factors, such as usefulness of the skills or knowledge an achievement task aims to develop. Wigfield and Eccles (1992) have expanded the definition in their expectancy-value model by proposing the concept of task values which contains four major components to illustrate the qualities of the achievement tasks. They are attainment value (the importance of the task), intrinsic value (the enjoyment of engaging in the task), utility value (usefulness of the task) and cost (the cost for doing the task).

In education, expectancy-value theory can also be applied to account for students' achievement-related behaviors in school activities. Hansen (1989) suggested four kinds of behaviors that could be found in students in accordance with their expectations and values. The behaviors include engaging, dissembling, evading and rejecting behaviors. First,

engaging behaviors often appear when students value the school activity and feel confident in achieving success. They would absorb themselves in acquiring the knowledge and skills when doing the activity and view unfamiliar parts as challenges and chances to develop their ability. Second, dissembling behaviors occur when students see value in the school task but are not confident of completing it successfully. In such a situation, students tend to protect their self-esteem by pretending they are capable of doing the task rather than develop their ability. They may make excuses or perform self-defeating actions, like exerting little effort on a task. Third, students show evading behaviors when they feel competent in achieving success in the school activity but have no reason to do it. Thus, in the process of completing the activity, they are easily absent-minded or distracted by things or activities they are more interested in, such as chatting with classmates. Last, rejecting behaviors could be found in the students who don't value the school activity as well as have a low success expectation. Such students are passive in doing the task and tend to give up completely even without an intention to pretend their efforts.

In short, based on expectancy-value theory, it is suggested that students could improve their achievement-related behaviors if they are assisted in appreciating the value of the school activities as well as in believing they are capable of achieving success.

The major focus in expectancy-value theory is on the two motivational constructs believed to influence individuals' motivation to conduct achievement-related behavior. The following motivational theory, self-efficacy theory, turns its attention on one motivational construct, self-efficacy, considered more influential than other factors in predicting individuals' motivation and achievement behavior.

Self-efficacy Theory

Self-efficacy is a psychological construct proposed by Bandura (1977). It refers to personally-perceived capabilities for reaching certain goals, or completing a task successfully. Much research has found that self-efficacy might be a powerful predictor of individuals' motivation, self-regulation behaviors (e.g. set goals, evaluate learning progress), and achievement (Multon, Brown, & Lent, 1991). With a high sense of self-efficacy, people tend to choose challenging tasks (Sexon & Tuckman, 1991), persist longer, use more cognitive and problem-solving strategies (Bandura, 1993), and involve in self-regulated learning (Pintrich & De Groot, 1990). These positive consequences would assist people in attaining their achievement outcomes (Zimmerman, 1995). The successful attainments would subsequently bring positive personal experiences that enhance self-efficacy and encourage people to make progress in the future. Therefore, self-efficacy is a relatively influential factor worth cultivating in achievement settings. Bandura (1997) suggested a set of ways to increase self-efficacy. They include (a) encouraging students to take optimal challenges through setting clear, achievable but challenging goals, (b) making sure students know how to deal with the challenging tasks by modeling or implying the useful strategies, (c) giving positive informative feedback that encourages students to approach success, and (d) helping students to recognize that their ability is progressing through taking the optimal challenges, investing effort and persisting in them. In the process of increasing students' perceptions of self-efficacy, students would simultaneously improve their motivation and engagement in school activities.

The sources of information that people obtain to judge their self-efficacy include actual performances, vicarious experiences, social persuasion and physiological arousal (Bandura, 1997). The information gained from actual performances, such as success and failure, is a more dependable source for judging self-efficacy because it comes from

direct personal experiences. Success or positive experiences tend to raise self-efficacy and failure or negative experiences often lower it. However, there might be some exceptions (Earley & Lituchy, 1991). For example, succeeding in an easy task or attributing the success to uncontrollable causes, like luck or others' help, wouldn't raise one's self-efficacy.

Vicarious experiences provide another source of information that helps people gauging their self-efficacy. Observing similar individuals succeed or fail in a task offers a clue for the observers to judge their capabilities for doing similar tasks (Schunk, 1995). If the similar others succeed, the observers tend to believe they can succeed in doing similar tasks as well. Nevertheless, the observers' self-efficacy may decrease if the task results don't correspond with their judgments of their own capacities. Though not as direct as actual performances, vicarious experiences would be more influential when people have little prior individual experiences with the tasks (Bandura, 1986).

Social persuasion given by important or credible people can also affect the judgment of self-efficacy. Positive social persuasion may increase self-efficacy while negative social persuasion may decrease it. However, positive social persuasion wouldn't exert its desirable effect unless it is realistic and trustworthy. Unlike empty praise, good positive social persuasion can provide solid information, such as persuaders' real experiences, to enhance people's beliefs in their own capacities and assure them that the goals they are to achieve are attainable. If the goals are subsequently successfully realized, the promoted feelings of self-efficacy would remain, but if not, self-efficacy beliefs would be weakened (Schunk, 1995).

The last source of information that influences one's sense of self-efficacy is physiological arousal. People tend to generate certain physiological and emotional reactions toward the action or task they are going to do. If the reactions are stress, anxiety, fear or negative thoughts, self-perception of efficacy would reduce. The lowered sense of

efficacy might in turn engender extra stress and anxiety which negatively affect the consequences of their actions or task performances. The poor consequences would reassure people that their efficacy is low when they are in similar conditions. Thus, the way to prevent the vicious circle is to improve people's physiological and emotional reactions before they engage in an action or a task.

Overestimating or underestimating one's self-efficacy might result in negative consequences. People who overestimate their capacities and then experience subsequent failure may lower their motivation to do similar tasks. On the other hand, underestimated self-efficacy might directly lower one's motivation to perform the task because people tend to choose the tasks that they think they are capable of handling and avoid the ones they feel too difficult for them (Bandura, 1993). Though relatively precise self-efficacy judgment seems more preferable, Bandura (1997) further contended that individuals would expend more effort and persist longer if their self-efficacy is slightly higher than what they can do, which echoes the support for providing optimal challenges to learners in many studies.

Though self-efficacy has been considered as a relatively influential factor that affects individuals' achievement-related behaviors, there are still many other factors that would also interfere with people's achievement actions (Bandura, 1997). For example, people with adequate self-efficacy may perform a task poorly if they don't value the task or expect positive outcomes. Schunk (1995) proposed that self-efficacy would show its effect on people's motivation more saliently when the influence of other factors, like value or outcome expectations, is reduced. In sum, it has been proved that self-efficacy plays an important role in determining motivational actions in achievement situations, but it wouldn't be comprehensive to describe individuals' motivational states if other factors are ignored.

Similar to self-efficacy theory that emphasizes one motivational construct, the next motivational theory, attribution theory, focuses on the motivational factor, to know the causes of success or failure in an achievement context. It is proposed that by knowing the reasons for the consequences of behavior, individuals' motivation for doing similar or relevant tasks in the future would be influenced (Weiner, 1992).

Attribution Theory

The concept of causal attribution was first introduced by Fritz Heider (1958) and elaborated by Bernard Weiner (1986). It is based on the belief that humans spontaneously look for the reasons for the consequences of their behaviors, especially when their behaviors are inconsistent with their expectations (Whitley & Frieze, 1985; Weiner, 1985, 1992). Such attributions may affect their future behaviors in similar situations. Hence, in achievement settings, attribution theorists tend to analyze three areas — the features of self-perceived causes, the factors that make individuals conclude certain attributions toward their success and failure, and the influence of such attributions on future performances. Based on the analyzed results, individuals' motivation to perform certain actions in achievement situations can be explained, and some motivational strategies aiming to promote motivational states are proposed accordingly.

Weiner's attribution theory (1992) also focuses on these three areas. It comprises three causal dimensions, attributional antecedents, and consequences of attributions. The three causal dimensions, namely locus, stability and controllability, are the underlying features of causes used to account for why certain causal attributions to success or failure are beneficial and others are detrimental to people's achievement motivation. First, locus pertains to the distinction between internal and external causes. Internal causes, such as ability and effort, are originated from individuals themselves while external causes, like luck or help from others, come from outside. Second, stability refers to the differentiation

between the causes constant in different situations and the ones varying with situations. Ability is often considered as a stable cause whereas effort, luck and others' help as unstable causes. Third, controllability is connected to whether the causes of outcomes are controllable or uncontrollable by individuals. For example, effort is a controllable cause, and ability is an uncontrollable cause.

Attributional antecedents, consisting of situational factors and individual differences, interfere with people's perceptions of their success and failure to reach certain causal attributions. Situational factors, like teachers' feedback and peers' consensus, are the ones whose antecedent information comes from contexts. Teachers may accidentally convey low ability cues in their feedback when showing sympathy to failing students, offering help when students don't need it, and giving praise for success in easy tasks (Graham, 1990). Sympathy from others is often associated with uncontrollable causes, like low ability, and thus implies the need of help. Therefore, showing sympathy to students who fail in a task or providing them with unsolicited help would produce indirect messages that the teacher thinks his/her students lack ability (Graham, 1984; Rudolph, Roesch, Greitemeyer, & Weiner, 2004). Since ability is stable and uncontrollable, students might reduce their effort to do similar tasks in the future because they believe nothing they can do to reverse the outcomes. Praise from teachers for students who succeed in easy tasks may also elicit the same causal attribution, lack of ability, because such praise implies that teachers don't think the easy tasks are easy for students (Barker & Graham, 1987). In addition, peers' consensus can also have the effect on causal attributions. For example, if everyone is given a good grade on a test, the cause of the success would be influenced by a consensus that the test result is derived from external uncontrollable causes, like an easy test, rather than internal causes, like effort or ability.

As for another type of attributional antecedents, individual differences, they often refer to a distinction between personal beliefs in entity theory of ability and incremental

theory of ability. Entity theorists hold that ability is an unchangeable fixed entity that wouldn't grow over time or with their exerted effort. Thus, they tend to worry about how much ability they have in a specific area. In contrast, incremental theorists view ability as an unstable modifiable trait that the more effort they invest the better ability they may develop (Dweck & Molden, 2005). Many attribution retraining studies have proposed that incremental theorists often achieve better academic performances than those who believe in entity theory of ability (Blackwell, Trzesniewski, & Dweck, 2007; Forsterling, 1985; Good, Aronson, & Inzlicht, 2003).

Consequences of attributions often concern the consequences of attributing achievement outcomes to effort or ability. Weiner (1992) has pointed out that success or failure in achievement situations is commonly attributed to two causes, ability and effort. Ability is often defined as an internal, stable and uncontrollable cause. On the other hand, effort is perceived as an internal, unstable and controllable cause. Attributing achievement outcomes to effort is generally considered more important than attributing the outcomes to ability (Weiner, 1994). Failure attributed to lack of effort indicates that if more effort is invested, there is still a good chance to succeed. This implication can lessen the threat of self-esteem and trigger more effort expended on the similar tasks in the future.

On the contrary, failure ascribed to low ability usually indicates that the possibility of succeeding in the similar tasks is low, because ability is considered to be stable and uncontrollable. Even worse, such low ability attributions may damage self-esteem. In order to protect self-esteem, individuals would take self-handicapping strategies, like playing all day before a test, to intentionally place obstacles in their achievement performances. By doing so, failure is more likely to be attributed to the causes other than low ability (Elliot & Church, 2003). When individuals have experienced a great deal of failure and attributed it to low ability, they tend to develop a sense of helplessness. In such vulnerable mental state, they would give up easily and refuse others' help when

encountering difficulties (Diener & Dweck, 1978; Licht & Dweck, 1984).

Furthermore, failure attributed to effort is associated with feelings of guilt while failure ascribed to ability is related to feelings of shame. Guilt tends to generate the inclination to increase effort, but shame often makes people desire to decrease effort or simply give up a task (Covington & Omelich, 1984; Weiner, 1992).

Success attributed to effort (or other controllable causes) is also more constructive than that attributed to ability (or other uncontrollable causes). Since effort is a controllable cause, individuals who make effort to attain success may have more confidence in achieving success in the future. However, attributing success performances to ability or other uncontrollable causes may reduce such confidence because being successful or not is not determined by their own effort that they can control (Diener & Dweck, 1980).

Teachers can follow the implications of attribution theory to promote students' motivation to learn and perform better at school. They can guide students to attribute success or failure to internal and controllable causes, like effort. When helping students, teachers can show the students how efforts work from their previous performances or design an achievable task for them as a proof of the importance of efforts (Brophy, 2010). Gradually, they would increase their self-esteem and become more willing to make effort and persist in a school task.

Attribution theory stresses upon one motivational construct, the perceived causes of success and failure, to elaborate its potential to influence motivation. The next motivational theory, self-determination theory, on the other hand, starts with three basic psychological needs, then directly focuses on motivation as a whole and classified it into different types of motivation in accordance with the degrees of internalization.

Self-determination Theory

Self-determination theory is based on an assumption that humans have an inherent propensity to learn about outer environment through developing the knowledge of it and assimilating social practices (Ryan, 1995). Such inherent tendency (also regarded as autonomous motivation, including intrinsic motivation) would grow and remain when three basic psychological needs, namely autonomy, competence and relatedness, are satisfied (Deci & Ryan, 1985). The satisfaction of the basic needs can motivate people to participate in social activities and to identify with the values or regulations from outer environment. With the continual support for the three needs, people would keep identifying themselves with the social values and regulations and get integrated into the context. The process of identification and integration is called internalization in the theory. (Deci & Ryan, 1985, 2000). On the contrary, if the three innate needs are thwarted, humans' natural tendency to learn and develop would be undermined. Thus, it has been suggested that if contexts can provide support for the three inherent needs, people can become more self-determined and intrinsically motivated to engage in the things they do (Deci, Vallerand, Pelletier & Ryan, 1991). In this regard, the three human innate needs could be perceived as three motivational components in self-determination theory.

Autonomy, one of the basic needs, means being self-directed in making choices or plans as well as in taking actions. Another need, competence, pertains to knowing how to attain the desired outcomes and feeling capable of performing requisite behaviors to achieve them. Finally, relatedness refers to building a sense of security and the satisfactory closeness with other people around in the society. Among the three components, the support for autonomy needs is considered more important for it also helps integrate the internalized social regulations and values into the sense of self (Deci, Eghrari, Patrick, & Leone, 1994, Ryan & Deci, 2006). Therefore, the satisfaction of autonomy needs is viewed as the prerequisite to intrinsic motivation. In education, much

research has also confirmed the positive effect of autonomy support on the promotion of students' intrinsic motivation to learn (Hardre et al., 2006; Reeve & Jang, 2006; Sheldon & Krieger, 2007; Williams & Deci, 1996).

According to the degrees of internalization, several types of motivation are proposed and placed along a continuum of relative autonomy to visually illustrate the difference among them and to imply the possibility of moving from one end to the other with the support of the three basic needs (Deci & Ryan, 1985). Many studies investigating the relationship among different forms of motivation have supported the concept of organizing motivation types along a continuum (Guay, Ratelle, & Chanal, 2008; Otis, Grouzet, & Pelletier, 2005). There are three major types of motivation, namely intrinsic motivation, extrinsic motivation and amotivation. Intrinsic motivation is an optimal form of internalization in that the regulations on an individual's behaviors are fully internalized and integrated into the sense of self. In this state, people have an interest in what they are doing and immerse themselves in the satisfaction and pleasure derived from the process of doing it. As for extrinsic motivation, it often appears when behavior is externally regulated. The effort people exert is to fulfill the demands of external events or personal valued goals, like winning an award, achieving a career, or assimilating into the target language community. On the other hand, amotivation is characterized as lack of motivation or intention to perform target behavior. People in the state of amotivation tend to escape from doing the required tasks because they see no value and have no interest in the tasks, and even if certain external rewards or punishments exist, such extrinsic motivators still fail to motivate them.

Judging from the extent of outer regulation or different degrees of internalization, self-determination theorists divide extrinsic motivation into four subtypes: external regulation, introjected regulation, identified regulation, and integrated regulation (Deci & Ryan, 1985). The first two subtypes with lower levels of internalization are viewed as

controlled motivation, and the last two, including intrinsic motivation, with higher levels of internalization as autonomous motivation. First, external regulation involves the least self-determination. People merely act to meet a certain demand or requirement. Second, introjected regulation represents a form of regulation which is partially internalized and serves as internalized demands placing pressure upon people. Under such mental pressure, they would unwillingly perform certain socially-expected behavior so as to gain social approval or protect self-esteem.

Third, identified regulation involves more self-determination than the former two types. People would develop identified regulation when they adopt the values or regulations of the target behavior as their own, but not feel them as an external or internal control. Thus, they would willingly perform behaviors so as to attain their personally-valued goals. Fourth, integrated regulation is an optimal form of internalization. It is thoroughly self-determined and would fully engage people in doing target activities. Such regulation is developed when people fully internalize and integrate the values and regulations of the target behaviors. Therefore, people perform the target behaviors naturally and spontaneously without the feelings of being controlled.

Solely striving for promoting students' intrinsic motivation is not realistic because in reality, not every school activity is interesting to students and able to create recreational enjoyment. Some of them are meaningful and worthwhile but not interesting to be engaged in for they are mainly designed to develop necessary knowledge and skills. Losier and Koestner (1999) suggested that the activities that are socially valued but not seem interesting necessarily, such as an election, would be done more successfully under identified regulation than with intrinsic motivation. Otis et al. (2005) studied a group of high school students' reasons for going to school from the eighth to tenth grade. The result showed that most of the students' reasons reflected identified regulation throughout three years, manifesting that the common reasons for going to school were not for fun

but for instrumental reasons, like accumulating necessary knowledge and skills to get good jobs in the future. Deci and Ryan (1985) further contended that if people's self-regulated motivation has been sufficiently promoted, external rewards may even be instrumental to developing intrinsic motivation. However, though extrinsic incentives may be more appropriate in certain circumstances and can complement motivational strategies to promote intrinsic motivation, most motivation theorists are still in favor of promoting intrinsic motivation, at least more self-determined forms of motivation. For example, Brown (2001) recommended more self-regulated motivation types, including intrinsic motivation, to learn a second or foreign language. Therefore, it is important for teachers to provide adequate support for the three basic psychological needs, namely autonomy, competence and relatedness, so that students can develop more self-determined motivation and even their intrinsic motivation to learn.

The Support for the Three Human Fundamental Needs in Education and Second/Foreign Language Learning

Many researchers, based on the self-determination theory, probed into the correlation between the three human innate needs (i.e. autonomy, competence and relatedness) and education, including second/foreign language acquisition. This section centers on reviewing the ways to support the three human fundamental needs based on relevant research findings in the field of education and second/foreign language learning.

Autonomy.

According to self-determination theory, autonomy is one of the three major factors promoting intrinsic motivation or more self-regulated forms of extrinsic motivation. Deci and Ryan (1985) proposed that when people feel free from pressure and control, like rewards and punishment, intrinsic motivation can truly function to initiate autonomous

behaviors. In general education, autonomy is characterized by being able to learn actively and independently (Wang & Peverly, 1986). In applied linguistics, Holec (1981) has a similar view on autonomy that learners can take responsibility for their own learning by deciding individual learning objectives, materials and the way in which their learning would proceed. Oxford and Shearin (1994) especially emphasized the importance of goal setting in second language learning motivation. They addressed that goals could function as effective motivators if they are specific, attainable, accepted by students and combined with positive and informative feedback concerning learning progress. Conclusively, an ideal autonomous learner often demonstrate the following learning traits: being aware of what they need, formulating appropriate learning goals, deciding suitable materials and ways to learn, initiating independent learning behaviors, adjusting their original goals, monitoring their learning process and evaluating their learning outcomes.

Moreover, autonomous learners tend to attribute their learning success or failure to effort rather than other uncontrollable reasons, like ability or luck; therefore, they are likely to persist in their learning when encountering obstacles (Child, 1994). This characteristic indicates that autonomous learners obtain greater control over their learning than those who don't view their success or failure as the result of their effort. Dornyei (1990) further pinpointed that foreign language learners often have plenty of failure experiences; thus, failure attributions are especially important in foreign language learning environment.

Besides the learning traits identified from autonomous learners, teachers also play an important role in promoting students' autonomy. Much research has proved that autonomy-supportive teachers could help students cultivate their autonomous motivation (Assor, Kaplan, Kanat-Maymon, & Roth, 2005; Guay, Boggiano, & Vallerand, 2001; Noels, Clement, & Pelletier, 1999; Reeve & Jane, 2006) and attain better achievement outcomes (Jane, 2008; Soenens & Vansteenkiste, 2005; Vansteenkiste et al., 2005). Several

studies have found that teachers' communication style, such as the ways of presenting learning tasks, could influence students' learning motivation (Dornyei, 1994; Williams & Burden, 1997). Deci et al. (1991) advised that teachers' manners (the style or language) of presenting external events, like feedback, grades, rewards, performance evaluation should be autonomous-supportive. By doing so, those external events can function as motivational techniques that help develop students' autonomy. Furthermore, they also encouraged teachers to become more autonomous-supportive rather than controlling by "offering choice, minimizing controls, acknowledging feelings, and making available information that is needed for decision making and for performing the target task" (Deci et al., 1991, p. 342). Reeve and Jane (2006) identified a number of autonomy-supportive teacher behaviors which were found correlated with students' autonomous motivation in classroom settings. They were listening to students, asking students what they need, giving time for students to learn in their own way, providing opportunities for students to talk, notifying students of the rationales behind classroom activities, instructions and suggestions, offering positive informative feedback to acknowledge students' progress and encourage students' effort, giving cues to students in need when they encounter difficulties, being responsive to students' feedback and questions, and understanding students' personal perspectives and feelings. In short, with teacher's autonomy support, students could enhance their self-determination and intrinsic motivation, encourage persistence in learning and even facilitate achievement (Deci & Ryan, 1985, Deci et al., 1991).

