

科技部補助專題研究計畫成果報告 期末報告

英語文之學習遷移、害怕失敗、遲滯拖延和自我效能：我們可
否在藝術相關科系學生中找到證據嗎？

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中文摘要：本計劃之目的在於探討藝術相關科系學生學習遷移的潛力，以及害怕失敗、遲滯拖延和自我效能對學習英語文的關係與影響。學習遷移已經研究超過一百年以上，它是一個非常重要但是卻是一個難以找出答案的議題，最主要的困難有三：第一、遷移的程度是相對性的，實驗組如何表現的比對照組還好呢？第二、什麼樣的遷移行為該被衡量？幾乎沒有一種評量方法可以適用所有例子，第三、在做學習遷移實驗時，實驗組和對照組的行為表現其信度和效度難以衡量(Cormier & Hagman, 2014)。這樣聽起來，能夠找到學習遷移的證據機會是很小的，但是 Baum, Owen, 和 Oreck (1997)發現藝術和學生的課業表現是有關連的。Catterall (2002)亦發現透過音樂可以促進認知發展，戲劇可以幫助英文閱讀能力，視覺藝術可以幫助問題解決能力，以及舞蹈可以培養學生持續力。Gardner (1999)指出在藝術領域裡所學到的技巧可以幫助學生了解其他的學習活動，而且可以轉移學生的自信心到其他學科上面，基於此理由，本研究之目的即在探討藝術的潛力和學習英文的關係。除了學習遷移以外，我們也將探討害怕失敗、遲滯拖延和自我效能對學生學習英文的影響，大家對藝術相關科系學生普遍的刻板印象就是在學科上尤其是英文，表現不是很好，學生是因為語言能力的問題嗎？還是他們害怕在英文考試中失敗或是課堂上表現不佳？還是他們寧願花時間在自己的專業領域上面，所以他們能總是找到原因來拖延學習英文呢？根據研究者多年的教學經驗，有些學習藝術的學生在專業領域和英語文能力都是非常傑出的，本研究之目的試圖找出為什麼有些學生在專業和英語文能力都非常傑出，藉此找出方法幫助其他英語文能力不好的學生。本研究分為研究一、我們將探討藝術相關科系學生在其專業和學習英文之間的學習遷移，研究二、害怕失敗、遲滯拖延和自我效能對學生英語文能力的關係和影響。本研究之實驗參與者約為五百零一位藝術相關科系學生。研究工具為三：(一)實驗參與者每學期皆會接受線上全民英檢施測，成績一方面做為學生對自我英語能力的了解，也做為老師備課時的參考，在本計劃中將做為檢視英語文學習之用。(二)問卷：分為五個部份：第一部份為學生之基本資料、第二部分為學習遷移，問題的內容是採自 James' s 的研究。第三部分為 Conroy 的「害怕失敗量表」，第四部份為 Solomon 和 Rothblum 的「學習遲滯拖延量表」，第五部分為 Pintrich 和 DeGroot 的「自我效能量表」。實驗結果顯示學習轉移理論中擁抱策略和搭橋策略與學生的英文程度都有顯著性的相關。迴歸分析也顯示擁抱策略像是設定期待值、相配、刺激、示範和解決問題的學習方法都是正向的預估值。從結構方程式來看，害怕失敗和學習遲滯拖延在學生的自我效能和英文能力，具有中介效果。

中文關鍵詞：學習遷移；害怕失敗；遲滯拖延；自我效能；藝術相關科系學生

英文摘要：The purpose of the project was to examine the potential of transfer of learning for arts students and the relationships among students' fear of failure, procrastination, and self-efficacy with learning English. Transfer of learning is an important but hard-to-solve problem. Three major difficulties are attributed to it: the