In sum, by developing learners' autonomous learning traits and providing learners an autonomous learning environment with teachers' support, the goal of promoting their intrinsic motivation or more self-determined forms of extrinsic motivation to learn is more likely to be realized.

Competence.

Regarding the definition of competence in self-determination theory, the need for competence involves being aware of the ways to attain the outcomes and also being efficacious in carrying out necessary actions to achieve them (Deci et al., 1991). In order to satisfy learners' need for competence and promote intrinsic motivation, it is important to provide them with the opportunities to perceive their own competence (Harter & Connell, 1984). Deci and Ryan (1985) suggested two possible ways that may contribute to individual perceived competence. They are providing positive informative feedback and accumulating success experiences.

Feedback from teachers or peers has certain effect on students' learning motivation. Generally, positive feedback is more preferable (Vallerand & Reid, 1988). If learners are immersed in the positive feedback about their learning behaviors or the praises that attribute success to effort, their self-regulated motivation for learning would be developed gradually. In addition, they may value and enjoy their learning more and maintain their momentum to learn even though there is no such feedback as reinforcement. Ryan (1982) also had similar findings that positive feedback administered in an autonomous way could help learners perceive their competence, maintain self-initiated learning behavior and thus increase learner's intrinsic motivation.

On the contrary, controlling feedback pertinent to social comparison is harmful to intrinsic motivation (Ames, 1992). It's because such feedback often turns students' attention from learning to competing with their classmates and peers, which often undermines students' interest in learning itself. Therefore, it's important to ensure positive feedback is given to acclaim and affirm learner's self-initiated effort and the competence gained from the effort, so that learners can value their learning and simultaneously become motivated to learn.

In terms of gaining success experience, Hunt (1966) suggested that optimal-challenging tasks, which are not overly difficult or easy to students, could help students generate interest and the feelings of competence, either of which is beneficial in promoting intrinsic or more self-regulated motivation. It may be due to that humans have a natural tendency to enjoy and get immersed in optimal challenges, and thus through the process of overcoming the challenges, their competence is developed as well (Elliot et al., 2000). Deci and Ryan (1985) also agreed to the employment of optimal challenges in learning contexts for students could perceive their competence from their success experiences in challenging but achievable tasks. In language learning, Oxford and Shearin (1994) also gave the same suggestion that teachers could provide more attainable and meaningful language tasks for students to experience success regularly so that their sense of self-efficacy could be built up. In short, assisting students in recognizing their own competence through positive autonomy-supportive feedback and optimal-challenging tasks can offer support for their competence needs and thus promote their intrinsic or more self-determined motivation.

Relatedness.

Relatedness is the third inherent need that contributes to the development of more self-regulated or intrinsic motivation (Deci & Ryan, 1985). It refers to the secure and satisfactory interpersonal involvement and social interaction with others in the society. When it comes to second and foreign language learning environments, relatedness usually involves the relationship with teachers and classmates. Gardner (1985) pointed out that students' attitudes toward their teachers may affect their motivation to learn and their learning results. It may be due to that students would engage in academic tasks more if their relationship with teachers is positive and secure, meaning that they feel being liked, understood, and helped when they are in need by their teachers (Skinner & Belmont,

1993). Teachers' involvement with their students would be reciprocally enhanced by students' increased engagement in school activities. In addition, through interacting with supportive teachers, students would cultivate their learning motivation intrinsically (Grolnick & Ryan, 1989; Noels et al., 1999). Thus, it is suggested that "the teacher should be a patient, encouraging person who supports students' learning efforts" (Good & Brophy, 1994, p. 215).

As for the interaction among students, cooperative learning and group cohesion are both relevant to relatedness needs. First of all, classroom cooperative learning is more effective in enhancing intrinsic motivation or more self-regulated learning behaviors than competitive or individualistic learning (Johnson & Johnson, 1994). The reason for it may be that cooperative learning could reduce learning anxiety and enhance personal devotion to learning tasks, positive learning attitude, and a close supportive relationship with teachers and peers.

Second, group cohesion is "the strength of the relationship linking the members to one another and to the group itself" (Forsyth, 1990, p. 10). Ehrman and Dornyei (1998) further stated that members in a good cohesive group completely accept each other and offer mutual support. In other words, a good cohesive group functions like a community and unites every member in it as a unit (Senior, 2002). This supportive and closely-connected relationship is found conducive to the promotion of second language motivation and thus considered as a significant motivational component in second language learning environment (Clement, Dornyei, & Noels, 1994; Dornyei 1994). In addition, it is proved that the higher the group cohesion is, the more production and better performance the group would give (Evans & Dion, 1991). Studies also discovered that good group performance is able to promote group cohesion, so both group performance and group cohesion can foster each other in a positive reciprocal relationship (Chang & Bordia, 2001). In conclusion, teachers' involvement with students, cooperative learning

environment and the quality of group cohesion are critical in terms of promoting learners' relatedness.

The present study selected the self-determination theory as the theoretical foundation for three reasons. First, the theory incorporates the implications of the other four motivational theories introduced in the literature review. The four theories respectively emphasize the importance of setting appropriate goals (goal theory), raising students' success expectancy and value in learning materials (expectancy-value theory), attributing success or failure to effort (attribution theory), and establishing an adequate sense of self-efficacy (self-efficacy theory). These theories are relevant to the support for autonomy and competence, two of the three human inherent needs proposed in the self-determination theory.

Second, the self-determination theory particularly stresses upon supplying support for relatedness, the third human inherent need. It states that building up a positive and supportive relationship among students and teachers fosters self-determined learning motivation (including intrinsic motivation).

Last, the self-determination theory seems more likely to offer solutions to the problem that Taiwanese students have: the lack of intrinsic or more self-determined learning motivation. The theory proposes the possibility of developing one's motivation from an extrinsic type to a more self-determined one by satisfying the three human inherent needs (Deci et al., 1991). This resonates with the purpose of the present study, which is to search for a practical way to promote students' intrinsic or more self-determined motivation to learn.

Learning Motivation Research in Taiwan

Motivation is considered as a vital factor that influences second/foreign language acquisition (Dornyei, 1990, 2001; Oxford & Shearin, 1994; Warden & Lin, 2000). In Taiwan, many studies have employed different teaching techniques in the hope of promoting students' motivation to learn English in EFL classroom settings. Among them, most aimed to see how students were motivated by using computer technology in language classes. (Fang, 2010; Lee, 2012; Wu, Yen & Marek, 2011; Yang, Gamble & Tang, 2012). The participants in the studies were often university students. Fang (2010) studied EFL university students' perceptions of the computer-assisted writing program, MyAccess. The results showed that most of the participants liked using the computer program as a writing tool. They felt the computer-mediated feedback helped them revise their essays and develop their writing skills, especially for form corrections. Wu, Yen and Marek (2011) tried to find out which elements of EFL learning through videoconferences could increase motivation, confidence and ability the most. The participants were 227 EFL university students. The results indicated that enjoyment derived from successful authentic interactions with English native speakers (or excellent speakers of English) on the topics interesting to students was the most fundamental factor that enhanced confidence, motivation and ability. In addition, Yang, Gamble and Tang (2012) investigated the effect of different online discussions on EFL learners' oral proficiency and motivation. Three types of online discussions, namely unstructured, structured without teacher's facilitation and structured with teacher's facilitation, were explored and compared. The participants were 90 EFL students from a university in Taiwan and were randomly assigned to three treatment groups. The results revealed that EFL learners' oral proficiency and motivation benefited more from structured online discussions with teacher's assistance than the other two types. Relative small number of research studies younger participants. Lee (2012) studied the effect of the storytelling technique supported

by PowerPoint designs and an online recording program, VoiceThread, upon the learning attitudes and motivation of EFL children with low academic performances. The study results were positive and encouraging.

Other studies focus on the techniques employed to increase students' English leaning motivation, and their participants were often university students, too. Chang (2010) explored the relationship between group cohesiveness and group norms with EFL learners' motivation. The participants were 152 university students in Taiwan. The results indicated that there was a slight to moderate correlation between the two elements and the students' motivation. Besides, several of the participants commented that a good learner class group was important to their learning, especially when associating with motivated classmates and the ones they could get along with. Besides investigating the influence of group structure upon students' learning motivation, some researchers studied the effect of using authentic material as a motivator upon English learning. Tsai (2012) adopted a novel as the main material to investigate the effect upon EFL university students' English leaning. The instruction was supported with various multimedia supplements, including the film on the novel, PowerPoint slides and relevant online texts. It was found that the participants' attitudes toward novel-reading, confidence and interest in reading novels, and perceived reading abilities were all improved. Moreover, Su (2010) studied whether literature instruction could motivate EFL university students. The study results revealed that the participants' learning motivation, language acquisition and literature knowledge were improved. In addition, they became more able to appreciate literary works.

Many English learning motivation studies in Taiwan involved computer technology and were often conducted in universities. The reason for adopting computer technology as an aid to motivate students to learn English may be that computer programs could provide learners with various language resources and flexible ways to learn English. Thus, an English instruction accompanied with computer technology could better meet students'

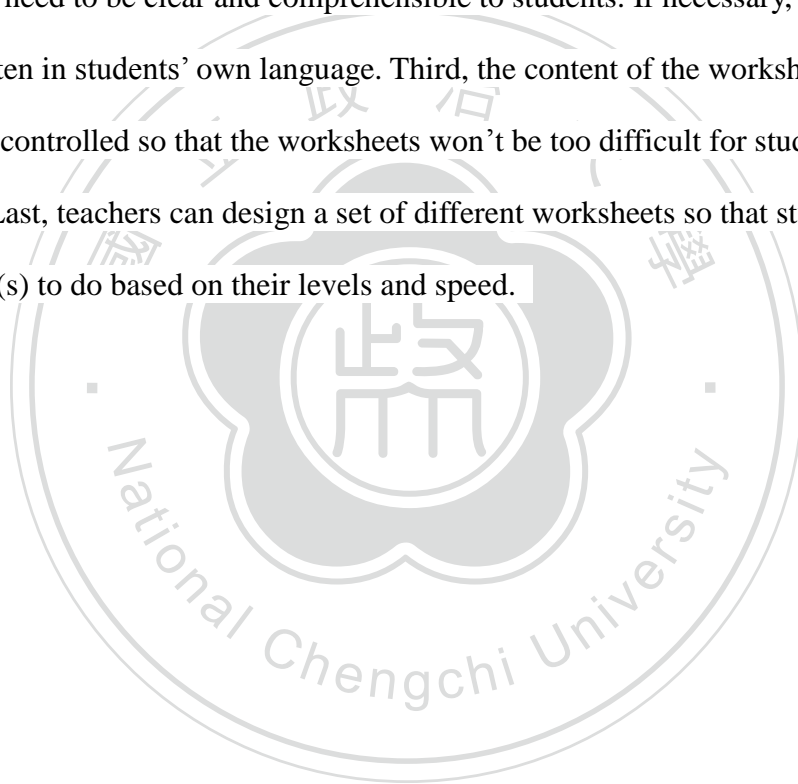
learning needs and motivate them to learn. However, this kind of instruction is more popular in the universities than the junior high schools in Taiwan because the curricula, course schedules, materials and assessments of English courses in the universities are more flexible. The feature of flexibility makes motivation research proceed more smoothly without practical barriers. On the contrary, the junior high schools in Taiwan have a united and fixed curriculum that pressures teachers and students to follow and requires students to absorb a certain amount of prescribed learning material within a semester. Besides, the Taiwanese junior high school students study English in a test-oriented environment. They have three periodical school-administered English achievement tests every semester and numerous in-class quizzes. In addition, they are required to take a formal English exam in Comprehensive Assessment Program held by the Ministry of Education in Taiwan before graduation. Thus, their motivation to learn are often underdeveloped or only triggered by external stimuli, like getting good grades or praise from others. In such a learning situation, a practical teaching/learning method that could help students promote self-determined motivation to learn is relatively not easy to find, and therefore the relevant studies are few. The present research attempted to fill the gap by designing test-question preview worksheets based on self-determination theory to lessen students' test pressure, transfer their attention from grades to learning, and enhance their learning motivation.

Worksheets Used in English Classes

Worksheets are generally defined as the sheets of paper containing written or typed exercises (Doff, 1988). They are distributed to the class and may be collected when the lesson ends so that they could be used again. Doff (1988) introduced several purposes of using worksheets in English classes. First, worksheets can provide additional exercises when the textbook doesn't offer enough exercises for students to practice. Teachers can

also adapt the exercises from the textbook so as to meet the needs of their students better. Some supplementary learning materials other than the textbook can also be given to students in the form of worksheets. Last, if there aren't textbooks for all the students, worksheets could serve as students' textbooks.

Furthermore, Doff (1988) gave suggestions for designing worksheets used in English classes. First, teachers need to make sure there are enough copies of worksheets for their students so that they can do activities at the same time. Second, the instructions on the worksheets need to be clear and comprehensible to students. If necessary, the instructions can be written in students' own language. Third, the content of the worksheets can be simple and controlled so that the worksheets won't be too difficult for students to complete. Last, teachers can design a set of different worksheets so that students can choose one(s) to do based on their levels and speed.



CHAPTER THREE

METHODOLOGY

This chapter specifies the participants, instruments and procedure of the empirical study, aiming to discover the influence of the test-question preview worksheets on junior high school students' English learning motivation and on their performance of English achievement tests.

Participants

The participants in the study were two classes of eighth-grade students of the same size (30 students, 17 boys and 13 girls, in each class) from a public junior high school in Taoyuan City in Taiwan. They were all native speakers of Chinese and had similar social and educational background. Before the experiment, they all had received formal English training for at least 6 years, and none of them had lived overseas before. In addition, both classes' overall English academic performances were found similar by comparing the sum of the scores gained from their previous school-administered English achievement tests with the independent-samples t-test.

With the similar background and English academic performances, both classes were randomly assigned as an experimental group and a control group. Furthermore, the participants in each group were stratified into three subgroups (i.e. high, middle and low groups) according to their mean scores of the previous school-administered English achievement tests. Based on the concept of discrimination indices, in norm-referenced testing, dividing the whole test candidates into high, middle and low groups with the percentage, 27%, 46% and 27%, to do item discrimination analysis is more likely to get higher reliability of discrimination indices when the candidates' scores are in normal distribution (Wu, 2009). The first 27% of the whole participants in each group (i.e. the

experimental and control groups) were labeled as the members of the high group, the next 46% the middle group, and the last 27% the low group. Thus, the experimental group and the control group had 8 members in the high group, 14 in the middle group, and 8 in the low group.

Instruments

The instruments implemented in this study comprised (1) test-question preview worksheets (See Appendix A), (2) an English learning motivation questionnaire (See Appendix B), and (3) a school-administered English achievement test (See Appendix C). The achievement test was composed by the English teachers in the public junior high school where the participants were studying. The other two instruments, the worksheets and the questionnaire, were both designed based on the self-determination theory (Deci & Ryan, 1985).

The Principles for Designing the Test-question Preview Worksheets and English Learning Motivation Questionnaire

According to the self-determination theory (Deci & Ryan, 1985), the satisfaction of the three fundamental psychological needs, competence¹, autonomy and relatedness, can promote intrinsic or more self-regulated motivation. In order to enhance the participants' English learning motivation, several test-question preview worksheets were designed to provide support for the three basic needs. In addition, an English learning motivation questionnaire was devised for evaluating whether the participants' competence perception, autonomy for learning English and relatedness with their classmates and the teacher were promoted after the use of the worksheets. Both instruments were developed based on the six principles drawn from previous research findings and suggestions about the ways of

¹ The present study focuses on promoting the participants' competence perception.

satisfying the three psychological needs. The principles are explained below.

There were two principles adopted to support students' competence perception. The first principle was providing optimal challenges (Principle 1). Such challenges could offer chances for students to evaluate their competence, accumulate success experiences, and have a sense of achievement (Deci & Ryan, 1985; Hunt, 1966; Oxford & Shearin, 1994). The second principle was giving positive informative feedback (Principle 2). The feedback could help students increase their confidence in their own competence (Deci & Ryan, 1985; Vallerand & Reid, 1988).

As for autonomy support, three principles were employed in the design of the worksheets and the questionnaire. The first principle was removing (or lessening) test pressure (Principle 3). Learners with too much focus on tests and performances may feel pressured and become anxious in their learning (Deci & Ryan, 1985). In order to help the participants focus more on their learning, it was necessary to reduce the anxiety. The second principle was offering the participants opportunities to take responsibility for learning (Principle 4). It has been suggested that teachers should be aware of autonomous learners' traits and design activities that encourage students to cultivate such traits, like setting individual goals, deciding the ways to learn, and evaluating their learning (Holec, 1981; Oxford & Shearin, 1994; Wang & Peverly, 1986). Furthermore, leading students to attribute their success to effort and failure to insufficient effort is also an autonomous learner trait that could be developed (Child, 1994; Dornyei, 1990). The third principle for promoting autonomous learning was to respond to the participants' questions and comments and to acknowledge their experiences and perspectives (Principle 5). It was adopted from a set of the autonomy-supportive teacher behaviors that have been identified and found correlated with students' autonomy for learning (Reeve & Jang, 2006).

The support for the participants' relatedness with their classmates and the teacher included one principle. It was creating opportunities to interact with others (Principle 6), which could increase the closeness with others (Johnson & Johnson, 1994). For example, students would get involved in a discussion if their teacher gives them a task that can't be worked out or completed alone.

The ways to apply the principles to the test-question preview worksheets and the English learning motivation questionnaire are specified in the following two sections.

Test-question Preview Worksheets

The purpose of developing the test-question preview worksheets (See Appendix A) was to provide the participants with support for competence perception, autonomy and relatedness, which are viewed as three basic psychological needs for promoting intrinsic or more self-regulated motivation (Deci & Ryan, 1985). In order to reach the goal, the worksheets were designed based on the six principles (Principles 1 to 6) elaborated in the previous section. Each worksheet contained four sections. They were (1) the test section, (2) the advanced exercise section, (3) the student self-evaluation section, and (4) the student/teacher feedback section. The content of the four sections as well as the ways of applying the principles to the design of the sections are described in the following paragraphs. The participants were given the Chinese version of the worksheets during the experiment (See Appendix A).

The Test Section

The test section was composed of two parts, vocabulary and grammar, which were usually the targets tested in the school-administered English achievement test². The

² The test questions in the test section would serve as the test questions on an upcoming vocabulary and grammar in-class quiz. They were different from those of the school-administered English achievement test, but both sets of the test questions tested the same linguistic knowledge taught in English class.

exercises in this section were given to the participants to preview before a test, and then the same exercises were used as the test questions in the test. Thus, the participants could be free from the pressure and control of the test and could focus more on the materials they were learning (Principle 3). The full score of the test was 100 points. The following illustrates the vocabulary part in the test section from one of the worksheets.

I. Test: A. Vocabulary. *Please fill in the gaps with appropriate vocabulary. (40%)*

1. 學期 _____ 2. 錄音機 _____ 3. 重複 _____
4. 字典 _____ 5. 明白；跟隨 _____
6. There are many (r) _____ here. You can choose one and listen to English programs on it.
7. I love to sing and dance (a) _____ with pop songs.
8. You can keep a (d) _____ to practice your English writing.
9. It's (q) _____ hot these days. I feel I can't live without an air conditioner.
10. No one is perfect. Everyone makes (m) _____ sometimes.

In the vocabulary part, there were two types of exercises. The first type contained five questions (i.e. Questions 1 to 5) which required the participants to write down the English equivalents of Chinese words or phrases. They could easily get the points in this part by finding the answers directly from their English textbooks. The other type encompassing the next five questions (i.e. Questions 6 to 10) was not as easy because the participants had to fill suitable vocabulary in the gaps of the given English sentences. For this part of exercises, they were encouraged to discuss the answers with their classmates or teacher.

After the vocabulary part was the grammar part. It is illustrated below.

The grammar part also consisted of two types of exercises. The first type examined the participants' linguistic knowledge at lexical level. The most common task was changing the base form of a verb into its past form as shown in our example. The participants could find the answers in the textbook. The second type was a little more challenging because

the participants needed to paraphrase, complete English sentences with given words or change English sentences from indicative forms into interrogative ones. They could cooperate with each other or seek help from the teacher to compose or transform the sentences correctly.

B. Grammar. *Please give the past tense of the following verbs. (18%)*

1. try		2. practice		3. enjoy	
4. keep		5. finish		6. plan	

Please complete the sentences with the given words. (42%)

【Notice: Pay attention to the tense and the changes of the base verbs.】

1. Eric/ finish/ read the English magazine/ this morning.

2. Frank/ plan/ write a card to Tina/ after school/ yesterday.

3. Willy/ enjoy/ dance and jog/ , not sing.

4. My sister/ help me/ my homework/ every day.

5. The floor/ need/ clean/ every week.

6. Peter/ keep/ practice/ speak English/ with foreigners/ last Sunday.

7. David doesn't know these English words.

He/ need/ look up/ them. _____

To make sure the participants of different achievement levels had a chance to deal with challenging tasks, the exercises in the vocabulary and grammar parts were designed and arranged from easy to hard ones. By solving the questions, the participants could develop their sense of achievement and be more aware of their competence (Principle 1). Also, the participants were encouraged to take responsibility for their learning by deciding the ways to look for the answers to the questions in the test section (Principle 4).

They could ask their classmates or the teacher for help when the questions were too hard for them (Principle 6).

After previewing and preparing for the test questions, the participants took the test with the same questions in class. Then, their teacher collected the worksheets used in the tests. She corrected them and wrote supportive informative comments. Through the corrections and comments, the participants would better understand which part(s) need(s) more efforts and what they had learned. This perhaps helped them know their own competence better (Principle 2).

The Advanced Exercise Section

The advanced exercise section included two types of exercises, English sentence making practice and a small oral survey. They were both more flexible and challenging than the exercises in the test section. The participants could do these exercises with the aid of their classmates or their teacher after class (Principle 6). Since the participants could gain help from others, the advanced exercises were regarded as optimal challenges to them (Principle 1). Furthermore, this section was given to the participants as an assignment so that there weren't any test pressure and control (Principle 3). Extra points would be given as encouragement when the participants made efforts on this part. An illustration of this section is presented below.

In the English sentence making practice, the participants were encouraged to create their own sentences to describe their personal experiences by using the vocabulary or grammar they had learned from the grammar and vocabulary instruction. As for the small oral survey, they were encouraged to use the newly-learned vocabulary and grammar to converse with their classmates and then to record the information they got on the worksheet in full English sentences. Both types of exercises placed emphasis on language use instead of language knowledge. This perhaps helped the participants focus more on

their English learning rather than on having good performances on tests (Principle 3). Moreover, through interacting with classmates, they could possibly become more related to each other (Principle 6).

II. Advanced Exercises:

※You will gain extra points if you finish this section!

A. Sentence making practice.

Please use one of the given verbs to describe two things that you will do after school.

1.(want, need)_____

2.(plan, try)_____

Please write two sentences that describe two things you recently kept doing, practiced, finished or enjoyed.

1. (keep, practice)_____

2. (finish, enjoy)_____

B. An English oral survey.

Please ask two of your classmates about what they will do after school today in English and write down their answers in the following table.

【Please use the verbs: want, need, plan or try.】

Example: A: _____

B: _____

Names	I will ...
1.	
.	

Later, the teacher corrected and commented this section with positive informative feedback. From the feedback, the participants would get to know more about their current competence and would thus become more confident in using the target language (Principle 2).

The Student Self-evaluation Section

The student self-evaluation section was purposefully designed to promote the participants' English learning motivation. There were two parts in this section. Part 1

needed to be completed before a test whereas Part 2 after the test. Below illustrate the self-evaluation questions.

Part 1: Please answer the following question before the test.

Question : I anticipate getting _____ points because I have...

- a. previewed the test questions.
- b. practiced answering the test questions by writing the answers on another piece of paper.
- c. looked for the answers to the test questions from the English textbook.
- d. reviewed the vocabulary and grammatical points in the English textbook.
- e. discussed the test questions with my classmates or teacher.
- f. (other preparations)_____

Part 2: Please answer the following questions after the test.

Question 1: I got _____ points, and I feel satisfied with the test result because ...

- a. I successfully achieved my goal with the effort I had made.
- b. _____
even though I failed to reach my goal.
- c. (other reasons)_____

Question 2: I got _____ points, but I'm not satisfied with the test result because ...

- a. I carelessly left some of the test questions unanswered.
- b. I misunderstood some of the test questions.
- c. I answered the test questions carelessly.
- d. I didn't scrutinize my answers.
- e. I wasn't attentive to the teacher's instruction.
- f. I didn't review the vocabulary and grammatical points completely.
- g. I didn't discuss the test questions with others in advance.
- h. I was misguided by my classmates in discussions.
- i. I didn't have enough time to finish all the test questions.
- j. _____
even though I achieved my goal.
- k. (other reasons)_____

Therefore, I need to_____.

In this way, I won't make the same mistakes when encountering similar test questions on the upcoming tests.

Question 3: From this worksheet learning, I have learned _____
_____.

Question 4: I feel thankful to _____ because
_____.

In Part 1, there was only one guided question designed to encourage the participants to set goals and to determine the ways to prepare for the test section. It was purposefully devised to motivate the participants to take responsibility for their learning (Principle 4).

On the other hand, Part 2 consisted of four guided questions (i.e. Questions 1 to 4). After the test section was corrected and commented by the teacher, the participants chose either Question 1 or Question 2 to answer according to how satisfied they felt with their test results. Then they ticked or wrote down the reasons for their satisfaction or dissatisfaction with their own performances. Moreover, they reflected on what they had learned from the worksheet in Question 3. The teacher's corrections and comments in both the test section and the advanced exercise section could also assist them in perceiving their competence (Principle 2). From Questions 1 to 3, the participants were led to self-evaluate their learning. This process perhaps helped develop their autonomy for learning English (Principle 4).

As for Question 4 in Part 2, it gave the participants a chance to think of the people they wanted to express gratitude to and the reasons for doing so. Through this reflection, the participants would probably find that their classmates and the teacher were very helpful when they encountered some difficulties or situations they couldn't work out by themselves. Besides, their relatedness with their classmates and the teacher would perhaps be strengthened by this realization and an opportunity to say thank you (Principle 6).

To sum up, this section was for the participants to practice taking the initiative in learning, to evaluate their learning outcomes, to perceive their competence, and to cooperate with their classmates and the teacher in learning, all of which were assumed to provide support for competence perception, autonomy for learning English and relatedness with classmates and the teacher.

In addition, the checklists offered in the question in Part 1 and Questions 1 and 2 in Part 2 could help the participants to answer the questions more completely. They also served as suggestions for how to study for the test section and what might need to be careful about so as to get a satisfying test result.

The Student/Teacher Feedback Section

The fourth section was designed for the participants and their teacher to exchange feedback. Thus, it contained two parts. One was for the participants to write down their feedback; the other was for their teacher to respond to it. The instruction of the section is illustrated as follows:

1. The words I want to say to my teacher:

(Suggested topics: (1) Advice for future instructions. (2) Learning difficulties.
(3) Learning reflection.)

2. The words my teacher wants to say to me:

In the first part, the participants picked any of the suggested topics (i.e. advice for future instructions, learning difficulties and learning reflection) or set their own topic to express their comments, questions, experiences and perspectives about this period of learning.

Their teacher responded to their feedback positively, supportively and informatively in the second part. From the feedback, the teacher would know what extra help or complementary material was needed to assist the participants in learning English and how to adjust her instructions to meet their needs. On the other hand, the participants would find their problems, worries and learning anxiety recognized and concerned by their teacher. Besides, they would receive some supportive informative responses that probably helped them become aware of their current competence and the possible directions of adjusting their ways of learning. Furthermore, their relatedness with their teacher could possibly increase through this channel of communication. In sum, this section was designed to help the participants perceive their competence (Principle 2), promote their autonomy for learning (Principles 4 and 5), and improve their relatedness with their teacher (Principle 6).

The last two sections, the student self-evaluation section and the student/teacher feedback section, were deliberately devised to promote the participants' competence perception, autonomy for learning English and relatedness with their classmates and the teacher in the hope of increasing their intrinsic or more self-determined English learning motivation.

The Two Stages of Completing the Worksheet Learning

The test-question preview worksheets are unlike the worksheets normally used in English classes. They combine the functions of test preview and worksheets together. For the function of test preview, the test questions of an upcoming vocabulary and grammar in-class quiz³ were printed on the worksheets and distributed to the participants to preview and prepare for after the teacher finished teaching a lesson. The next day, the

³ The test questions of an upcoming vocabulary and grammar in-class quiz were different from those of the school-administered English achievement test which the participants would take after the worksheet treatment, but both sets of the test questions tested the same linguistic knowledge taught in English class.

worksheets were used as test papers. The participants took a quiz right on them. Then the teacher collected the worksheets, checked the answers and gave comments.

For the function of worksheets, the worksheets contained several advanced exercises, including a sentence making practice and an English oral survey. They were given to the participants as assignments. It was expected that the participants would cooperate with each other to finish these exercises. In addition, several guided questions for the participants to decide the ways to learn and set a goal before a test and to evaluate their own learning after the test were placed in the student self-evaluation section on the worksheets. The worksheets provided opportunities for the participants and the teacher to give feedback in the student/teacher feedback section.

There were two stages in the worksheet learning. In the first stage, the teacher gave the participants a vocabulary and grammar instruction and distributed a test-question preview worksheet to them. Then the participants completed Part 1 in the student self-evaluation section on the worksheet to set a goal for the upcoming test and to determine their own favorite ways of preparing for the test section in advance. They could look for the answers in their textbooks or discuss the challenging questions with their classmates or the teacher. However, they were not allowed to write anything in the test section until the next day when the teacher asked them to take out the worksheet and finish the test questions right on the section as an in-class vocabulary and grammar test. Then, all the worksheets were collected, corrected, commented and graded by the teacher.

In the second stage, the teacher returned the worksheets back and explained the test questions that the participants asked. Then she gave a clear instruction and several examples to get the participants ready for completing the advanced exercise section, the rest of the student self-evaluation section and the student/teacher feedback section. After they finished the worksheets, the teacher gathered the worksheets again to give comments on the advanced exercise section and to respond to the participants' self-evaluation and

feedback in the last two sections. In the end, the worksheets were distributed back to the participants.

English Learning Motivation Questionnaire

The English learning motivation questionnaire (See Appendix B) was a four-point Likert scale questionnaire in which each item contained four options ranging from “Strongly Agree” to “Strongly Disagree.” It was used before and after the treatment to discover whether the participants’ English learning motivation was enhanced through the use of the test-question preview worksheets. Three groups of questions were designed to respectively probe into the change of the participants’ competence perception, autonomy for learning English and relatedness with their classmates and the teacher before and after the experiment. The first group consisted of two questions, and the second and the third groups contained five questions respectively. The following paragraphs describe the twelve questions and their correspondence with the principles (i.e. Principles 1 to 6) used to design the questionnaire. The participants were given the Chinese version of the questionnaire during the experiment (See Appendix B).

Questions 1 and 2 were composed based on Principles 1 and 2 about the support for competence perception (i.e. providing optimal challenges and positive informative feedback). They were used to evaluate the effect of the worksheet learning on the promotion of the participants’ competence perception. Question 1 was to assess if the participants had built up a sense of achievement by overcoming the optimal challenges offered by the school English class (Principle 1). As for Question 2, it aimed to examine whether the teacher’s positive informative feedback enhanced the participants’ confidence in their own competence in learning English (Principle 2).

The next five questions (Questions 3 to 7) were produced according to Principles 3 to 5 about autonomy support (i.e. removing or lessening test pressure and control, giving

chances to take responsibility for learning, and responding to students' problems).

Question 3 aimed to find out whether the participants were active in learning English or mostly triggered by their test pressure to learn (Principle 3). Questions 4 to 6 investigated if the participants showed any autonomous learners' traits in their English learning (Principle 4). The traits included setting goals (Question 4), determining the ways to learn (Question 5), and ascribing their success and failure to effort (Question 6). At last, Question 7 evaluated whether the participants autonomously learned from their mistakes picked out by their teacher in the test section (Principle 5).

The last five questions (Questions 8 to 12) in the questionnaire were to examine the participants' relatedness with their classmates and the teacher in English learning. They were produced based on Principle 6 about relatedness support (i.e. creating the opportunities to interact with classmates and the teacher). Questions 8 to 11 evaluated the relatedness between the participants and their classmates. The focuses included acquiring the tips for English learning from their classmates (Question 8), sharing their favorite ways of English learning with their classmates (Question 9), encouraging each other to learn English better (Question 10), and enjoying discussing English problems with their classmates (Question 11). Question 12, on the other hand, inquired into the participants' relatedness with their teacher. It was to find out if the participants felt enjoyable in discussing their English problems with their teacher.

The face validity of the questionnaire was ensured by inviting an expert, a professor mastering testing and statistics of social science and serving in a university of education in northern Taiwan, to examine whether the questionnaire items truly reflected the objectives of the study or not. Also, a pilot study was conducted to see if any necessary modifications were needed to secure the reliability of the questionnaire.

A School-administered English Achievement Test

A school-administered achievement test is a formal periodical exam held three times a semester in public junior high schools in Taiwan. In other words, the Taiwanese junior high school students have to take one every five or six weeks to evaluate their learning outcome of the subjects, including English, taught in school. Besides, the scores the students gain from these achievement tests may influence their chances of entering their ideal senior high schools; therefore, they value these tests very much.

In school-administered English achievement tests, the knowledge of vocabulary and grammar is usually an emphasis and often tested in various forms, such as gape filling and multiple-choice questions. Under such circumstance, the worksheets were designed with a focus on these two areas so as to meet the participants' immediate needs. The reason to involve one of the English achievement tests (See Appendix C) into this research was that the researcher wished to know whether or not the participants with the aid of the worksheets could outperform those not using the worksheets on the English achievement tests.

Data Analysis Methods

The data gathered from the three instruments were analyzed with qualitative and quantitative methods to answer the two research questions: (1) Is students' English learning motivation promoted after the use of the test-question preview worksheets in the test-oriented learning environment? (2) Do the students using the test-question preview worksheets outperform those not using the worksheets on a school-administered English achievement test? To answer Research Question 1, the data from the test-question preview worksheets and the English learning motivation questionnaire were respectively analyzed qualitatively and quantitatively. The qualitative method adopted in the study was to count the number of the participants in each of the experimental subgroups (i.e. high,

middle and low groups) who at least once gave similar responses to the guided questions in the student self-evaluation section and the student/feedback section on the worksheets. The reason for only analyzing the data from these two sections was that those data could represent the participants' learning behaviors and attitudes toward the worksheet learning. The analytical results would reveal whether the participants gained support for competence perception, autonomy for learning English and relatedness with their classmates and the teacher from the worksheet learning. The other two sections, the test section and the advanced exercise section, only providing a variety of exercises for the participants to practice and get familiar with the newly-learned English material, couldn't offer directly-relevant data that helped answer Research Question 1.

In the student self-evaluation section, there were two parts for the participants to answer before and after a test. Part 1 contained one guided question about the goals the participants set and the learning strategies they selected to prepare for the test questions. These data could reveal information about the participants' competence perception and degree of autonomy. As for Part 2, it comprised four guided questions. The first two questions were for the participants to express their satisfaction or dissatisfaction with their test results and the reasons for feeling in that way. Their responses to the questions provided the information about whether their competence perception increased or decreased after the test, and whether their success or failure was attributed to effort. The third question inquired what was learned from the worksheet, which offered the information about whether the participants recognized their English competence or/and autonomy for learning English was/were improving through the worksheet learning. The data gathered from these three guided questions would indicate if the worksheet learning provided support for the participants' competence perception and autonomy for learning English. The last question gave the participants a chance to express their gratitude toward their helpers. They not only wrote down their helpers' names but also described the

reasons why they felt thankful. These data would manifest the degrees of the participants' relatedness with their classmates and the teacher in terms of English learning and would also indicate whether they gained relatedness support from the worksheet learning.

The student/teacher feedback section, on the other hand, contained two open questions collecting the data about the participants' general reflections on and suggestions for the worksheet learning. These data would also reveal some information about whether or not the participants' three motivational components were improved after the use of the worksheets.

The data from the English learning motivation questionnaire were analyzed through three quantitative methods. First, the independent-samples t-test was used to compare the experimental and control groups' three motivational components. Second, the paired-samples t-test was employed to compare the questionnaire scores within the experimental and control groups as well as the experimental subgroups (i.e. high, middle and low groups). The quantitative data would indicate if the participants' competence perception, autonomy for English learning and relatedness with their classmates and the teacher changed after the experiment. Third, the mean scores of every questionnaire item gained by the experimental subgroups before and after the experiment were further compared in order to obtain the details of the changes in the three motivational components. The statistical results from both quantitative methods would reveal the influence of the test-question preview worksheets on the participants' English learning motivation.

To answer Research Question 2, the scores of the school-administered English achievement test gained by the experimental and control groups as well as their subgroups were compared by means of the independent-samples t-test. The statistical results would indicate whether or not the experimental group's English academic performance was better than the control group's after the experiment.

Procedure

The procedure of the whole study included a pilot study and a formal study. The purpose of conducting a pilot study was to test the workability of the English learning motivation questionnaire and the test-question preview worksheets. The formal study subsequently proceeded after the necessary modifications found in the pilot study were made.

Pilot Study

In this research, a pilot study was carried out to ensure the reliability of the English learning motivation questionnaire and the practicability and effectiveness of the test-question preview worksheets. The procedure and the results of the pilot study as well as the modifications of the two instruments are described in the following sections.

The Procedure of the Pilot Study

The participants in the pilot study were 30 students (16 boys and 14 girls) from an eighth-grade class, other than the participants in the formal study but with the similar social and learning background. The instruments included the English learning motivation questionnaire and three test-question preview worksheets. The participants firstly answered the English learning motivation questionnaire and then accepted a vocabulary and grammar instruction based on the content of their school English textbook. After the instruction, they were given a test-question preview worksheet to finish Part 1 in the student self-evaluation section and to prepare for the test questions in the test section. The next day, they took a vocabulary and grammar test right on the worksheet. The teacher collected the worksheets and then corrected and commented the test section. After returning back the worksheets, she illustrated how to do the advanced exercise section, the rest of the student self-evaluation section and the student/teacher feedback section.

The participants completed those sections after class and handed the worksheets to their teacher. The teacher checked the advanced exercise section, commented on the participants' self-evaluation, and responded to their feedback. Then she returned back the worksheets. After the vocabulary and grammar instruction and the worksheet learning repeated three times for three continuous lessons in the school English textbook, the participants filled in the same motivation questionnaire.

The Results of the Pilot Study and the Modifications

Since the goal of the pilot study was to test the reliability of the English learning motivation questionnaire and the function as well as the feasibility of the test-question preview worksheets, the results of the pilot study were evaluated and analyzed to determine several modifications in these two instruments. The details are presented in the following two sections, the English learning motivation questionnaire and the test-question preview worksheets.

The test-question preview worksheets.

In accordance with the participants' answers and responses to the questions on the test-question preview worksheets, several modifications were made to improve the practicability and effectiveness of the worksheets. The following four paragraphs describe the original forms of the four sections on the worksheets, the reasons for making the modifications, and the details of the changes.

The test section initially included an English sentence making practice. However, almost half of the participants, especially the low achievers, in the pilot study didn't score well in this part, even though the questions had been offered to them in advance. Thus, to prevent the participants from feeling disappointed at losing points in the English sentence making practice, the test section excluded the sentence making items. They were used

only in the advanced exercise section. When the participants produced good English sentences on their own, they could win extra points as encouragement.

As for the advanced exercise section, the participants in the pilot study weren't enthusiastic in completing the short oral survey. And some of them even left this part empty. With the view to increasing their enthusiasm for taking part in the oral survey, some extra points would be given to those who finished this part.

In the student self-evaluation section, the first three guided questions were originally in the form of short-answer questions, which was found to fail in eliciting comprehensive answers from the participants. Their answers were either too general or incomplete. In light of this, the form of these guided questions was changed into a checklist of possible answers that were drawn from the participants' responses in the pilot study. By doing so, it would be easier for the participants in the formal study to complete these three questions comprehensively.

The student/teacher feedback section didn't provide the suggested topics for the participants. In other words, they had to think of their own topics to write about. Nevertheless, some of the participants had no idea what they could write in this section or gave the responses similar to those in the student self-evaluation section. To avoid this problem, three suggested topics (i.e. learning difficulties, advice for future instruction and learning reflection) were added to the instruction of this section so that the participants in the formal study could pick one to write about when they couldn't come up with their own topics (See Appendix B).

The English learning motivation questionnaire.

Cronbach's alpha coefficient of the English learning motivation questionnaire was calculated to examine the internal-consistency reliability. The coefficient was 0.819 for the study sample, which indicated that the questionnaire used in the study was a reliable

instrument (Henson, 2001). In addition, the content validity of the questionnaire was assessed by an expert mastering testing and statistics of social science from a university in Taiwan, and some necessary modifications were made according to his advice.

To assess the function of the test-question preview worksheets, the results of the English learning motivation questionnaire before and after the worksheet treatment were compared through the paired-samples t-test, and a significant difference was found ($t=-3.269$, $p=0.003<0.05$). This statistic outcome suggested that the worksheet learning had positive effects on the participants' English learning motivation and could be used in the formal study.



Formal Study

The formal study lasted for seven weeks (from October 17th to November 2nd, 2010).

Figure 3 illustrates the procedure of the formal study.