degree of transfer is normally defined in relative terms, the kinds of performances are measured, and the reliability and validity of experimental and control-group performance. It may sound gloomy that the chance of finding evidence regarding transfer of learning is slim. However, Gardner (1999) points out that certain kinds of learning in the arts are possibly spilling over. He said that skill and craft gained in the arts help students understand that they can improve in other consequential activities and that the arts hold no monopoly on creating transferable feelings of self-confidence. Therefore, this study delved into the potentials of the arts and its relationship with learning English. Aside from transfer of learning, we also explore the influences of fear of failure, procrastination, and self-efficacy on learning English. Is it because of language problems or their fear of failing in the English tests, or is it their classes that are holding them back? Two studies were included: In study 1, we investigated the issue of transfer of learning for arts students between their professions and English. In study 2, we investigated the influences of fear of failure, procrastination, and self-efficacy on students' English proficiency levels. A SEM was implemented to examine whether or not fear of failure and procrastination play mediating factors between students' self-efficacy and their English proficiency levels. The participants were 501 arts majors. The research tools included an online GEPT test and a questionnaire. The questionnaire consists of five parts. Part I recorded students' demographic information. Part II was transfer of learning. The question items were adopted from James' study (2006). Part III was a short form of Conroy' s User' s Manual of Performance Failure Appraisal Inventory (PFAI) in 2002. The fourth part was Procrastination Assessment Scale for Students (PASS) developed by Solomon and Rothblum (1984). Nine items for taking an exam and 10 items of writing for term papers or assignments are chosen. Part V dealt with students' self-efficacy and it includes nine items from the Pintrich and De Groot (1990) Motivated Strategies for Learning Questionnaires (MSLQ). After participants had completed the questionnaires, the data was processed using a stepwise regression model, a t-test, a correlational test, and a SEM model. The results show both the hugging and bridging strategies were significantly correlated with students' English achievement. A stepwise regression analysis revealed that hugging strategies, such as setting expectations, matching, stimulating, modeling, and problem-based learning, were positive predictors. From the SEM, both fear of failure and procrastination played

mediating roles between students' self-efficacy and English achievement. The study provided insight into the influence of fear of failure and the reasons why students procrastinated in studying English and difficulties encountered, tailored to the specific needs for arts students.

英文關鍵詞：Transfer of Learning, Fear of Failure, Procrastination, Self-efficacy, Arts Students

科技部補助專題研究計畫成果報告

(期末報告)

Transfer of Learning, Fear of Failure, Procrastination, and Self-efficacy in Learning English: Any Evidence from the Arts?
英語文之學習遷移、害怕失敗、遲滯拖延和自我效能：我們可否在藝術相關科系學生中找到證據嗎？

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計畫主持人：曾敏珍

共同主持人：陳嘉成

計畫參與人員：

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中華民國 107 年 07 月 25 日

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**Transfer of Learning, Fear of Failure, Procrastination, and Self-efficacy in
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系學生中找到證據嗎？

Abstract

The purpose of the project is to examine the potential of transfer of learning for arts students and the relationships among students' fear of failure, procrastination, and self-efficacy with learning English. Transfer of learning has been studied for over one hundred years since the early 20th century. The popularity of this issue has been fluctuated among educational and psychological researchers. It is an important but hard-to-solve problem. Three major difficulties are attributed to it: the degree of transfer is normally defined in relative terms, the kinds of performances are measured, and the reliability and validity of experimental and control-group performance. It may sound gloomy that the chance of finding evidence regarding transfer of learning is slim. However, Baum, Owen, and Oreck (1997) found the link between the arts in students' academic performance and achievement. Catterall (2002) also found that cognitive development through music, reading achievement through drama, problem-solving through the visual arts, and persistence through dance impact TOL. In addition, Gardner (1999) points out that certain kinds of learning in the arts are possibly spilling over. He said that skill and craft gained in the arts help students understand that they can improve in other consequential activities and that the arts hold no monopoly on creating transferable feelings of self-confidence. Therefore, this study delved into the potentials of the arts and its relationship with learning English. Aside from transfer of learning, we also explore the influences of fear of failure, procrastination, and self-efficacy on learning English. When arts students struggle