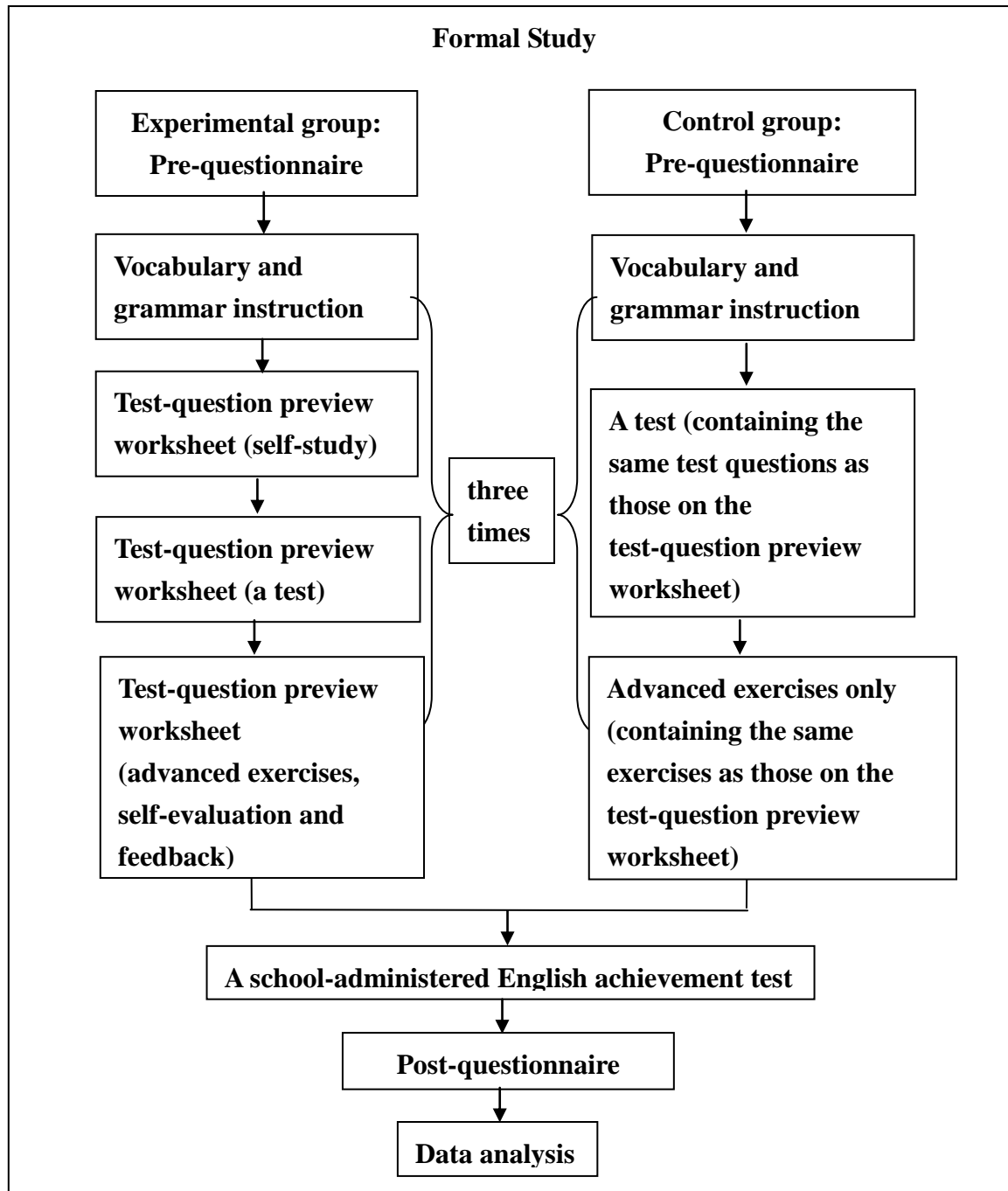


Figure 3.1 The Procedure of the Formal Study

In the formal study, there were an experimental group and a control group, each containing 30 students (17 boys and 13 girls). Both groups answered the English learning motivation questionnaire and received a vocabulary and grammar instruction based on the content of a lesson from their school English textbook. After the instruction, they took a vocabulary and grammar test. Then, the teacher graded the test papers, gave comments and explained the test questions to the participants. In addition, she demonstrated the ways to do the advanced exercises so that the participants could finish them after class. The next day, the teacher evaluated the advanced exercises and gave positive and supportive feedback to the participants. During the whole formal study, both groups accepted three vocabulary and grammar instructions, took three vocabulary and grammar tests and practiced the follow-up advanced exercises after each of the tests. At the end of the experiment, they took a school-administered English achievement test and filled up the same motivation questionnaire again.

The difference between the treatments of the two groups was that the experimental group was able to preview and prepare for the test questions on the vocabulary and grammar tests in advance. Those questions were given on the test-question preview worksheets distributed to the participants in the experimental group for self-study. Afterwards, they took the tests right on the worksheets which were used as the test papers. In addition to the test questions, several guided questions were also provided on the worksheets to encourage the participants to set goals, select suitable learning strategies for preparing for the test questions, self-evaluate their learning and exchange feedback with their teacher. These questions were intended to promote the three motivational components, namely competence perception, autonomy for learning English and relatedness with classmates and the teacher, in the process of preparing for the vocabulary and grammar tests.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the results and discussion of the quantitative and qualitative data from the three instruments used in the study. The statistical data from the English learning motivation questionnaire provide the information about whether or not the participants' three motivational components (i.e. competence perception⁴, autonomy for learning English and relatedness with their classmates and the teacher) were promoted after the use of the worksheets. The qualitative data from the test-question preview worksheets offer the details about the participants' learning behaviors, learning reflection and feedback to the teacher. The details would help explain the influence of the worksheets upon the motivational components. The statistical data from the school-administered English achievement test, on the other hand, would indicate whether the participants with the aid of the worksheets had better academic performance than those not using the worksheets.

The Statistical Results of the English Learning Motivation Questionnaire

This section represents the descriptive and inferential statistical results of the pre- and post-English learning motivation questionnaires⁵. The statistical results are given in Tables 4.1 to 4.8.

⁴ The present study focuses on promoting the participants' competence perception. Their English competence isn't examined in the study.

⁵ The contents of the pre- and post-English learning motivation questionnaires are the same. The difference is that pre-questionnaire was given to the participants before the treatment, and the post-questionnaire was given after the treatment.

Table 4.1

*Independent-samples T-test of the Experimental and Control Groups'**Competence Perception, Autonomy and Relatedness before the Treatment*

	Experimental Group - Control Group			
	Independent Differences			
	Mean	SD	t	Sig.
Competence Perception	4.73	1.701	-2.096	.040*
Autonomy	12.63	3.222	-1.415	.162
Relatedness	11.27	3.610	-2.524	.014*

* $p < .05$

As displayed in Table 4.1, the experimental group's competence perception and relatedness with their classmates and the teacher were lower than the control group's before the treatment. Since the present study focuses on observing the effects of the worksheet treatment on the experimental group, the changes of the three motivational components found in the group would be further analyzed. The following tables present the paired-samples t-test results, showing the in-group comparisons of the three motivational components before and after the treatment.

Table 4.2

Paired-samples T-test of the Experimental and the Control Groups' Competence Perception, Autonomy and Relatedness

	PRE-POST			
	Paired Differences			
	Mean	SD	t	Sig.
Experimental Group (N=30)				
Competence Perception	.000	1.486	.000	1.000
Autonomy	-.333	2.670	-.684	.499
Relatedness	-.500	2.636	-1.039	.307
Control Group (N=30)				
Competence Perception	.200	1.186	.924	.363
Autonomy	1.167	2.183	2.928	.007*
Relatedness	.567	3.339	.929	.360

* $p < .05$

As shown in Table 4.2, no significant difference was found in the experimental group's competence perception, autonomy and relatedness after the treatment overall, but the worksheets perhaps had different effects on the participants of different achievement levels. The following sub-sections further explore the effects of the worksheet learning upon the experimental high, middle and low groups.

On the other hand, the control group became less active in learning English after the experiment. This unexpected result, though not the focus in this study, may worth a further investigation in future studies.

The Changes of the Experimental High Group's Three Motivational Components

The following presents the paired-samples t-test results of the experimental high group's English learning motivation questionnaire scores (See Table 4.3) as well as the descriptive statistical results of the 12 questionnaire items (See Table 4.4). Both statistical results were used to see whether there were any changes in the high achievers' three

motivational components (i.e. competence perception, autonomy and relatedness) after the experiment.

Table 4.3

Paired-samples T-test of the Experimental High Group's Competence Perception, Autonomy and Relatedness

	PRE-POST			
	Paired Differences			
	Mean	SD	t	Sig.
Experimental High Group				
(N=8)				
Competence Perception	.125	.354	1.000	.351
Autonomy	-2.375	2.264	-2.967	.021*
Relatedness	-.750	2.375	-.893	.402

* $p < .05$

The experimental high group became more active in learning English after the worksheet learning. As displayed in Table 4.3, the high group's autonomy manifested a significant rise ($t=-2.967$, $p=0.021<0.05$), suggesting that the worksheets provided some autonomy support for the high achievers. However, the t-test results of the group's competence perception and relatedness indicated no significant differences after the experiment.

A detailed look into the descriptive statistical results of each questionnaire item (See Table 4.4) may help further understand the influence of the worksheet learning upon the high achievers' competence perception, autonomy and relatedness.

Table 4.4

The Descriptive Statistical Results of the Experimental High Group's Questionnaire Scores

Item	Statement	Pre-questionnaire		Post-questionnaire	
		Mean	SD	Mean	SD
1	I gain a sense of achievement from my success experiences of learning English at school.	3.25	.463	3.13	.641
2	The teacher's affirmation of my English competence makes me feel confident in learning English well.	2.88	.835	2.88	.835
3	I spend time reviewing the newly-learned English materials actively.	2.00	1.069	2.25	1.035
4	I set goals for improving my English competence.	2.00	1.195	3.00	1.069
5	I search for solutions to my English problems actively.	2.88	.835	3.38	.518
6	I attribute my success or failure in English learning to effort.	3.13	.835	3.38	.744
7	I learn from my mistakes with teacher's corrections and comments.	3.25	.707	3.63	.518
8	I learn some English-learning tips from my classmates, like the ways to memorize difficult English words.	2.13	1.246	2.25	1.035
9	I'm willing to share my English learning strategies with my classmates.	2.63	1.302	3.00	1.069
10	My classmates and I encourage each other to learn English well.	2.63	1.302	3.00	1.069
11	I enjoy discussing English questions with my classmates.	3.00	1.069	2.88	1.126
12	I enjoy discussing English questions with my teacher.	3.00	.926	3.00	1.069

According to the paired-samples t-test results in Table 4.3, the high achievers learned English more actively after the treatment. This finding was echoed by the unanimous

increase in the mean scores of the five questionnaire items (Items 3 to 7) that measured the participants' autonomy for learning English (See Table 4.4). The five items generally received above-average mean scores ($M=2.00, 2.00, 2.88, 3.13, 3.25$)⁶ before the worksheet learning. After the seven-week worksheet learning, all the mean scores of the five items increased ($M=2.25, 3.00, 3.38, 3.38, 3.63$). It indicated that the high achievers became more active in reviewing newly-learned English material. They were also more inclined to attribute success and failure to effort, search for solutions to English problems and learn from their mistakes with their teacher's corrections and comments. More impressively, the mean score of Item 4 (i.e. setting goals for improving English competence) increased the most at the end of the experiment (from $M=2.00$ to 3.00), showing that the high achievers tended to set goals to push themselves to improve English competence.

As for competence perception, the high achievers didn't feel an apparent change in their English competence after using the worksheets. According to Table 4.3, no significant difference was found in the high achievers' competence perception. The mean scores of the two questionnaire items (Items 1 and 2) that examined the participants' competence perception were both above the average mean score in the pre-questionnaire (See Table 4.4). This suggested that the high achievers had already developed a sense of achievement from their successful English learning experiences and had gained confidence from teacher's affirmation. However, in the post-questionnaire, the mean score of Item 1 decreased slightly ($M=3.13$), indicating that the high achievers didn't feel they gained more sense of achievement after the worksheet learning. Furthermore, the mean score of Item 2 appeared unchanged after the experiment ($M=2.88$), and so did the standard deviation ($SD=0.835$). This manifested that the high achievers didn't think their

⁶ The questionnaire is a four-point Likert scale; thus, above-average mean scores mean the scores of the questionnaire items are above $M=2$.

teacher's affirmation of their English competence on the worksheets helped increase their competence perception.

The high achievers' relatedness with their classmates and the teacher didn't show a significant difference after the worksheet learning based on the paired-samples t-test results (See Table 4.3). As displayed in Table 4.4, all of the five items (Items 8 to 12) received above-average mean scores ($M=2.13, 2.63, 2.63, 3.00, 3.00$) in the pre-questionnaire. This finding indicated that in general the high achievers were willing to share English learning strategies, encourage each other to learn English well, and discuss questions together before the treatment. In the post-questionnaire, it was found that the mean scores of Items 8 to 10 increased ($M=2.25, 3.00, 3.00$), Item 12 stayed unchanged ($M=3.00$), but Item 11 decreased ($M=2.88$). These statistical results suggested that after worksheet learning, the high achievers learned more tips for learning English from their classmates and were more willing to share their own English learning strategies. They also became more involved in encouraging each other to improve English. However, they didn't enjoy discussing English questions with their teacher more and even felt less interested in discussing with their classmates.

The Changes of the Experimental Middle Group's Three Motivational Components

The paired-samples t-test results and the descriptive statistical results of the middle group's questionnaire scores are presented in Tables 4.5 and 4.6. The results would indicate whether or not the middle achievers' competence perception, autonomy and relatedness changed after the experiment.

Table 4.5

Paired-samples T-test of the Experimental Middle Group's Competence Perception, Autonomy and Relatedness

	PRE-POST			
	Paired Differences			
	Mean	SD	t	Sig.
Experimental Middle Group (N=14)				
Competence Perception	-.500	1.401	-1.336	.205
Autonomy	-.571	2.243	-.953	.358
Relatedness	-1.500	2.473	-2.270	.041*

* $p < .05$

As shown in Table 4.5, there was a significant improvement in the middle achievers' relatedness with their classmates and the teacher after the worksheet learning ($t=-2.270$, $p=0.041<0.05$). Nevertheless, no significant changes were found in their competence perception and autonomy for learning English at the end of the experiment. These t-test results revealed that the middle achievers became neither more active nor more confident in learning English after using the worksheets.

In order to obtain the details about the changes of the middle group's three motivational components, the increase or decrease in the mean scores of each questionnaire item was further investigated (See Table 4.6).

Table 4.6

The Descriptive Statistical Results of the Experimental Middle Group's Questionnaire Scores

Item	Statement	Pre-questionnaire		Post-questionnaire	
		Mean	SD	Mean	SD
1	I gain a sense of achievement from my success experiences of learning English at school.	2.57	1.016	2.79	.802
2	The teacher's affirmation of my English competence makes me feel confident in learning English well.	2.14	.663	2.43	.852
3	I spend time reviewing the newly-learned English material actively.	2.21	.699	2.07	.730
4	I set goals for improving my English competence.	2.71	.726	2.57	.646
5	I search for solutions to my English problems actively.	2.71	.825	3.07	.475
6	I attribute my success or failure in English learning to effort.	3.00	.679	3.36	.633
7	I try to learn from my mistakes I made on my English tests with teacher's corrections and comments.	2.86	.949	3.00	.679
8	I learn some English-learning tips from my classmates, like the ways to memorize difficult English words.	2.07	.917	2.57	.852
9	I'm willing to share my English learning strategies with my classmates.	1.86	.663	2.21	.802
10	My classmates and I encourage each other to learn English well.	2.00	.784	2.36	.842
11	I enjoy discussing English questions with my classmates.	2.36	1.008	2.57	.938
12	I enjoy discussing English questions with my teacher.	2.79	.975	2.86	.770

According to the paired-samples t-test results in Table 4.5, the middle achievers developed a closer relationship with their classmates and the teacher after the worksheet

learning. The mean scores of the five relatedness items (Items 8 to 12) also had a unanimous increase in the post-questionnaire (See Table 4.6). As displayed in Table 4.6, four of the five questionnaire items on relatedness (Item 8, Item10, Item 11 and Item12) generally received above-average mean scores in the pre-questionnaire ($M=2.07, 2.00, 2.36, 2.79$) except Item 9. This indicated that the middle achievers initially had a close interaction with their classmates and the teacher in terms of acquiring English learning strategies from their classmates, encouraging each other to learn English well, and discussing English questions together. However, they were less willing to share their learning strategies with others as the mean score of Item 9 ($M=1.86$) was found below the average. After using the worksheets for seven weeks, the middle achievers developed a closer relationship with their classmates and the teacher for the mean scores of all the five relatedness items increased ($M=2.57, 2.21, 2.36, 2.57, 2.86$), and all were above the average mean score. Among them, Item 8 increased the most (from 2.07 to 2.57), showing that the middle achievers firmly agreed that they learned some useful learning tips from their classmates.

Nevertheless, according to the paired-samples t -test results shown in Table 4.5, the middle achievers didn't have a strong feeling that their English competence improved after the worksheet learning. However, when the mean scores of the two questionnaire items on competence perception (Items 1 and 2) were examined, both displayed an increase in the post-questionnaire (See Table 4.6) though the increase in the mean scores didn't reach the significant level in the t -test results.

As for autonomy, the t -test results in Table 4.5 also revealed that the middle achievers didn't become more active in learning English after using the worksheets. As displayed in Table 4.6, the five items (Items 3 to7) on autonomy received above-average mean scores ($M=2.21, 2.71, 2.71, 3.00, 2.86$) in the pre-questionnaire. In the post-questionnaire, it was found that Items 3 and 4 decreased ($M= 2.07, 2.57$) but Items 5

to 7 increased ($M=3.07, 3.36, 3.00$). The decrease in Item 3 showed that the middle achievers didn't think previewing test questions could make them learn autonomously. The decrease in Item 4 indicated that the middle achievers became less willing to set goals for improving English competence at the end of the experiment. Though Items 3 and 4 decreased in the post-questionnaire, Items 5 to 7 increased, indicating that the worksheet learning still had some positive effects on promoting middle group's autonomy for learning English. The increase in the three items revealed that the middle achievers were more inclined to view effort as the cause of their success in English learning. They also became more active in searching for solutions to their English problems and to learn from their mistakes with their teacher's corrections and comments.

The Changes of the Experimental Low Group's Three Motivational Components

The statistical results, including the paired-samples t-test results and the descriptive statistical results of the low group's questionnaire scores, are presented in Tables 4.7 and 4.8. This statistical data provide the information about the changes of the low achievers' competence perception, autonomy and relatedness.

Table 4.7

Paired-samples T-test of the Experimental Low Group's Competence Perception, Autonomy and Relatedness

	PRE-POST		t	Sig.
	Paired Differences			
	Mean	SD		
Experimental Low Group (N=8)				
Competence Perception	.750	2.053	1.033	.336
Autonomy	2.125	1.808	3.325	.013*
Relatedness	1.500	2.268	1.871	.104

* $p < .05$

As displayed in Table 4.7, the low achievers' competence perception and relatedness with their classmates and the teacher showed no significant differences after the worksheet learning. However, their autonomy for learning English manifested a significant drop at the end of the experiment ($t=3.325$, $p=0.013<0.05$). The results indicated that the low achievers had no feelings that their English learning motivation was promoted. Even worse, they became less active in learning English after using the test-question preview worksheets.

In order to gather more information about the effects of the worksheet learning upon the low group's English learning motivation, the mean scores of the 12 questionnaire items were further investigated. The descriptive statistical data are presented in Table 4.8.

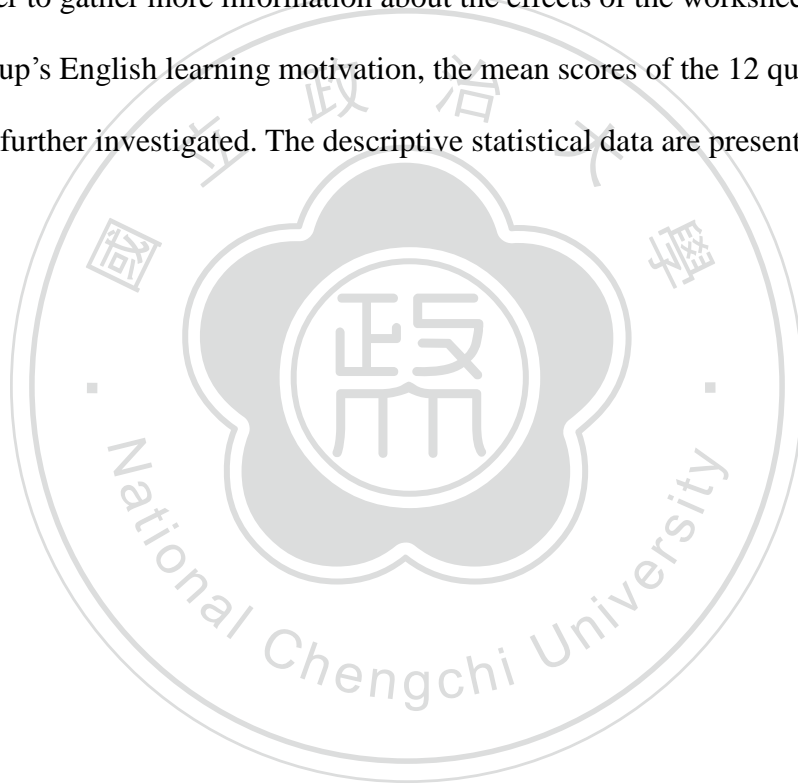


Table 4.8

The Descriptive Statistical Results of the Experimental Low Group's Questionnaire Scores

Item	Statement	Pre-questionnaire		Post-questionnaire	
		Mean	SD	Mean	SD
1	I gain a sense of achievement from my success experiences of learning English at school.	1.63	.744	1.38	.744
2	The teacher's affirmation of my English competence makes me feel confident in learning English well.	1.75	1.035	1.25	.463
3	I spend time reviewing the newly-learned English materials actively.	1.75	.707	1.75	1.035
4	I set goals for improving my English competence.	2.00	1.195	1.63	.744
5	I search for solutions to my English problems actively.	1.88	.991	1.63	.916
6	I attribute my success or failure in English learning to effort.	3.13	.835	1.88	.991
7	I try to learn from my mistakes I made on my English tests with teacher's corrections and comments.	1.75	1.035	1.50	.756
8	I learn some English-learning tips from my classmates, like the ways to memorize difficult English words.	2.25	1.165	1.88	1.126
9	I'm willing to share my English learning strategies with my classmates.	1.50	.756	1.25	.463
10	My classmates and I encourage each other to learn English well.	1.50	.756	1.75	.886
11	I enjoy discussing English questions with my classmates.	1.88	1.126	1.25	.463
12	I enjoy discussing English questions with my teacher.	2.38	1.188	1.88	1.356

Based on the paired-samples t-test results in Table 4.7, the low achievers became reluctant to learn English after the experiment. In the pre-questionnaire, three of the five

questionnaire items on autonomy (Items 3, 5 and 7) received below-average mean scores ($M=1.75, 1.88, 1.75$). It showed that the low achievers were initially less autonomous in spending time reviewing English material, looking for solutions to English problems and learning from mistakes with their teacher's corrections and comments. On the other hand, the rest two items (Items 4 and 6) got better mean scores ($M=2.00, 3.13$), indicating that the low achievers still set goals for improving English and attributed their success and failure to effort. However, after the worksheet learning, only Item 3 stayed unchanged ($M=1.75$); the other four items (Items 4, 5, 6 and 7) decreased ($M=1.63, 1.63, 1.88, 1.50$), especially Item 6, which decreased the most (from 3.13 to 1.88). The results showed that the low achievers had less intention to set goals, look for solutions and learn from mistakes. Even worse, they questioned their former belief in effort attributions, which revealed that they no longer wanted to attribute success to effort.