with English, is it because of language problems or their fear of failing in the English tests, or is it their classes that are holding them back? Alternatively, do challenges arise because they prefer to focus on their profession so they always can find reasons to procrastinate studying English? A stereotype has formed suggesting that arts students do not perform well in academic subjects; however, certain arts students perform exceptionally well in their profession and in English. This study investigated why certain arts students are adept at both learning their profession and also in English, and based on this, we searched for the means to help other arts students who may be accomplished in their specialties but struggle to learn English. Three studies are included: In study 1, we investigated the issue of transfer of learning for arts students between their professions and English. In study 2, we investigated the influences of fear of failure, procrastination, and self-efficacy on students' English proficiency levels. A SEM (Structural Equation Model) was implemented to examine whether or not fear of failure and procrastination play mediating factors between students' self-efficacy and their English proficiency levels. Study 3 was a qualitative study. We interviewed the students who were distinguished in English and apply to waive General English. We used 18 interview questions to dig up any evidence of similarities or differences of the ways they learn their profession and English.

The participants were approximately 501 arts majors. The research tools included an online GEPT test, a questionnaire, and an interview. The questionnaire consists of five parts. Part I recorded students' demographic information. Part II was transfer of learning. The question items was adopted from James' study (2006). Part III was a short form of Conroy's User's Manual of Performance Failure Appraisal Inventory (PFAI) in 2002. The fourth part was Procrastination Assessment Scale for Students (PASS) developed by Solomon and Rothblum (1984). Nine items for taking an exam

and 10 items of writing for term papers or assignments are chosen. Part V dealt with students' self-efficacy and it includes nine items from the Pintrich and De Groot (1990) Motivated Strategies for Learning Questionnaires (MSLQ). The interview questions were adopted from four studies by Forsyth (2012), Conroy (2002), Solomon and Rothblum (1984), and Usher (2009). The questionnaire underwent a pilot stage in December 2016, after which the questionnaires and interview questions were modified according to the suggestions given by the invited participants. After participants had completed the questionnaires, the data was processed using a stepwise regression model, a t-test, a correlational test, and a Structural Equation Modeling (SEM) model. The results show both the hugging and bridging strategies were significantly correlated with students' English achievement. A stepwise regression analysis revealed that hugging strategies, such as setting expectations, matching, stimulating, modeling, and problem-based learning, were positive predictors. From the SEM, both fear of failure and procrastination played mediating roles between students' self-efficacy and English achievement. The study provided insight into the influence of fear of failure and the reasons why students procrastinated in studying English and difficulties encountered, tailored to the specific needs for arts students.

Keywords: Transfer of Learning, Fear of Failure, Procrastination, Self-efficacy, Arts Students

Transfer of Learning, Fear of Failure, Procrastination, and Self-efficacy in

Learning English: Any Evidence from the Arts?