When it comes to competence perception, the paired-samples t-test results showed that the low achievers' confidence in their English competence didn't increase after the experiment (See Table 4.7). When the mean scores of the questionnaire items on competence perception (Items 1 and 2) were examined, it was found that both items received below-average mean scores ($M=1.63, 1.75$) in the pre-questionnaire, and the mean scores decreased in the post-questionnaire (See Table 4.8). The results manifested that the low achievers didn't gain much sense of achievement and confidence from English learning at school before the experiment, and such situation became even worse after the experiment. In other words, the worksheets were unable to promote the low achievers' competence perception.

The low achievers' relatedness with their classmates and the teacher revealed no significant change after the worksheet learning as shown in Table 4.7. To obtain more details, the changes in the mean scores of the five questionnaire items on relatedness (Items 8 to 12) were further investigated. As can be seen in Table 4.8, Items 8 and 12

received above-average mean scores ($M=2.25, 2.38$) in the pre-questionnaire, manifesting that the low achievers still learned some English learning tips from their classmates and were willing to discuss English questions with their teacher. However, Items 9 to 11 got below-average mean scores ($M=1.50, 1.50, 1.88$), showing that the low achievers were reluctant to share their English learning strategies, encourage their classmates to learn English and discuss with their classmates. In the post-questionnaire, it was found that Item 10 increased ($M=1.75$), but the mean score was still below the average mean score. It indicated that though the low achievers became more willing to give and accept encouragement from others than before, the momentum of doing it was not strong. The rest of the relatedness items (Items 8, 9, 11 and 12), on the other hand, decreased ($M=1.88, 1.25, 1.25, 1.88$). These statistical results revealed that the low achievers felt less inclined to learn tips for learning English from their classmates and had less enjoyment in discussing English questions with their teacher. Furthermore, they became reluctant to share learning strategies and discuss with their classmates.

The Analysis of the Open Questions on the Test-question Preview Worksheets

This section presents the qualitative data collected from the open questions of the student self-evaluation section and the student/teacher feedback section on the test-question preview worksheets. These data provide the information about the experimental high, middle and low achievers' learning behaviors, their reflection upon the behaviors and their feedback on the worksheet learning. Tables 4.9 to 4.15 illustrate the qualitative data with seven topics. They are (1) goal setting, (2) learning strategy use, (3) satisfaction or dissatisfaction with the test results, (4) reasons for feeling satisfied or dissatisfied, (5) gains from the worksheet learning, (6) reasons for feeling thankfulness to others, and (7) feedback on the worksheet learning.

Table 4.9

Numbers of the Participants Setting Goals

Goal (Anticipated Test Scores)	Frequency Count		
	High Group (N=8)	Middle Group (N=14)	Low Group (N=8)
100	4	3	0
99-90	2	4	0
89-80	2	3	2
79-70	0	3	0
69-60	0	0	2
59-50	0	0	0
49-40	0	1	0
39-30	0	0	1
29-20	0	0	0
19-10	0	0	1
9-1	0	0	1
0	0	0	1

The data in Table 4.9 shows the goals that the experimental high, middle and low achievers set before they started preparing for the test questions on the worksheets. According to the data, it was found that the high and middle achievers' anticipated test scores were similar, but the low achievers' anticipated test scores were generally lower than the high and middle achievers'. Out of the eight high achievers, four were confident that they would get 100 points, and the rest four set their anticipated test scores at least above 80 points. Most of the middle achievers also set their goals above 80 points. Of all the fourteen middle achievers, ten set their goals above 80 points, and three among the ten middle achievers thought they could get 100 points on the upcoming test. There were only four middle achievers setting their goals below 80 points. Three of them set their goals between 70 and 79 points, and one of them thought he could only get the score between 40 and 49 points. As for the low group, only two out of the eight low achievers set their goals above 80 points, and two between 60 and 69 points. Another three low achievers'

anticipated test scores spread out from 1 to 39 points. The last one set 0 point as his anticipated test score.

The experimental high, middle, and low groups all set goals during the use of the worksheets. The tendency of the three group's goal setting offered some details about the influence of the worksheets. The middle group tended to set the goals almost as high as the high group. It showed that the middle achievers were more confident in themselves to pursue higher goals because they could preview and prepare for the test questions on the worksheets before they took the tests. However, the low achievers didn't feel more confident in themselves because of it. As shown in the data, only half of the low achievers set their goals above 60 points; the rest four still set the goals below 39 points, and even one of them directly viewed 0 point as his anticipated goal. This phenomenon suggested that the low achievers thought even if they could preview the test questions, they still disbelieved they were competent to get a better test result.

Table 4.10

Numbers of the Participants Using Learning Strategies for Preparing for the Test Questions

Strategies	Frequency Count			Total (N=30)
	High Group (N=8)	Middle Group (N=14)	Low Group (N=8)	
Previewing the test questions	6	12	6	24
Discussing the test questions with classmates or the teacher	6	12	2	20
Looking for the answers to the test questions from the English textbook	5	8	4	17
Reviewing the vocabulary and grammatical points in the English textbook	4	8	3	15
Practicing answering the test questions by writing the answers on another piece of paper	4	8	2	14
No Preparation	0	0	2	2

Note. The number indicates the number of the participants who once chose the strategy/strategies to use on any of the three test-question preview worksheets.

Table 4.10 summarizes the experimental high, middle and low groups' learning strategy use. The strategy that was most used in the three groups was previewing the test questions. Over half of the participants in each group previewed the test questions after they received the worksheets, which showed that the worksheets with the test questions could encourage the participants to preview. The secondary most-used strategy was discussing the test questions with classmates or the teacher. There were over half of the high and middle achievers adopting this strategy, but only two low achievers used this strategy to prepare for the test questions. It indicated that the worksheet learning helped the high and middle achievers develop their relationship with their classmates or the teacher but didn't

have the similar effect upon the low achievers.

The next most-used strategy was looking for the answers to the test questions from the English textbook. At least half of the participants in the three groups used this way to get ready for the upcoming tests. It showed that besides asking their classmates or the teacher for help, the participants at different achievement levels also checked the textbook for the information they needed to answer the test questions. The last two strategies were reviewing the vocabulary and grammatical points in the textbook and practicing answering the test questions by writing the answers on another piece of paper. Half of the high achievers (four students) and more than half of the middle achievers (eight students) utilized these two strategies to prepare for the test questions, but less than half of the low achievers (only two or three students) adopted the strategies during their worksheet learning. Furthermore, two of the low achievers didn't make any preparation at all. These revealed that the high and middle achievers were more involved in the worksheet learning because most of them were willing to spend time reviewing the linguistic points in the textbooks and even practicing answering the test questions on another piece of paper. However, most of the low achievers didn't have much momentum to get themselves ready for the tests even though they were given the test questions to prepare in advance.

In conclusion, the test-question preview worksheets seemed being able to enhance the high and middle achievers' autonomy for learning English and relatedness with their classmates and the teacher more but didn't have the same effects upon the low achievers. Most of the high and middle achievers tended to use various strategies to make their test preparation more efficient and effective, but the low achievers' most-used strategies were only to read the test questions and try to find the answers from the textbook. Only few of them asked their classmates or the teacher for help or felt inclined to spend time reviewing the points in the textbook and practicing answering the test questions. Thus, more guidance and assistance may be needed to encourage the low achievers to adopt

more strategies to learn English through the worksheets.

Table 4.11

Numbers of the Participants Feeling Satisfied or Dissatisfied with the Test Results

	Frequency Count		
	High Group (N=8)	Middle Group (N=14)	Low Group (N=8)
Feeling satisfied	6	11	8
Feeling dissatisfied	5	12	7

Note. The number indicates the number of the participants who once expressed their satisfaction/dissatisfaction on any of the three test-question preview worksheets.

Table 4.11 shows that most of the experimental high, middle and low achievers experienced both satisfaction and dissatisfaction with their test results during the seven-week worksheet learning. In the three groups, six high achievers, eleven middle achievers and eight low achievers felt satisfied with at least one of their test scores, but five high achievers, twelve middle achievers and seven low achievers felt dissatisfied. It indicated that most of the participants in the three groups felt a sense of achievement because of their success experiences, which could help increase their competence perception. However, similar number of the participants in the three groups also experienced failure experiences, which reduced their sense of achievement and their confidence in their English competence. This finding may also explain why the three groups' competence perception didn't show an apparent difference in the paired-samples t-test results (See Table 4.3, 4.5, 4.7).

Table 4.12

Numbers of the Participants Giving Reasons for Feeling Satisfied or Dissatisfied with the Test Results

Item	Reasons	Frequency Count			Total (N=30)
		High Group (N=8)	Middle Group (N=14)	Low Group (N=8)	
1	(Satisfied) Making hard efforts	6	9	6	21
2	(Dissatisfied) Answering the test questions carelessly	8	13	3	24
3	(Dissatisfied) Not reviewing the vocabulary and grammatical points completely	3	5	3	11
4	(Dissatisfied) Not being attentive to the teacher's instruction	2	3	3	8
5	(Dissatisfied) Not discussing the test questions with others in advance	2	3	1	6
6	(Dissatisfied) Being misguided by my classmates in discussions	0	3	1	4
7	(Dissatisfied) Making inadequate efforts or answering the test questions carelessly though still reaching the goal	2	7	2	11

Note. The number indicates the number of the participants who once gave the reason(s) for their satisfaction/dissatisfaction in any of the three test-question preview worksheets.

Table 4.12 shows a summary of the experimental high, middle and low achievers' self-expressed reasons for their satisfaction and dissatisfaction with their test results. Most of the participants in the three groups (twenty-one students in total) attributed their satisfaction to the efforts they invested for preparing for the test questions (Item 1). Since the participants were given the test questions to prepare for in advance, they were more likely to achieve their goals as long as they were willing to make efforts. Hence, the test-question preview worksheets led the participants to ascribe their success to effort.

There were six reasons for dissatisfaction with the test results found in the participants' responses on the worksheets. The most-mentioned reason was being careless in answering the test questions (Item 2). Over half of the high and middle achievers expressed that they were not careful enough when answering the test questions. For example, they didn't scrutinize their answers before handing in their test sheets. The number of the low achievers who had the same reflection was relatively small. There were only three of them felt the same way. Since they could preview the test questions, their failure in achieving the goals were more likely to be attributed to a controllable cause, like carelessness.

The next three reasons for dissatisfaction (Items 3 to 5) also involved controllable factors. They included reviewing the vocabulary and grammatical points incompletely, being inattentive to teacher's instruction, and preparing for the test questions alone without discussing with others. Though it was found that less than half of the participants in each group attributed their dissatisfaction to these three causes, it still suggested that those participants' autonomy for learning English didn't decrease because they knew they were able to make an improvement the next time.

There weren't any high achievers taking Item 6 as the reason for their dissatisfaction with their test performances. It showed that the high achievers were not misguided by their classmates during the worksheet learning. It was probably because the high achievers' relatively good English competence prevented them from this problem. However, three of the middle achievers and one of the low achievers encountered such problem. The teacher may need to encourage the middle and low achievers to discuss English problems with her directly or with more than one of their classmates so as to reduce the chances of being misguided.

The last reason for dissatisfaction with the test results is a little different from the ones mentioned above. Some of the participants in the three groups expressed that the

goals they set were too low, so even when they achieved the goals they were not satisfied with their test results. Among the three groups, the middle group had the most participants (seven students) who felt dissatisfied for this reason. As for the high and the low groups, there were only two participants in each of the groups having such reflection. It appeared that the middle achievers had trouble setting the goals that matched their proficiency well. Though being able to preview the test questions increased their confidence in performing well on the tests, they lowered down their goals because they seldom set high goals in their past learning experience. Thus, when they successfully achieved the goals, they still felt dissatisfied with the results. They believed they could have performed better especially when they found their insufficient effort or carelessness made them lose some of the test points. Therefore, goal setting didn't help much for encouraging the middle achievers to improve English. This phenomenon may explain the decrease in the mean score of Item 4 in the English learning motivation questionnaire (See Table 4.6). The decrease revealed that the middle achievers were not that inclined to set goals for improving English competence as before. Therefore, during the worksheet learning, goal setting to the middle achievers didn't have apparent positive influence upon their learning autonomy.

Table 4.13

Numbers of the Participants Stating Gains from the Worksheet Learning

Gains from the worksheet learning	Frequency Count			
	High Group (N=8)	Middle Group (N=14)	Low Group (N=8)	Total (N=30)
Vocabulary and grammar	4	9	3	16
Learning strategies	3	5	0	8

Note. The number indicates the number of the participants who once stated the gain(s) in any of the three test-question preview worksheets.

Table 4.13 summarizes the participants' self-stated gains from the worksheet learning. The most-mentioned gain was the knowledge of vocabulary and grammar. There were sixteen participants in total pointing out that they learned some vocabulary and grammatical structures when using the worksheets. Among the three groups, the middle group had the most participants (nine students) claiming such gain. It suggested that the middle achievers seemed to benefit more from the worksheet learning in terms of acquiring linguistic knowledge than the high and low achievers.

In addition to the linguistic knowledge, three high achievers and five middle achievers also mentioned they learned some useful English learning strategies from the worksheet learning. Using strategies to make learning more efficiently and effectively is a trait that can be found in autonomous learners. This showed that the middle and high achievers gained some support for autonomy from the worksheet learning. However, no one in the low group expressed that they learned an English learning strategy from the worksheets. It suggested that the worksheets couldn't effectively help the low achievers acquire useful English learning strategies, and thus their autonomy for learning English wasn't supported as the high and low achievers' during the worksheet learning.

Table 4.14

Numbers of the Participants Giving Reasons for Feeling Thankful to Their Classmates and the Teacher

Reasons	Frequency Count		
	High Group (N=8)	Middle Group (N=14)	Low Group (N=8)
My classmates discussed the test questions with me.	5	11	4
My teacher discussed the test questions with me.	3	4	0

Note. The number indicates the number of the participants who once stated the reason(s) for their thankfulness in any of the three test-question preview worksheets.

Table 4.14 presents participants' self-stated reasons for feeling thankful to the people who helped them during the worksheet learning. It was found that eleven out of the fourteen middle achievers felt grateful to their classmates because they were willing to discuss the test questions with them. There were also at least half of the high achievers and low achievers feeling thankful toward their classmates. It manifested that the worksheets seemed to help promote the participants' relatedness with their classmates, and the effect was more evident upon the middle achievers. However, the number of the participants who expressed their thankfulness to the teacher was quite limited. There were only three high achievers and four middle achievers feeling grateful that their teacher discussed the test questions with them during the worksheet learning, and there was no one in the low group feeling the same way. This revealed that the worksheets couldn't effectively increase the relatedness between the participants and the teacher, especially the low achievers' relatedness with the teacher.

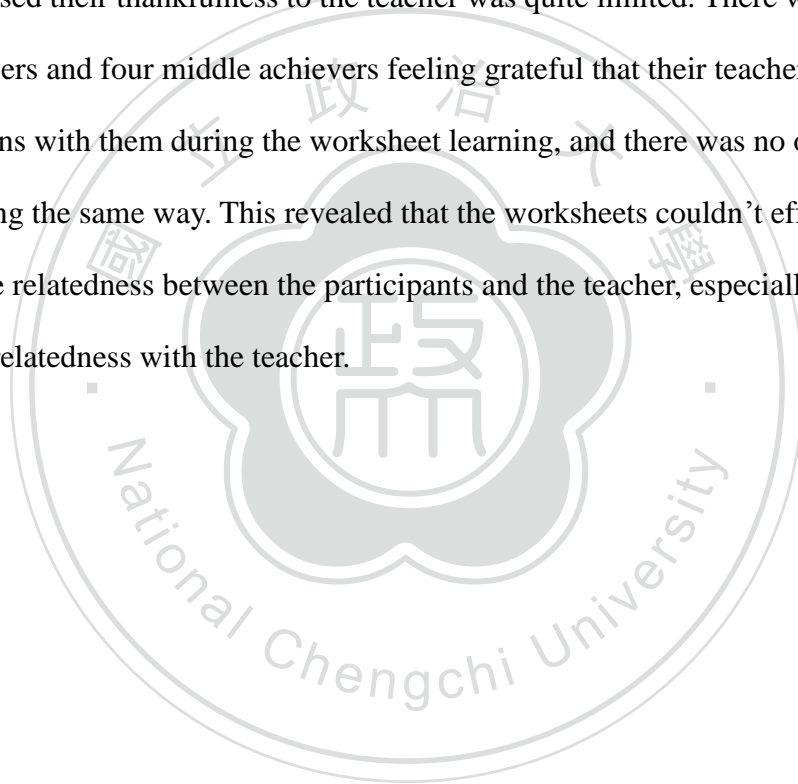


Table 4.15

Numbers of the Participants Giving Feedback on the Worksheet Learning

Item	Feedback	Frequency Count		
		High Group (N=8)	Middle Group (N=14)	Low Group (N=8)
1	The test questions are too easy.	2	0	0
2	The test questions are too hard.	0	2	3
3	I know my weaknesses in English.	0	4	2
4	I know what I have to do to improve my English. (e.g. studying hard, answering the test questions more carefully)	4	5	0
5	I don't know how to learn English well because the efforts I made didn't pay.	0	0	7
6	I hope my teacher can slow down the teaching pace and explain the points more clearly.	0	4	0
7	I hope my teacher can make English class interesting, like giving us some activities to do.	2	1	0

Note. The number indicates the number of the participants who once gave similar feedback in any of the three test-question preview worksheets.

Table 4.15 shows a summary of the participants' feedback on the worksheet learning in the student/teacher feedback section. Their feedback is mostly related to competence perception (Items 1 and 2), autonomy for learning English (Items 3 to 5), and the suggestions for the teacher's instruction (Items 6 and 7). As shown in Item 1, two high achievers felt the test questions on the worksheets were too easy for them and unable to help increase their sense of achievement and English competence. However, no one in the middle and low groups expressed that the test questions were easy. As for Item 2, two middle achievers and three low achievers thought that the test questions were too difficult for them, but none of the high achievers stated that the test questions were hard. Based on

the information provided in Items 1 and 2, it was discovered that the test questions on the worksheets were not optimal challenges for some of the high, middle and low achievers, and thus the worksheets couldn't effectively promote their perception of English competence. This also explains why the high, middle and low groups didn't show an apparent increase of their competence perception in the paired-samples t-test results (See Tables 4.3, 4.5 and 4.7).

Items 3 to 5 refer to the influence of the worksheet learning upon the participants' autonomy for learning English. The feedback, Item 3, is about the participants' self-awareness of their weaknesses in English. There were four middle achievers and two low achievers recognizing their weaknesses in English, such as a complicated grammatical structure. However, on one in the high group gave the feedback relevant to this point. This was possibly due to that their English competence was relative high; thus, they could solve most of their English problems without considering them as their weaknesses.

Item 4 on the feedback part refers to what the participants decided to do to improve their English. Four of the high achievers and five of the middle achievers felt the need to study harder and/or to be more careful in answering the test questions. However, no one in the low group mentioned about what they had to do to improve their English. The possible reason can be found in Item 5, which is described in the following paragraph. In short, the worksheet learning seemed to promote some of the high and middle achievers' learning autonomy because they were led to thinking about what they could do to improve their English learning and performances. Nevertheless, it didn't have the same effect upon the low achievers.

Item 5 is relevant to the reflection upon English learning problems. It was found that seven out of the eight low achievers didn't know how to learn English well since making efforts wasn't workable to solve their English problems. Such helpless situation, on the

other hand, didn't appear in the high and middle groups. This indicated that, unlike the high and middle achievers, most of the low achievers couldn't find an appropriate and effective method to improve their English during the worksheet learning. To them, simply working hard didn't really solve their English problems. They needed more guidance and assistance from their classmates and the teacher so that they could be much clearer about what they needed to do to improve their English and regained their sense of achievement. Therefore, the worksheets couldn't promote the low achievers' autonomy for learning English in this respect. Moreover, since they found their hard efforts were unable to improve their poor or dissatisfactory performances on the worksheets and tests, their autonomy diminished further. This may explain why the paired-samples t-test results indicated that the low achievers became less active in learning English (See Table 4.7).

Items 6 and 7 are the participants' suggestions about their teacher's instruction. The first suggestion is about the teacher's teaching pace and the way to clarify the grammatical points (Item 6). It was given by four middle achievers, and none of the high and low achievers gave such suggestion. The middle achievers felt that the teaching pace was too fast to follow and some of the grammatical points were not explained clearly. However, this wasn't a problem for the high achievers because their higher English competence helped them easily follow up the teacher's teaching pace and understand the grammatical points taught by the teacher. On the contrary, due to insufficient knowledge of English, the low achievers had difficulty comprehending what the teacher taught to them no matter how fast or slow the teaching pace was.

The second suggestion, given by two high achievers and one middle achiever, is about making the English lessons more enjoyable (Item 7). The participants suggested that the teacher could add some interesting activities for them to do. Through the suggestions about the English lessons, the teacher could adjust her teaching style and offered more assistance to the low achievers to make the participants of all achievement

levels absorb the English material better.

Discussion on the Findings of the Analysis on the English Learning Motivation

Questionnaire and the Test-question Preview Worksheets

This section presents the discussion of the effect of the test-question preview worksheets upon the high, middle and low achievers' three motivational components (i.e. autonomy, competence perception and relatedness) based on the quantitative and qualitative results gained from the motivation questionnaire and the open questions on the worksheets. There are three sub-sections focusing on the influence of the worksheets upon each of the motivational components.

The Influence of the Worksheet Learning upon the Participants' Autonomy for Learning English

Findings from this current study suggest that the test-question preview worksheets may offer support for autonomy for the high and middle achievers, but the effect seems not as evident for the low achievers.

High Group

According to the paired-samples t-test results, the high achievers were motivated to learn English autonomously (See Table 4.3). The details can be seen from the changes in the mean scores of the five autonomy questionnaire items as well as the qualitative data gathered from the test-question preview worksheets. Based on the changes in the mean scores of the five autonomy items, it was found that the high achievers were more inclined to set goals for improving English, spend time reviewing English material, search for solutions to English problems, make effort attributions and learn from mistakes with teacher's corrections and comments (See Table 4.4). According to their statements in the

student self-evaluation section of the worksheets, the high achievers all set goals before the worksheet learning and at least half of them (at least four out of the eight students in the high group) adopted all the five learning strategies suggested on the worksheets (See Table 4.10). They previewed the test questions and discussed them with others. They also reviewed the vocabulary and grammatical points in the textbook and looked for the information they needed from the book to answer the test questions. Furthermore, to avoid any possible mistakes, they even practiced answering the test questions by writing the answers on another piece of paper. After the tests, over half of the high achievers (six students) attributed their satisfaction with the test results to effort and dissatisfaction to carelessness (eight students) (See Table 4.12). As for the gains from the worksheet learning, three high achievers pointed out that they learned some useful learning strategies (See Table 4.13). In the student/teacher feedback section on the worksheets, half of the high group (four students) mentioned that they knew the ways to improve their English after self-evaluating their learning (See Table 4.15). In conclusion, the statistical and qualitative data all indicated that most of the high achievers became more active in preparing for the test questions, attributed their success to effort and failure to carelessness, and found the ways to improve English learning in their self-evaluation after using the test-question preview worksheets. The results suggest that the worksheet learning may help promote learning autonomy for the high achievers.

There are three possible reasons why the worksheets may support learning autonomy for the high achievers. First, the worksheets offered them an opportunity to preview the test questions. Under such circumstance, the high achievers paid less attention to the tests and more attention to leaning because they would certainly obtain a satisfactory test result as long as they worked hard to prepare for the test questions. With less external control, more self-determined motivation would be developed and in turn initiate autonomous behaviors (Deci & Ryan, 1985).

Second, the worksheets also helped the high achievers develop autonomous learner traits, including setting goals, using learning strategies and finding the ways to improve English learning. The high achievers were led to set a goal by answering the guided questions on the worksheets. Since the test questions could be previewed, the high achievers had more sense to set specific, attainable and acceptable goals by themselves and obtained higher success expectancy for achieving them. Such goals combined with teachers' positive and informative feedback about learning progress could motivate students to learn a second language (Oxford & Shearin, 1994). Moreover, according to expectancy-value theory, people with high success expectancy and value in tasks would become more absorbed in doing the tasks (Hansen, 1989).

Besides goal setting, the worksheets provided several sample strategies as suggestions to choose from. The high achievers could adopt the strategies that met their needs to achieve their goals more effectively. Some of them expressed that they learned some useful learning strategies through the process (See Table 4.13). Also, in the student/teacher feedback section, some high achievers pointed out that they knew the ways to improve their English after using the worksheets (See Table 4.15).

These autonomous learner traits that the worksheets intended to cultivate are also mentioned in Holec's (1981) definition of autonomy for learning a language. He stated that an autonomous language learner could take responsibility for their learning by setting individual goals and determining the material and the ways to learn. Thus, the high achievers who were guided to set goals, use strategies to learn, and find the ways to improve English when using the worksheets became more autonomous in their English learning.

Third, the worksheets seemed to support effort attributions. It was found that most of the high achievers tended to ascribe their satisfaction with the test results to effort instead of uncontrollable causes, like ability or luck (See Table 4.12). It was possibly because

they were able to preview the test questions on the worksheets; thus it wasn't hard for them to achieve their goals if they made enough efforts to prepare for the questions. Therefore, they were more likely to ascribe their success to effort. Effort attributions are supported by attribution theory for such attributions would foster students' beliefs in incremental theory of ability and improve their academic performances (Blackwell, Trzesniewski, & Dweck, 2007; Good, Aronson, & Inzlicht, 2003). Furthermore, success attributed to effort could help increase people's confidence in achieving future success (Diener & Dweck, 1980), and high success expectancy would make people more involved in the tasks they value (Hansen, 1989). As for the reasons for dissatisfaction with the test results, most of the high achievers attributed their dissatisfaction to controllable causes, like carelessness (See Table 4.12). Attributing failure to controllable factors wouldn't decrease learning autonomy because it could elicit individuals' sense of guilt and the desire to make an improvement (Weiner, 1986).

Middle Group

Though no significant improvement was found in the paired-samples t-test results (See Table 4.5), the middle achievers seemed to gain some support for autonomy for learning English according to the changes in the mean scores of the questionnaire items on autonomy and the qualitative data from the worksheets. Based on the increased mean scores of the autonomy items (See Table 4.6), it was found that the middle achievers became more willing to search for solutions to English problems, make effort attributions, and learn from mistakes with the teacher's corrections and comments. However, they didn't feel that the worksheets could encourage them to review the newly-learned English material actively and that goal setting could effectively motivate them to improve English. The last two findings may be the causes that made the middle achievers' autonomy for learning English fail to show a significant improvement in the t-test results.

The qualitative data gathered from the worksheets also indicated that the middle achievers probably gained some support for autonomy for learning English from the worksheet learning. As shown in Table 4.10, more than half of the middle achievers (at least eight out of the fourteen students in the middle group) used all the five learning strategies suggested on the worksheets. They previewed and discussed the test questions with others. They also reviewed the points in the English textbook and checked the book for necessary information to answer the test questions. Also, they practiced answering the test questions on another piece of paper to avoid making careless mistakes. After taking the tests, most of the middle achievers tended to attribute their satisfaction with the test results to effort (nine students) and dissatisfaction to carelessness (thirteen students) (See Table 4.12). It was also found that half of the middle achievers (seven students), though having achieved the goals they set, still felt dissatisfied with the test results and ascribed their discontentment to insufficient effort, carelessness and misguidance of their classmates. When talking about the gains from the worksheet learning, five middle achievers expressed that they learned several useful learning strategies (See Table 4.13). Some middle achievers also gave the feedback that they became aware of their weaknesses in English and found the ways to improve their English learning (See Table 4.15). Conclusively, most of the middle achievers became more involved in preparing for the test questions on the worksheets with various learning strategies. Some of them simultaneously acquired the strategies in the process and discovered their weaknesses in English as well as the ways to improve their English through self-evaluation. They were also inclined to attribute their satisfactory or dissatisfactory test results to controllable causes, like effort and carelessness.

The above-mentioned statistical results and qualitative data from the worksheets suggest that the worksheets may help promote the middle achievers' autonomy for learning English, but the positive influence isn't as apparent as that upon the high

achievers'. One of the possible reasons for not having the same effect upon the middle achievers may be that the middle achievers, compared with the high achievers, have relatively low sense of self-efficacy. As can be seen in Table 4.15, two middle achievers expressed that the test questions were too difficult. However, none of the high achievers felt the same way. In this regard, the middle achievers' sense of self-efficacy is not as high as the high achievers'. It has been proposed that people with a high sense of self-efficacy perform more self-regulated behaviors (Multon, Brown & Lent, 1991; Pintrich & De Groot, 1990). The middle achievers with lower sense of self-efficacy may thus perform fewer self-regulated behaviors. This may explain why they became less active in reviewing the newly-learned English material (See Table 4.6).

Another reason for not having an apparent increase in autonomy for learning English may be that the middle achievers don't feel goal setting could help increase their momentum to improve English (See Table 4.6). This may result from that the goals they set were below their proficiency during the worksheet learning. When they achieved the goals, they didn't feel satisfied with their test results because they thought they should have set higher goals. There were seven out of the fourteen middle achievers giving such a response (See Table 4.12). This showed that though the middle achievers were more confident in setting high goals because they could preview and prepare for the test questions, they still tended to lower down their goals because they seldom set high goals in their past learning experiences. Nevertheless, when they reached these moderated high goals, they still felt they failed the tests for not performing better.

In general, the statistical and qualitative data showed that the middle achievers gained support for autonomy for learning English when using the worksheets. The reasons for such positive influence are similar to those used to explain the high achievers' significant autonomy improvement. They include that the worksheets helped lessen the control of tests upon the middle achievers and led them to use various learning strategies,

to attribute success to effort, to discover their weaknesses in English and to find the ways to improve English learning with several guided questions.

In conclusion, the worksheets seem to be beneficial to promote the middle achievers' autonomy for learning English. The effect would be more evident if the teacher helps them increase their sense of self-efficacy by adjusting the difficulty of the test questions to meet their current English competence and guide them to set appropriate goals that meet their competence well.

Low Group

Based on the paired-samples t-test results (See Table 4.7), the low group became less active in learning English after the worksheet learning. It suggests that the worksheets may not foster the low achievers' autonomy for learning English. The changes in the mean scores of the questionnaire items on autonomy and the qualitative data from the worksheets also indicated such a tendency. The mean-score changes of the autonomy items showed that before the treatment, the low achievers were already reluctant to review English material, search for solutions for English problems and learn from their mistakes with teacher's corrections and comments (See Table 4.8). After the worksheet learning, the situation didn't improve. Instead, they became more reluctant to look for ways to solve their English problems and learn from their mistakes. Even worse, they were less inclined to set goals for improving English and make effort attributions. Furthermore, the qualitative data from the worksheets showed that only a small number of the low achievers used all the five learning strategies suggested on the worksheets preparing for the test questions (See Table 4.10). The two strategies that were utilized by at least half of the low group were previewing the test questions (six out of the eight students in the low group) and checking the textbook for the answers to the questions (four students). It indicated that the low achievers seldom discussed with others, reviewed

the vocabulary and grammatical points in the textbook and practiced answering the test questions on another piece of paper. Two of the low achievers even directly stated that they didn't preview or prepare for the test questions at all, and none of them claimed that they learned a useful learning strategy (See Table 4.13) In addition, nearly the whole group (seven students) gave the feedback that they didn't know how to learn English well because their effort didn't pay off (See Table 4.15). Although there were two low achievers expressing that they identified their weaknesses in English, they had no idea how to solve the problems.

Most of the low achievers (six students) attributed their satisfactory test results to effort (See Table 4.12). However, the decreased mean score of the autonomy questionnaire item (See Item 6 in Table 4.7) and the feedback given by the low achievers on the worksheets (See Table 4.15) all showed that such attribution was no longer held by most of the low achievers at the end of the experiment. It was probably because they personally experienced that their effort didn't bring them satisfactory learning results during the worksheet learning. On the other hand, the low achievers ascribed their dissatisfaction with the test results mostly to controllable causes, such as insufficient effort and carelessness (See Table 4.12).

In conclusion, most of the low achievers became reluctant in learning English after using the worksheets. They didn't adopt various learning strategies as the high and middle achievers did, and the most-used strategies were simply to read the test questions and search for the answers to the questions from the textbook. They weren't inclined to ask others for help, spend time reviewing the newly-learned material and practice answering the test questions on another piece of paper. Furthermore, they didn't feel those strategies they used helped them prepare for the test questions effectively; thus, none of them expressed that they learned a strategy from the worksheet learning. This also resonates with the feedback given by most of the low achievers that they had no idea how to learn

English well because their effort didn't bring them their anticipated results. This personal discovery gradually impaired the low achievers' former belief in effort attributions, which contributed to the decrease in the mean score of the autonomy questionnaire item, asking students whether they attribute their success and failure to effort (Item 6 in Table 4.8).

Regarding the statistical and qualitative results, the worksheet learning seems to have negative influence upon the low achievers' autonomy for learning English. The possible reason is that before the experiment, the low achievers had already had lots of failure experiences, established a solid belief that their low ability was unchangeable (i.e. entity theory of ability) and then developed a sense of helplessness. In the pre-questionnaire, most of their mean scores of the five autonomy questionnaire items were lower than those of the high and middle achievers and were also below the average mean score (See Table 4.8). Thus, when using the worksheets, they were not involved in learning English through preparing for the test questions on the worksheets. As displayed in Table 4.10, there were few low achievers adopting the strategies that would cost much time and energy or would bother their classmates and the teacher. Only two of the low achievers chose the strategy, discussing the test questions with others, to prepare for the test questions and practiced answering the questions on another piece of paper, and only three of them spent time reviewing the vocabulary and grammatical points in the textbook. Furthermore, two of them even directly gave up the tests for they didn't do anything to prepare for the test questions. Giving up easily and refusing others' help are the features that can be found in the people with a sense of helplessness (Diener & Dweck, 1978; Licht & Dweck, 1984). The low achievers' reluctance to learn English and to ask for help indicated that they had already developed a sense of helplessness before using the worksheets.

In light of this vulnerable mental state, the test-question preview worksheets, to low achievers, seem to serve as additional tasks which only increase their failure experiences

and strengthen their feelings of helplessness. As shown in Table 4.8, after the worksheet learning, the low achievers became more reluctant to set goals for improving English, look for the ways to solve their English problems, attribute success to effort and learn from mistakes. The qualitative data from the worksheets also reveal that the low achievers didn't know how to improve their English because their effort didn't bring success to them (See Table 4.15). These suggest that the worksheets may not offer autonomy support to the low achievers. In this case, the teacher may need to rebuild the low achievers' confidence in learning English by leading them to solve their English problems and giving positive and encouraging feedback to assure them that they have the ability to improve their English as long as they adopt the right strategy and make effort for it.

The Influence of the Worksheet Learning upon the Participants'

Competence Perception

Based on statistical and qualitative results, the test question preview worksheets seem beneficial to the middle achievers' perception of English competence but unable to support high achievers'. In addition, it may have negative effects on the low achievers' confidence in their English competence. The influence of the worksheets upon the three groups' competence perception are described and discussed in the following three sub-sections.

High Group

The worksheets seem unable to promote the high group's perception of English competence. As shown in Table 4.3, the paired-samples t-test results indicated that there was no significant difference found in the high group's competence perception after the experiment. The mean-score changes in the questionnaire items on competence perception revealed a similar result (See Table 4.4). The slightly-declined mean score in

the item (Item 1) showed that the high achievers didn't feel their success experiences brought them the same amount of sense of achievement as before. The qualitative data from the worksheets also manifested that the high achievers' competence perception didn't seem to increase after the worksheet learning. As displayed in Table 4.11, over half of the high achievers experienced both satisfaction (six out of the eight students in the high group) and dissatisfaction (five students) with their test results. Thus, they didn't gain much sense of achievement from their English performances, so their perceived competence didn't change apparently. Furthermore, two high achievers gave the feedback that they thought the test questions were too easy for them and asked the teacher to make the tests harder or give them the tests directly without a chance to preview (See Table 4.15). The only data that indicated the high achievers felt the improvement of their English competence are that half of the high achievers expressed they learned some vocabulary and grammar from the worksheets (See Table 4.13). Generally speaking, the worksheets may not effectively support the high achievers' English competence perception.

There are two possible reasons for the worksheets failing to have positive influence upon the high group's competence evaluation. First, the opportunity of previewing the test questions made the tests less challenging to the high achievers. Thus, their success experiences couldn't increase their sense of achievement as much as before (See Table 4.4). In addition, because the difficulty of the tests was reduced, the high achievers tended to set extremely high goals. There were half of the high achievers (four students) not allowing themselves making any mistakes on the tests, or they would perceive their academic performances dissatisfactory (See Table 4.9). This may explain why over half of the high group experienced dissatisfaction with their test results and didn't feel their competence increased after using the worksheets. Second, some of the high achievers considered the test questions were too easy (See Table 4.15). They thought there was no

need for them to preview or prepare for the questions. In this regard, they didn't gain much sense of achievement from answering the questions right.

These two reasons indicate that the test questions on the worksheets didn't seem to function as optimal challenges to the high achievers, and the effect of promoting high achievers' perception of English competence accordingly reduced. Elliot et al. (2000) proposed that through overcoming optimal challenges, competence could be developed. Therefore, it is important to make sure every high achiever is provided with the test questions that are optimal challenges to them so that their competence perception could be improved.

Middle Group

The worksheets may help promote the middle group's perception of English competence to a certain degree though the promotion isn't significant. There was no significant difference found in the middle group's competence perception in the paired-samples t-test results (See Table 4.5). However, the mean scores of the questionnaire items on competence perception rose after the experiment (See Table 4.6). This indicated that the middle achievers felt they gained more sense of achievement and confidence from their success experiences and the teacher's affirmation of their competence during the worksheet learning, but the degree of it wasn't strong enough to be presented in the t-test results. The qualitative data from the worksheets also indicated that the worksheets had some positive influence upon the middle group's competence perception. It was found that the middle achievers became more confident in themselves when facing the upcoming tests. Half of them (seven out of the fourteen students in the middle group) set their goals above 90 points, and three of them thought they were capable of getting full scores on the tests (See Table 4.9). After the tests, most of the middle achievers achieved their goals, which promoted their perceived competence (See

Table 4.11). Though there were still many of them feeling dissatisfied with their test results, most of them responded that they all achieved their goals, but they weren't satisfied with the results because they believed they could have performed better (See Table 4.12). Moreover, over two-third of the middle group (nine students) pointed out that they learned some vocabulary and grammatical structures from the worksheets (See Table 4.13), which also revealed that the middle achievers' competence perception was supported after the worksheet learning. The only data showing that the worksheets were unable to support the middle group's competence perception were that the test questions were considered too hard, but there were only two middle achievers gave such feedback (see Table 4.15). Thus, the questions could generally be viewed as optimal challenges to most of the middle achievers. According to quantitative and qualitative data, the worksheets seem helpful for improving the middle achievers' confidence in their English competence.

The possible reason for the positive influence upon the middle achievers' perception of English competence is that the opportunity of previewing the test questions made the tests achievable challenges to the middle achievers. After previewing the test questions, the middle achievers became more confident in setting their own goals and realizing them (See Table 4.9). In addition, most of them experienced success in achieving their goals (See Table 4.11). The success experiences at school brought them more sense of achievement (See Table 4.6). Although there were still many of them feeling dissatisfied with the test results, the feelings of dissatisfaction were not completely derived from their failure to achieve their goals. More than half of the dissatisfied middle achievers (seven students) thought the goals they set were too low to match their proficiency; thus, even they achieved the goals they still felt dissatisfied (See Table 4.12). Furthermore, over half of the middle achievers stated that they learned some vocabulary and grammatical structures from the worksheets (See Table 4.13), which showed that they knew their

competence was increasing.

In conclusion, being more confident in facing the upcoming tests, gaining more sense of achievement from their success experiences and perceiving the increase in their own competence are the favorable outcomes resulting from being able to preview the test questions. Through overcoming optimal-challenging tasks, students could develop their competence and feel more confident from their success experiences (Elliot et al., 2000; Deci & Ryan, 1985; Hunt, 1975). Oxford and Shearin (1994) also proposed that giving students attainable and meaningful language tasks could help students experience success regularly and promote their sense of self-efficacy. Therefore, the worksheets may help support the middle achievers' confidence in their English competence.

Low Group

The worksheets seem to have negative effects on the low achievers' competence perception. Though there wasn't any apparent difference found in the low group's perception of English competence based on the paired-samples t-test results (See Table 4.7), the mean-score changes of the questionnaire items on competence perception presented different results. The low achievers initially felt they gained little sense of achievement from their English academic performances at school and were not confident in learning English even though their teacher affirmed their competence. The situation was getting worse after they used the worksheets (See Table 4.8). The qualitative data from the worksheets also indicated that the low group's competence perception didn't seem to be supported by the worksheet learning. After previewing the worksheets, half of the low achievers (four out of the eight students in the low group) were still not confident in their English competence and set their goals below 39 points, and one of them even gave up completely by setting 0 point as his goal (See Table 4.9). This may explain why all the low achievers experienced success in achieving their goals after the tests (See

Table 4.11). The success experiences of achieving easy goals couldn't help increase their perceived competence. On the other hand, most of them (seven students) also had failure experiences during the worksheet learning (See Table 4.11). It indicated that those who set easy goals but still failed to achieve them had little momentum to prepare for the test questions, and those who truly made effort but still failed to achieve their goals deepened their sense of frustration. According to the students' feedback, almost all the low achievers (seven students) expressed that they experienced such frustration during the worksheet learning (See Table 4.15). They felt their effort didn't bring them their anticipated results. Since not all the low achievers felt their competence improved after achieving their goals, and their failure experiences further strengthened their sense of frustration, using the worksheets may not help increase the low achievers' competence perception.

Furthermore, three of the low achievers gave the feedback that the test questions were far beyond their current English competence (See Table 4.15). Thus, the test questions didn't seem to be optimal challenges to some of the low achievers. As for self-stated gains, three of the low achievers expressed they learned some vocabulary and grammatical structures from the worksheets (See Table 4.13), but the number of them is small. In general, the worksheets are not helpful in promoting the low achievers' competence perception and may have negative influence.

There are two possible reasons for the negative influence upon the low group's competence evaluation. First, some of the low achievers had a strong sense of helplessness. They were not confident in their own English competence to set challenging goals even though the test questions were given to them to prepare for in advance (See Table 4.9). Furthermore, they were reluctant to make efforts to learn English and to gain a better academic performance. Thus, their success or failure in achieving the easy goals they set didn't help improve their competence perception and perhaps further confirmed

their poor English competence. This may be why they gained less sense of achievement from their success experiences of learning English at school (See Table 4.8). The tendency to give up tasks easily is commonly found among helpless learners (Diener & Dweck, 1978; Licht & Dweck, 1984). The low achievers who developed a sense of helplessness before the experiment may need more guidance and assistance from their teacher to increase their competence perception. Brophy (2010) suggested that teachers could guide the helpless students to believe their failures are derived from lack of preparation and useful strategies instead of low ability by showing them evidence from their previous learning experiences or giving them attainable tasks as proofs. Thus, simply using the worksheets may not help promote the English competence perception of the helpless low achievers.

Second, the test questions may be too hard to be optimal challenges to some of the low achievers. As shown in Table 4.15, three low achievers expressed that the test questions were too difficult, and most of the low achievers felt it was no use making efforts to prepare for the test questions because they still failed to achieve their goals. Such failure experiences strengthened the low achievers' sense of frustration and made them gradually believe that their English competence was poor and unchangeable. After the experiences were accumulated, they would develop a strong sense of helplessness in the end. Deci and Ryan (1985) suggested that accumulating success experiences is a way to promote individual perceived competence. In order to increase competence perception, it is important to provide students with optimal-challenging tasks (Hunt, 1975). The process of overcoming the optimal challenges would help develop students' competence (Elliot, et al., 2000) and the sense of self-efficacy (Oxford & Shearin, 1994). Therefore, the teacher may need to adjust the difficulty of the test questions to meet the low achievers' current English competence or offer necessary assistance to make the questions manageable to the low achievers so that they can accumulate success experiences.

***The Influence of the Worksheet Learning upon the Participants' Relatedness
with Their classmates and the Teacher***

The quantitative and qualitative results showed that the middle achievers' relatedness with their classmates and the teacher was promoted after the use of the test-question preview worksheets. However, the positive effect didn't appear in the high group. In addition, there seemed to be a negative influence upon the low group's relatedness with their classmates and the teacher. The following sub-sections describe and discuss the influence of the worksheets upon the three groups' relatedness with others.

High Group

The high group's relatedness with their classmates and the teacher didn't have an apparent change after the worksheet learning as shown in the paired-samples t-test results (See Table 4.3). The mean-score changes in the relatedness questionnaire items revealed that the high achievers didn't feel more enjoyable to discuss the test questions with their teacher. In addition, they became a little bit reluctant to discuss with their classmates (See Table 4.4). Although their inclination to discuss with others didn't increase, they were willing to learn and share English learning strategies with their classmates and to encourage each other to learn English well (See Table 4.4). Furthermore, more than half of them felt grateful to their classmates who discussed the test questions with them (See Table 4.14). However, there were only three of them feeling thankful to the teacher for her help. It indicated that the high achievers' relatedness with the teacher wasn't strong. In general, the worksheet learning didn't seem to support the high group's relatedness with others much.

There are two possible reasons for no apparent change in the high group's relatedness with their classmates and the teacher. First, the high achievers were more competent in solving their English problems on their own; thus, they didn't need much

help from others. It may explain why the high achievers didn't feel more inclined to discuss the test questions with their classmates and the teacher (See Table 4.4). The teacher may need to make sure the test questions are optimal challenges to the high achievers so that they would feel the need to discuss the questions with others. Second, the high achievers' relationship with the teacher wasn't secure and positive enough to make them actively turn to her for help. There were only three high achievers expressing their gratitude toward the teacher for her help (See Table 4.14), indicating that the high achievers seemed reluctant to ask the teacher for help when there was a need. In order to establish a secure and positive relationship with students, teachers may need to make effort to let students feel they are liked, understood and helped when encountering difficulties by their teachers (Skinner & Belmont, 1993). Noels, Clement and Pelletier (1999) also stated that students who interact with supportive teachers would develop their intrinsic learning motivation. Therefore, providing the high achievers with challenging test questions and improving their relationship with their teacher may help promote their closeness with their classmates and the teacher.

Middle Group

The middle group's relatedness with their classmates and the teacher was found improved after the worksheet learning according to the paired-samples t-test results (See Table 4.5). Besides, the mean scores of the relatedness questionnaire items all increased, indicating that the middle achievers became more willing to learn and share learning tips with their classmates, encourage each other to learn English well and discuss the test questions with others (See Table 4.6). The qualitative data also showed that nearly the whole middle achievers (twelve out of the fourteen students in the middle group) had the experience of discussing with either their classmates or the teacher for preparing for the test questions during the worksheet learning (See Table 4.10). Still nearly the whole

middle group (eleven students) showed their gratitude toward their classmates for discussing the test questions with them, but fewer than one-third of the group (four students) expressed thankfulness toward their teacher (See Table 4.14). This indicated that the middle achievers were relatively reluctant to ask their teacher for help. Generally speaking, the worksheets seem able to offer support for the middle achievers' relatedness with others, especially with their classmates.

The finding that the middle achievers were motivated to interact with their classmates and the teacher in terms of English learning after the use of the worksheets can be explained with the following two reasons. First, since the middle achievers were able to preview the test questions on the worksheets and were also encouraged to discuss the questions with their classmates and the teacher, the classroom competitive atmosphere was toned down, and their focus was turned to resolving the English problems together. Under such circumstance, their learning anxiety would be reduced, their engagement in preparing for the test questions would be improved, and their relationship with classmates and the teacher would become closer and more supportive to each other. The less competitive and more cooperative learning environment could enhance students' self-regulated motivation in learning English (Johnson & Johnson, 1991). The middle achievers benefit more from such learning atmosphere because they are not as competent as the high achievers to be able to handle all the English problems by themselves. Thus, they are more likely to experience failure when they learn individually without cooperation. In this regard, they would rely more on the help from their classmates and the teacher when they are given chances and even encouraged to do so. This phenomenon can be seen in the qualitative data collected from worksheets. Almost all the middle achievers used the learning strategy of discussing English problems with others to prepare for the test questions (See Table 4.10) and felt thankful to their helpers (See Table 4.14).

Second, the worksheets also provided an opportunity of expressing gratitude to the

people who helped prepare for test questions or offered other necessary support in English learning. The middle achievers could write down the names of their helpers and the reasons for their thankfulness on the worksheets. This would enhance their willingness to help each other and hence increase their relatedness.

Though the middle achievers' relatedness with their classmates and the teacher was found promoted after the worksheet learning, it was discovered that their relatedness with the teacher wasn't improved a lot. Fewer than one-third of the middle achievers wrote down their gratitude toward the teacher on the worksheets (See Table 4.14). It manifested that they were less active in asking their teacher for help when preparing for the test questions. Skinner and Belmont (1993) pointed out that if students' relationship with teachers is positive and secure, the students would become more involved in academic tasks. Thus, teachers may need to actively care about their students, encourage them to face difficulties and provide necessary help when they are in need.

Low Group

The use of the test-question preview worksheets seems unable to promote the low group's relatedness with their classmates and the teacher since no significant difference was found in the paired-samples t-test results (See Table 4.7). In addition, the mean scores of most of the relatedness questionnaire items (Items 8, 9, 11, 12) decreased after the experiment, showing that the low achievers became reluctant to learn and share English learning tips with their classmates and to discuss the test questions with others (See Table 4.8). The qualitative data from the worksheets also indicated that the low achievers' relatedness with their classmates and the teacher wasn't supported by the worksheet learning. It was found that only two of the low achievers chose the learning strategy, discussing the test questions with others, for preparing for the tests (See Table 4.10). Moreover, after the tests, there were half of them feeling grateful toward their classmates

for their help, but no low achievers felt thankful toward the teacher (See Table 4.14). This represents that the low group's relatedness with the teacher wasn't strong. Based on the quantitative and qualitative results, the worksheet learning may not help improve the low achievers' relatedness with their classmates and the teacher.

The possible reason for the worksheets not being able to support the low achievers' relatedness with others is that the low achievers have developed a strong sense of helplessness, which hinders them from actively interacting with others in terms of English learning. They attributed their failure to low ability and developed a belief that their competence was poor and unchangeable. Thus, they felt they had nothing to share or help their classmates to learn English and, at the same time, had little momentum to ask others for help. Therefore, the exercises on the worksheets and the following tests only increased their belief in their incompetence and reluctance to interact with others. It was found that only two of the low achievers chose the learning strategy, discussing the test questions with others, to prepare for the tests (See Table 4.10). After the worksheet learning, they became more reluctant to learn and share English learning strategies and to discuss English questions with their classmates or the teacher (See Table 4.8). Furthermore, there was no one expressing thankfulness to the teacher, showing that they had little intention to ask the teacher for help (See Table 4.14). This passive attitude of refusing others' help is one of the features of helpless learners (Diener & Dweck, 1978; Licht & Dweck, 1984). Therefore, the teacher may need to actively get involved in the low group's English learning and provide necessary assistance and guidance to reestablish their confidence in their English competence and their belief in that effort brings success. In addition, the teacher can encourage the middle and high achievers to be the low achievers' personal English tutors so that the low achievers' relatedness with the teacher and their classmates may improve.

Report and Discussion of the Results of the School-administered English Achievement Test

In order to answer Research Question 2, both experimental and control groups, whose initial English academic achievement were similar, took a school-administered English achievement test at the end of the experiment. The test scores between both groups as well as their subgroup pairs were compared by means of the independent-samples t-test. The statistical outcomes are presented in Table 4.16.

Table 4.16

Independent-samples T-test of the Experimental and Control Groups' /Subgroups' Scores of the School-administered English Achievement Test

Experimental Group-		Experimental Subgroups - Control Subgroups					
Control Group		High Groups		Middle Groups		Low Groups	
t	Sig.	t	Sig.	t	Sig.	t	Sig.
-0.027	0.978	-1.128	0.278	-0.640	0.528	1.433	0.174

* $p < .05$.

According to the results of the independent-samples t-test, there were no significant differences between the experimental and the control groups' test scores as well as in their subgroup pairs'. In other words, both the experimental and control groups had similar performances on the English achievement test, and so did their subgroup pairs. This finding suggests that the use of the test-question preview worksheets may have little influence on the participants' English academic performances.

There are three possible reasons for the statistical result. First, the test questions on the worksheets only took care of the vocabulary and grammatical structures, which occupied 59% of the whole school-administered English achievement test. The rest of the 41% included other types of exercises, like listening and reading comprehension questions and translation fill-in. Since the worksheets only helped the participants to

prepare for the vocabulary and grammar parts on the achievement test, the effect of the worksheets on their academic performances was limited.

Second, the participants may provide or exchanged incorrect information when discussing the test questions on the worksheets, which may lead to mistakes on the school-administered achievement test. According to the qualitative data from the test-question preview worksheets, four participants expressed that their helpers gave them incorrect information, and it misguided them to answer the test questions wrong. In this regard, the teacher may need to encourage the participants to check their textbooks or ask her directly when they encounter some unclear or controversial points about the test questions on the worksheets during their discussions.

Third, the worksheets may not provide sufficient practice to help the participants familiarize themselves with the new materials they just learned. In the seven-week study, the participants only used three test-question preview worksheets before they took the school-administered English achievement test at the end of the experiment, and each worksheet contained only about 30 questions to practice. They may need more questions to absorb the new learning materials well. Besides, the participants were not encouraged to practice the questions frequently before they took the school-administered English achievement test. Under such circumstance, the effect of the worksheets on improving the participants' academic performances may be reduced. In order to increase the effect, the teacher can provide the participants with more questions to practice and encourage them to review all the worksheets frequently before they take an achievement test.



CHAPTER FIVE

CONCLUSION

This chapter contains three sections: the summary of the major findings, the pedagogical implications for practical application, and the limitations of the study.

Summary of Major Findings

The purpose of the present study is to find out whether the test-question preview worksheets could help promote the participants' English learning motivation in a test-oriented learning environment. Furthermore, the study investigates whether the participants with the aid of the worksheets could have better English academic performance than those not using the worksheets. The conclusions are presented by answering the two research questions.

The first research question looks into the effects of the worksheet learning upon the participants' three motivational components, namely competence perception, autonomy and relatedness, under a test-oriented learning environment. The results suggest that the worksheets may help promote the high achievers' autonomy for learning English but have no apparent influence upon their competence perception and relatedness with their classmates and the teacher. The t-test results showed that the high achievers tended to adopt autonomous attitude in learning English after the use of the worksheets ($t=-2.967$, $p=0.021<0.05$), but the other two motivational components remained similar. The little change in the mean scores of the questionnaire items on competence perception and relatedness also indicated that the high achievers didn't feel they gained more sense of achievement either from their success experiences or from the teacher's affirmation during the worksheet learning. Moreover, the worksheets were unable to motivate them to interact with their classmates and the teacher more often. The qualitative data from the

worksheets also supported these findings. According to the high achievers' responses and feedback on the worksheets, it was discovered that they adopted various learning strategies to prepare for the test questions, attributed their success to effort and failure to carelessness and found the ways to improve their English during the worksheet learning. These learning behaviors indicate that their autonomy for learning English is supported. However, most of them had success and failure experiences in the tests, and some of them thought the test questions were too easy. Besides, only three of them expressed thankfulness toward the teacher for her help in the feedback. These all suggest that, for the high achievers, the support for competence perception and relatedness with others may not be effective.

As for the middle group, the worksheets seem to benefit their English learning motivation the most. According to the paired-samples t-test results, there was a significant improvement in the middle achievers' relatedness with their classmates and the teacher ($t=-2.270$, $p=0.041<0.05$). Though the other two components, competence perception and autonomy, didn't show apparent improvement based on the t-test results, the mean scores of the questionnaire items on competence perception and most of the autonomy items increased after the worksheet learning. The qualitative data collected from the open questions on the worksheets also suggest that the middle achievers' three motivational components may be supported by the worksheet learning. As shown in the data, most of the middle achievers used different learning strategies to study for the test questions on the worksheets and ascribed their success to effort and failure to carelessness. Some of them pointed out that they learned some useful learning strategies from the worksheets and identified their weaknesses in English. Besides, they became more confident when facing the upcoming tests, and their success in achieving their goals increased their sense of achievement. Most of them also expressed that they learned some vocabulary and grammatical structures from the worksheets. Furthermore, almost the whole group had

the experiences of discussing the test questions with their classmates and the teacher. They also showed their gratitude toward their helpers. These responses and feedback all indicate that the worksheets may support the middle group's three motivational components.

The worksheet learning does not have similar positive effects on the low group. The t-test results showed that their autonomy for learning English decreased significantly ($t=3.325$, $p=0.013<0.05$) after the treatment. Also, the mean scores of most of the questionnaire items on the three motivational components decreased, reflecting that the low achievers' English learning motivation may not be promoted by the worksheet learning. The qualitative data gathered from the worksheets also present similar findings. The data showed that not many of the low achievers adopted various learning strategies to prepare for the test questions on the worksheets. The two most-used strategies, previewing the test questions and searching for the answers to the questions from the textbook, were the ones that didn't take much time and energy and had little interaction with others. Only few of them actively used the strategy, discussing the test questions with others, and this may explain why there was no one in the low group expressing thankfulness toward the teacher for her help. Furthermore, some of the low achievers tended to set easy goals or give up English learning tasks directly. Those who had given a try often felt frustrated because their effort didn't bring them their anticipated learning results. Three of the low achievers directly pointed out that the test questions were too hard for them to answer. Thus, most of them had failure experiences in the tests. Besides, none of them stated that they learned a useful learning strategy to improve their English from the worksheets. These responses all suggest that the worksheets may not help promote the low achievers' autonomy for learning English, competence perception and relatedness with others.

The second research question inquires into whether the experimental group could

outperform those without the aid of the worksheets. The results suggest that the worksheets may have little influence upon the participants' academic performance on a school-administered English achievement test. According to the independent samples t-test results, there wasn't any significant difference found in the test performances between the experimental and the control groups. It was probably because that the worksheets didn't cover all the questions tested in the English achievement test. They only focused on establishing the participants' linguistic knowledge (i.e. vocabulary and grammatical structures) but left out other abilities, like the ability of translation and reading comprehension, which were also tested in the English achievement test. In addition, students' misguidance in the discussions over the test questions on the worksheets may also lead to mistakes on the English achievement test. Last, the worksheets only provided limited test questions for the participants to practice. Therefore, the worksheets could not exert significant effects upon the participants' academic performance.

Pedagogical Implications

Learning English in a test-oriented learning environment, like junior high schools in Taiwan, may gradually decrease students' motivation to learn English. Students tend to become passive learners because their learning behaviors are controlled by tests. Deci, Pelletier and Ryan (1991) proposed that if the context could provide the support for the three human inherent needs, namely competence⁷, autonomy and relatedness, more self-determined motivation could be developed. Thus, teachers may need to support the three basic needs of their students by designing some learning activities or supplements, like worksheets, so as to motivate them to learn English. The present study suggests making use of tailor-made worksheets in the hope of achieving this goal.

⁷ The present study focuses on promoting the participants' competence perception.

For the purpose of ensuring the effectiveness of the worksheets, several suggestions of designing the worksheets are given. First, teachers can place test questions on the worksheets for students to preview. By doing so, students' test pressure and anxiety would be reduced and their attention would be drawn to looking for the answers to those questions instead of worrying about their performances on the tests.

Second, to provide relatedness support, teachers can design some open questions that encourage students to discuss test questions or assignments with their classmates and teachers. Leading them to express gratitude toward their helpers and state the reasons why they feel thankful is also a good way to increase students' relatedness with each other and with their teachers. Furthermore, teachers may need to be supportive and encouraging to students so as to create a positive and secure relationship with them. It would help increase students' motivation to interact with their teachers actively. In addition, the worksheets can provide access for students and teachers to exchange their feedback and feelings. Both students' relatedness with teachers and autonomy for learning could be enhanced through understanding each other and feeling being concerned by teachers.

Third, it should be cautioned that low achievers may suffer from a strong sense of helplessness, which would make them easily give up their learning and refuse others' help. They need more attendance and assistance from their teachers and classmates so that their English learning motivation can be promoted. Teachers can design attainable learning tasks for them to do (Brophy, 2010). Besides, offering them with remedial classes to build up the necessary English competence for learning new English material, and encouraging their classmates to be their personal tutors may be more helpful than simply handing them the worksheets to learn on their own.

Last, in order to help students have better academic performances, teachers can do the following things. For example, teachers can encourage students to discuss the test questions with more than one of their classmates or with their teacher to avoid the

chances of being misguided. And teachers may need to make sure the exercises on the worksheets are sufficient for students to familiarize themselves with the newly-learned English material. If there is a need, teachers can give additional exercises for students to practice. Furthermore, the worksheets could involve some requirements that urge students to spend time reviewing the worksheets before an English test. Thus, they wouldn't make the same mistakes as they made on the worksheets. By doing so, the worksheets would be more effective in helping students learn and perform better at school.

Limitations of the Study

There are several limitations of the present study that need to be further investigated. The first limitation is the small sample size of the research. There were only 30 students in the experimental and the control groups participating in the empirical study. Furthermore, when they were further divided into three subgroups (i.e. high, middle and low groups), both the experimental and the control classes contained only eight students in the high group, fourteen students in the middle group, and eight students in the low group. The small number of the participants in each subgroup may be problematic in applying the paired-samples and independent-samples t-tests for conducting within-group/subgroup and between-groups/subgroups comparisons.

Second, the amount of time spent on the experiment is too short. Within the seven weeks, the experimental group only used three test-question preview worksheets on three English lessons in their school textbook. Thus, the study results may not completely represent the effectiveness of the test-question preview worksheets on students' English learning motivation.

Third, the experimental and control groups' competence perception and relatedness with their classmates and the teacher were different before the worksheet treatment based on the independent-samples t-test results (See Table 4.1). This may cause further

statistical problems, if the study intends to compare the two groups' three motivation components after the treatment. Therefore, the present study focused on in-group comparisons by means of paired-samples t-test. The analysis helps to clarify the effect of the worksheet on the experimental group.

Fourth, the English learning motivation questionnaire and the test-question preview worksheets may not be comprehensive enough to represent the three motivational components, namely competence perception, autonomy and relatedness. The principles that were adopted to design the questionnaire and the worksheets were only concluded from a small number of studies relevant to the support of the three motivational components. It is thus recommended that more relevant studies could be involved and taken as references to develop a set of principles that are more comprehensive for devising the questionnaire and the worksheets.

Last, the test questions and assignments on the worksheets mainly focus on vocabulary and grammatical structures, which couldn't cover all the knowledge and abilities examined in the school-administered English achievement test. In addition, when comparing the test scores gained from the experimental and control groups with independent-samples t-test, the comparison didn't focus on comparing the scores gained from the vocabulary and grammar test sections but on the overall scores of the test. Thus, the statistical results may not fully reflect the effect of the worksheets upon students' English academic performances (targeted on linguistic knowledge).

Suggestions for Future Research

The research findings of the present study were limited in several ways that could be further investigated in future studies.

First, future research can be conducted on a larger number of participants in both experimental and control groups so that the statistical results of the empirical study would

be more valid. Also, future studies can try other inferential statistics, like nonparametric statistics, which can reduce the possible influence of a small sample size upon study results.

Second, future researchers could lengthen the treatment time. In this way, the test-question preview worksheets would have more time to exert their effects on students' English learning motivation.

Third, further research may be needed in this area, to observe the development of students' English learning motivation or any of its components after students stop using the test-question preview worksheets. It may provide the information on the independent development of English learning motivation after the use of the worksheets.

Fourth, it is recommended that the principles utilized to design the English learning motivation questionnaire and the test-question preview worksheets can be made more complete through more comprehensive literature review. By doing so, future studies can have a more solid theoretical foundation and provide more valid and convincing study results.

At last, the influence of the test-question preview worksheets on students' language anxiety could be added to further research. It has been reported that learning effectiveness may be impaired if students suffer too much apprehension during their learning (Horwitz, 2001). Therefore, whether the worksheet learning could help students release their language anxiety and improve their English learning would be an area worth future studies.

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Appendix A

Three Test-question Preview Worksheets

南一 Book 3 Lesson 4 學習英語【共 100 分】

一、Test:

(一)字彙：請根據提示填入適當的字彙。(每格 4 分)

1. 學期 _____ 2. 錄音機 _____ 3. 重複 _____
4. 字典 _____ 5. 明白；跟隨 _____
6. There are many (r) _____ here. You can choose(選) one and listen to English programs on it.
7. I love to sing and dance (a) _____ with pop songs.
8. You can keep a (d) _____ to practice your English writing.
9. It's (q) _____ hot these days. I feel I can't live without (沒有) an air conditioner(冷氣機).
10. No one is perfect. Everyone makes (m) _____ sometimes.

(二)文法：

A. 請寫出下列動詞的過去式：(每格 3 分)

1. try		2. practice		3. enjoy	
4. keep		5. finish		6. plan	

B. 請依據提示完成句子：(每句 6 分)【要注意時態及動詞變化】

1. Eric/ finish/ read the English magazine/ this morning.

2. Frank/ plan/ write a card to Tina/ after school/ yesterday.

3. Willy/ enjoy/ dance and jog/ , not sing.

4. My sister/ help me/ my homework/ every day.

5. The floor/ need/ clean/ every week.

6. Peter/ keep/ practice/ speak English/ with foreigners/ last Sunday.

7. David doesn't know these English words.
He/ need/ look up/ them. _____

二、進階練習【加分題】：

(一)造句練習：

A. 請用下方的動詞描述今天放學後會做的二件事情。

1. (want 或 need) _____

2. (plan 或 try) _____

B. 最近有持續做(keep)、練習(practice)、完成(finish)或享受於(enjoy)

某事嗎？請舉二個例子。

1. (keep 或 practice) _____

2. (finish 或 enjoy) _____

(二)英文訪談：

請找兩位朋友，用英文問他/她今天放學後會做什麼事，並記錄在下方表格中。

(請使用動詞：want, need, plan 或 try)

Example: A: _____

B: _____

朋友的名字	放學後會做…
1.	
2.	

三、我有話要說: (1~3 題可複選。第 2、3 題，請依據自己的情況挑一題寫。)

Part 1: 請於考試前回答此部分的題目，共 1 題。

我預計這次考試我可以拿到_____分，因為我已經…

☐看過考題，但沒寫過試題。 ☐看過考題，且練習寫過試題。

☐查/讀過課本，把答案找出來。 ☐複習過本課重點(單字、句型等)。

☐不會的題目請教同學或老師，一起討論。

☐其他 _____

Part 2: 請於考試後回答此部分的題目，共 4 題。

【第 1、2 題，請依據自己的情況挑一題寫】。

1. 考完後，我拿到_____分，我很滿意，…

☐因為有達到預計的目標，我的努力有好的成果。

☐雖未達到預計目標，但仍滿意，因為_____。

☐其他原因 _____

2. 考完後，我拿到_____分，我不滿意，因為…

☐漏寫題目。☐題目看錯。☐不夠細心作答。☐沒有仔細檢查。

☐未認真聽課。☐考前未複習完整(單字、句型或文法不熟)。

☐沒有事先請教他人不會的地方。

☐同學的解說是錯誤的，以至答案寫錯。☐寫考卷的時間不夠。

☐雖有達到預定目標，但仍不滿意，因為_____。

☐其他_____。

所以我要_____

，這樣下次若考出類似的題目我才會回答。

3. 從這份學習單/考試中，我學到_____

_____。

4. 感謝_____，因為_____

_____。

四、Let's talk:

1. 想告訴老師的話:(學習上遇到的困難、教學建議、心得...)

2. 老師想告訴你/妳的話:

南一 Book 3 Lesson 5 建立你自己的網誌不是很難【共 100 分】

一、Test:

(一)字彙: A. 請根據提示填入適當的字彙。(每格 2 分)

1. 網友_____ 2. 搜尋; 尋找 (s)_____
3. 可能的_____ 4. 地址; 住址 _____
5. 容易使用的_____
6. Jessica tried to (s)_____ money for her trip to the U.S.A.
7. Let's stay at home and watch some (v)_____. How's that?
8. Do you have any new (in)_____ about Lady Gaga?
9. Why not take the MRT to Taipei Zoo? It's very (c)_____ (t).
10. How did you know Teresa left for Japan one hour ago?
I heard it (th)_____ a friend.

- B. 動詞片語(課本 P.66):
1. 做線上購物_____
 2. 和朋友聊天(c)_____ 3. 搜尋資訊(I)_____
 4. 交外國網友_____ 5. 訂票_____
 6. 寄電子郵件給朋友_____

(二)文法:

A. 請寫出下列動詞的過去式: (每格 2 分)

1. create		2. send		3. share	
4. spend		5. shop		6. visit	

B. 請依據提示完成句子:【注意動詞變化】(每句 5 分)

1. You/ need/ spend time/ work on/ it.

2. read comic books/ be/ a lot of fun/ Sherry
(動名詞當主詞)_____
(不定詞當主詞)_____
(虛主詞)_____
3. sing English songs/ be/ interesting/ Ivy
(動名詞當主詞)_____
(不定詞當主詞)_____
(虛主詞)_____
6. drink coffee and listen to pop music/ help me/ stay up late(熬夜).
(動名詞當主詞)_____
(不定詞當主詞)_____

二、進階練習【加分題】：

(一)造句練習：每個人對同一件事的感覺都不盡相同，像做數學作業對某些同學很簡單但對某些同學卻很難。請依自己的狀況，用動名詞、不定詞或虛主詞當主詞個舉出一個例子。

1. (動名詞) _____

2. (不定詞) _____

3. (虛主詞) _____

(二)英文訪談：

請找兩位朋友，用英文問他/她學習英文的好方法為何，並記錄在下方表格中。 Ex:

A: What is a good way to learn English?

B: _____ is a good way to learn English.

朋友的名字	學英文的好方法
1.	
2.	

三、我有話要說: (1~3 題可複選。第 2、3 題，請依據自己的情況挑一題寫。)

Part 1: 請於考試前回答此部分的題目，共 1 題。

我預計這次考試我可以拿到_____分，因為我已經…

- ☐ 看過考題，但沒寫過試題。 ☐ 看過考題，且練習寫過試題。
☐ 查/讀過課本，把答案找出來。 ☐ 複習過本課重點(單字、句型等)。
☐ 不會的題目請教同學或老師，一起討論。
☐ 其他 _____

Part 2: 請於考試後回答此部分的題目，共 4 題。

【第 1、2 題，請依據自己的情況挑一題寫】。

1. 考完後，我拿到_____分，我很滿意，…

- ☐ 因為有達到預計的目標，我的努力有好的成果。
☐ 雖未達到預計目標，但仍滿意，因為_____。
☐ 其他原因 _____

2. 考完後，我拿到_____分，我不滿意，因為…

- ☐ 漏寫題目。 ☐ 題目看錯。 ☐ 不夠細心作答。 ☐ 沒有仔細檢查。
☐ 未認真聽課。 ☐ 考前未複習完整(單字、句型或文法不熟)。
☐ 沒有事先請教他人不會的地方。
☐ 同學的解說是錯誤的，以至答案寫錯。 ☐ 寫考卷的時間不夠。
☐ 雖有達到預定目標，但仍不滿意，因為_____。

☐其他 _____。
所以我要 _____
，這樣下次若考出類似的題目我才會回答。

3. 從這份學習單/考試中，我學到 _____
_____。

4. 感謝 _____，因為 _____
_____。

四、Let's talk:

1.想告訴老師的話:(學習上遇到的困難、教學建議、心得...)

2. 老師想告訴你/妳的話: _____



南一 Book 3 Lesson 6 Nora(當時)正在購買感恩節晚餐所需的食材【共 100 分】

一、Test:

(一)字彙: 請根據提示填入適當的字彙。(1~5 題每格 3 分; 其餘每格 2 分)

1. 南瓜_____ 2. 小紅莓; 蔓越莓_____
3. 醬; 調味汁_____ 4. 馬鈴薯 _____
5. 北美洲_____
6. Yesterday was Mom's birthday. We (c)_____ it at a fancy restaurant.
7. We eat moon cakes on the Moon Festival. It's our (t)_____.
8. They (th)_____ about taking a trip to New York, but it was too expensive, so they gave it up(放棄).
9. Is this your wallet? I (f)_____ it on the floor.
10. Sandy (c)_____ a star out of a piece of paper and made it into a card.

(二)文法:

A. 請寫出下列序數及月分: (每格 3 分)

第 2		第 40		第 12		第 8	
第 31		第 5		第 23		第 99	
1 月		10 月		8 月		2 月	

B. 請依據提示完成句子: (每句 4 分)

【注意動詞變化及時間副詞前是否要補上介系詞】

1. Helen/ wash dishes/ this morning

2. Kevin and Jerry/ chat with each other/ Sunday morning

3. The Wang family/ have/ a big dinner/ Thanksgiving/ 2009

4. We/ gather together/ the night of Christmas/ 2010

5. Judy/ visit New York/ December seventh/ 1999

6. We/ shop/ in the department store/ at that time

7. Jerry/ clean his room/ four thirty/ yesterday afternoon

8. Uncle Jerry/ search for/ his cat/ all afternoon/ last Tuesday

9. Richard was creating his blog then. (依畫線部分造原問句)

二、進階練習【加分題】：

(一) 造句練習：昨天晚上 8 點及 10 點時你/妳正在做什麼事呢？

【請用過去進行式描述出來。】

1. (8 點) _____

2. (10 點) _____

(二) 英文訪談：

請找兩位朋友，用英文問他/她生日是幾月幾號，並記錄在下方表格中。

Ex: A: What date is your birthday?

B: _____

朋友的名字	生日 【日期請用英文寫出】
1.	
2.	

三、我有話要說: (1~3 題可複選。第 2、3 題，請依據自己的情況挑一題寫。)

Part 1: 請於考試前回答此部分的題目，共 1 題。

我預計這次考試我可以拿到_____分，因為我已經...

☐ 看過考題，但沒寫過試題。 ☐ 看過考題，且練習寫過試題。

☐ 查/讀過課本，把答案找出來。 ☐ 複習過本課重點(單字、句型等)。

☐ 不會的題目請教同學或老師，一起討論。

☐ 其他 _____

Part 2: 請於考試後回答此部分的題目，共 4 題。

【第 1、2 題，請依據自己的情況挑一題寫】。

1. 考完後，我拿到_____分，我很滿意，...

☐ 因為有達到預計的目標，我的努力有好的成果。

☐ 雖未達到預計目標，但仍滿意，因為_____。

☐ 其他原因 _____

2. 考完後，我拿到_____分，我不滿意，因為...

☐ 漏寫題目。 ☐ 題目看錯。 ☐ 不夠細心作答。 ☐ 沒有仔細檢查。

☐ 未認真聽課。 ☐ 考前未複習完整(單字、句型或文法不熟)。

☐ 沒有事先請教他人不會的地方。

- ☐同學的解說是錯誤的，以至答案寫錯。 ☐寫考卷的時間不夠。
- ☐雖有達到預定目標，但仍不滿意，因為_____。
- ☐其他 _____。
- 所以我要_____
- ，這樣下次若考出類似的題目我才會回答。

3. 從這份學習單/考試中，我學到_____。

4. 感謝_____，因為_____。

四、Let's talk:

1.想告訴老師的話:(學習上遇到的困難、教學建議、心得...)

2. 老師想告訴你/妳的話:





Appendix B
English Learning Motivation Questionnaire (English/Chinese version)

English Learning Questionnaire

Dear student :

This questionnaire aims to understand your current state of English learning at school, and the results will only be used for the research. Thus, please feel free to answer each of the following questions according to your present feelings and awareness. We deeply appreciate your help and cooperation.

Your English teacher,

Notice: Please tick the answer that best suits your current situation.

1. I gain a sense of achievement from overcoming the optimal English challenges at school.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

2. The teacher's affirmation of my English competence makes me feel confident in learning English well.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

3. I actively spend time reviewing the newly-learned English materials actively.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

4. I set goals for improving my English competence.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

5. I search for solutions to my English problems actively.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

6. I attribute my success or failure in English learning to effort.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

7. I try to learn from my mistakes I made on my English tests with my teacher's corrections and comments.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

8. I learn some English-learning tips from my classmates, like the ways to memorize difficult English words.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

9. I'm willing to share my ways of learning English with my classmates.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

10. My classmates and I encourage each other to learn English well.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

11. I enjoy discussing English questions with my classmates.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

12. I enjoy discussing English questions with my teacher.

☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Class: _____ Number: _____ Name: _____

英語課問卷

親愛的同學：

這是一份用來了解你/妳目前在學校英文學習狀況的問卷。答案沒有對錯之分，請依照自己的感受，勾選出符合自己英文學習實況的答案。你/妳的熱心回答將會對老師的教學有所助益。感謝你/妳的幫忙！

※ 填答說明：問卷題目共 12 題，請勾選出目前最符合自己英文學習狀況的答案。

1. 從克服難度適中的英語挑戰中，我得到很多成就感。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
2. 老師對我英語實力的肯定，讓我覺得自己有能力學好英文。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
3. 我會主動找時間複習英文。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
4. 我會自訂英文學習目標，加強自己的英文能力。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
5. 學習英文中，若遇到困難，我會主動尋求解決的方法。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
6. 我認為我英文學習的成功與失敗是因為我夠不夠努力的關係。
(例如：花時間記單字和多寫翻譯練習題，所以考卷上的翻譯題答得不錯。)
☐非常符合 ☐符合 ☐不太符合 ☐不符合
7. 考完英文，我會從考卷上老師的更正與評語將錯的題目弄懂。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
8. 我會從同學那裡，學到一些讀英文的訣竅，像如何牢記某些難背的單字。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
9. 我會和同學分享自己學英文的方法。
☐非常符合 ☐符合 ☐不太符合 ☐不符合

10. 我和同學會互相鼓勵，把英文學好。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
11. 我覺得和同學一起討論英文問題很棒。
☐非常符合 ☐符合 ☐不太符合 ☐不符合
12. 我覺得和老師一起討論英文問題很棒。。
☐非常符合 ☐符合 ☐不太符合 ☐不符合

班級: _____ 座號: _____ 姓名: _____

辛苦了！感謝你/妳的配合！




Appendix C

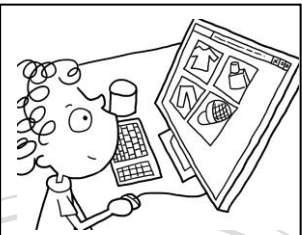
A School-administered English Achievement Test

一、聽力測驗

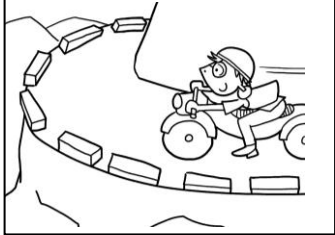
A. 根據聽到的內容，敘述符合圖片者勾選 ☒ T，不符合者勾選 ☒ F。
(每題2分，共10分)

1. 

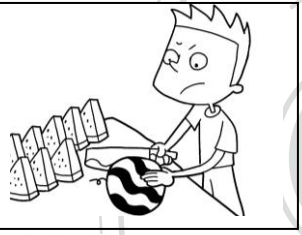
☐ T ☐ F

2. 


☐ T ☐ F

3. 

☐ T ☐ F

4. 

☐ T ☐ F

5. 

☐ T ☐ F

B. 根據聽到的對話內容與問題，選出正確的答案。(每題2分，共10分)

- () 1. (A) He wanted to invite her to the movies.
 (B) He wanted to give her movie tickets.
 (C) He needed her help with his math homework.
- () 2. (A) She couldn't go to his birthday party.
 (B) She didn't like his birthday party.
 (C) She wanted to invite him to her birthday party.
- () 3. (A) No, it's difficult for her.
 (B) Yes, it is easy for her to make a pumpkin pie.
 (C) No, she made pumpkin pies before.
- () 4. (A) Creating a blog is easy for the girl and the boy.
 (B) Creating a blog is difficult for the girl.
 (C) Creating a blog is difficult for the boy.

- () 5. (A) He walks to school. (B) He goes to school by bus.
(C) He goes to school by bike.

二、文意字彙 (每題1分，共15分)

- _____ 1. On the Internet, you can look for useful i_____.
- _____ 2. The potatoes cost ten dollars a p_____.
- _____ 3. F_____ has only twenty-eight days this year. It is the second month of the year.
- _____ 4. A: How do you c_____ Christmas? B: By singing Christmas songs.
- _____ 5. Don't park on red l_____, or you will be fined(罰錢).
- _____ 6. It was a big m_____ to leave my umbrella at home this morning.
It begins raining now.
- _____ 7. Tim's house is very small, so he has to s_____ the room with his brother.
- _____ 8. The White House(白宮) is not open to c_____ people because of the safety.
- _____ 9. F_____ the good example, and you can be successful.
- _____ 10. *Time* is my favorite m_____. I can read it to know many things.
11. 照片 _____ (o) 12. 重複 _____ 13. 傳統 _____
14. 十二月 _____ 15. 八月 _____

三、選擇 (每題2分，共20分)

- () 1. _____ to do online shopping today.
(A) We are convenient (B) It's convenient for us
(C) How convenient we are (D) They are convenient
- () 2. I saw Tom last night. He _____ the floor then.
(A) mop (B) mopping (C) was mopping (D) mops
- () 3. _____ a lot of fun chatting with friends through the computer.
(A) We have (B) It has (C) We are (D) He is
- () 4. _____ to do something wrong. No one is perfect.
(A) Anyone is possible (B) Maybe anyone is possible
(C) It's possible for anyone (D) It may possible
- () 5. Mom told me _____ too much TV.
(A) don't watch (B) no watch (C) not watch (D) not to watch

- ()6. To use computers to book tickets _____ very convenient.
(A) are (B) is (C) have (D) be
- ()7. Mr. Jones has two daughters. _____ like creating the blog.
(A) They both (B) They all (C) Both them (D) All of them
- ()8. We had a parrot as a pet _____.
(A) in 2009, January 12 (B) on June 10, 2010, Tuesday
(C) on Thursday, March 19, 2008 (D) on April 1, Wednesday, 2011
- ()9. He _____ study math last night. That's why he got good grades today.
(A) do (B) does (C) didn't (D) did
- ()10. A : May I go to the party with you? B : _____.
(A) That's fine with you. (B) Yes, you may.
(C) You're right. (D) Yes, I'm afraid not.

四、1~9填入適當介系詞，10~15填入適當動詞型態。(每題1分，共15分)

1. I listen to *Let's Talk in English* _____ the radio every morning to learn English.
2. Tina keeps a diary _____ English every day.
3. I love dogs; I am not afraid _____ them.
4. Mr. Wilson goes to church _____ Sunday mornings.
5. Eva invited 50 people _____ her wedding party.
6. The weather is usually hot _____ summer in Taiwan.
7. _____ the evening of October 10th in 2011, there was a beautiful firework show in Changhua. (彰化)
8. Andy is good _____ telling jokes. He always makes us laugh.
9. Teacher's Day comes _____ September 28.
10. Don't forget _____ (save) the file(檔案) before you turn off the computer.
11. Mike uses a tape recorder to practice _____ (speak) English.
12. A: Do you want _____ (join) us? B: Yes, I'd love to.
13. Mom asks me _____ (think) twice before doing everything.
14. Anne finished _____ (write) the papers.
15. _____ (learn) Japanese on the weekend is interesting to me.

五、閱讀測驗 (每題2分，共6分)

(一) Brother Sharp became an idol in the world a year ago. He was a beggar walking around in Ningbo, China. One day, someone sent his picture on the Net because of his

good fashion sense. People in China were surprised by the way he dressed and wanted to know more about him. He was also reported in many newspapers. After a few days, Brother Sharp was found in Ningbo with his mother and brother. When a reporter went to meet him, he looked very different from the picture that we saw on the Internet. He had new clothes on and his hair was all gone. He was shy and did not talk much. Later, Brother Sharp told the reporter that he thought being a beggar was better than going back home. He enjoyed the life of being a beggar because he could go anywhere he wanted to. However, his family did not agree with him and took him back to his home town to start a new life.

beggar乞丐 sense感覺 better較好

1. Why was Brother Sharp famous in the world?

- (A) Everyone in his family was a beggar.
- (B) He was the most handsome beggar in China.
- (C) He always walked around in Ningbo.
- (D) He dressed well although he was a beggar.

2. He enjoyed being a beggar because _____.

- (A) it was free
- (B) he liked Ningbo
- (C) he didn't want to go back home
- (D) he was shy

(二)

Ellen wrote a poem to Belle.

Making me laugh and cry with tears,

You've been my best friend all these years.

Feeling happy, sad, or alone,

Remember to call me on the phone.

In our life hand in hand we are,

Everything for us to share.

Nothing can push us away.

Do you feel the same way?

3. What does Ellen ask Belle to do when Belle feels sad?

- (A) Give Ellen a hand. (B) Give Ellen a call. (C) Cry loudly. (D) Laugh loudly.

六、填充式翻譯(每格1分，共11分)

1. My family _____ to give _____ to Mom _____
the second Sunday in May.

(在五月的第二個星期天，我的家人團聚在一起向媽媽獻上感謝。)

2. The waiter is busy _____ everyone's glass _____ water.
(服務生正忙著替每個人的杯子倒滿水。)

3. The man _____ everywhere _____ his wallet. He looked worried.
(那個男人到處找他的錢包。他看起來很擔憂。)

4. My friend and I are _____ going to the movie,
Warriors of the Rainbow: Seediq Bale.
(我朋友和我正想著去看電影賽德克·巴萊。)

七、依照提示作答 (每題3分，共9分)

1. Going to work by MRT saves Lisa a lot of time. (用It...)

2. When did you have the English test? 用英文寫出日期2011年11月29日)

3. Amy practices the piano for three hours every day. (加入spend改寫句子)

八、寫出印刷體 (每題2分，共4分)

ex: *English* → English

1. *dilemma* → _____

2. *Fahrenheit* → _____