英語文之學習遷移、害怕失敗、遲滯拖延和自我效能：我們可否在藝術相關科系學生中找到證據嗎？

摘要

本計劃之目的在於探討藝術相關科系學生學習遷移的潛力，以及害怕失敗、遲滯拖延和自我效能對學習英語文的關係與影響。學習遷移已經研究超過一百年以上，它是一個非常重要但是卻是一個難以找出答案的議題，最主要的困難有三：第一、遷移的程度是相對性的，實驗組如何表現的比對照組還好呢？第二、什麼樣的遷移行為該被衡量？幾乎沒有一種評量方法可以適用所有例子，第三、在做學習遷移實驗時，實驗組和對照組的行為表現其信度和效度難以衡量(Cormier & Hagman, 2014)。這樣聽起來，能夠找到學習遷移的證據機會是很小的，但是 Baum, Owen, 和 Oreck (1997)發現藝術和學生的課業表現是有關連的。Catterall (2002)亦發現透過音樂可以促進認知發展，戲劇可以幫助英文閱讀能力，視覺藝術可以幫助問題解決能力，以及舞蹈可以培養學生持續力。Gardner (1999)指出在藝術領域裡所學到的技巧可以幫助學生了解其他的學習活動，而且可以轉移學生的自信心到其他學科上面，基於此理由，本研究之目的即在探討藝術的潛力和學習英文的關係。除了學習遷移以外，我們也將探討害怕失敗、遲滯拖延和自我效能對學生學習英文的影響，大家對藝術相關科系學生普遍的刻板印象就是在學科上尤其是英文，表現不是很好，學生是因為語言能力的問題嗎？還是他們害怕在英文考試中失敗或是課堂上表現不佳？還是他們寧願花時間在自己的專業領域上面，所以他們能總是找到原因來拖延學習英文呢？根據研究者多年的教學經驗，有些學習藝術的學生在專業領域和英語文能力都是非常傑出的，本研究之目的試圖找出為什麼有些學生在專業和英語文能力都非常傑出，藉此找出方法幫助其他英語文能力不好的學生。本研究分為三個部分，研究一、我們將探討藝術相關科系學生在其專業和學習英文之間的學習遷移，研究二、害怕失敗、遲滯拖延和自我效能對學生英語文能力的關係和影響，研究三、為質性的研究，我們將訪問英文資優申請英文免修的學生，以十八個問題試圖找出這些英文優秀的學生在學習藝術專業和英語文的遷移和異同。

本研究之實驗參與者約為五百零一位藝術相關科系學生。研究工具為三：(一)實驗參與者每學期皆會接受線上全民英檢施測，成績一方面做為學生對自我英語能力的了解，也做為老師備課時的參考，在本計劃中將做為檢視英語文學習之用。(二)問卷：分為五個部份：第一部份為學生之基本資料、第二部分為學習遷移，問題的內容是採自 Jame's 的研究。第三部分為 Conroy 的「害怕失敗量表」，第四部份為 Solomon 和 Rothblum 的「學習遲滯拖延量表」，第五部分為 Pintrich 和 DeGroot 的「自我效能量表」。(三)訪談：訪談題目來自 Forsyth, Conroy, Solomon 和 Rothblum 以及 Usher 的研究，訪問對象為英文資優並且申請英文免修的學生。本問卷已於 2016 年 12 月邀請學生和老師試作(pilot study)，問卷內容依照建議完成修改。實驗結果顯示學習轉移理論中擁抱策略和搭橋策略與學生的英文程度都有顯著性的相關。迴歸分析也顯示擁抱策略像是設定期待值、相配、刺激、示範和解決問題的學習方法都是正向的預估值。從結構方程式來看，害怕失敗和學習遲滯拖延在學生的自我效能和英文能力，具有中介效果臺灣許多藝術家和藝術工作者在國際大放異彩，政府在推廣軟實力的同時，語言能力是不可或缺，本計劃將找出學生專業和英文的學習遷移，藉以幫忙學生增加英語學習動機和增進其英語文能力。

關鍵字：學習遷移；害怕失敗；遲滯拖延；自我效能；藝術相關科系學生

CHAPTER ONE

INTRODUCTION

Transfer of learning has been studied for over one hundred years since the early 20th century. E. L. Thorndike was the first educational psychologist to examine transfer of learning in a scientific method. In the study, he hypothesized that learning Latin helped students learn other subjects, so he divided students into two groups, the ones who had studied Latin and the others who had not, and then compared their performances. To their dismay, the results had shown that studying Latin had not helped students with developing thinking or analytical skills. Thorndike self-explained that transfer of learning relied on identical elements in two situations, implying that most of the time differences in two learning situations were too much for transfer to occur (Fallon, Lahar, & Susman, 2009).

Transfer of learning is an important but hard-to-solve problem. Finding a way to actually measure the transfer has been a contentious issue. There are several problems contributing to it (Cormier & Hagman, 2014). First, the degree of transfer is normally defined in relative terms. For example, Task 2 is compared between an experimental group which receives some prior tasks training (Task 1) and a control group which receives no such Task 1 training. Most of the time, the experimental group outperforms the control group if Task 1 transfers positively to Task 2. To measure how much better the performance is, a half a dozen formulas are used, but an understanding and awareness of the particular formulas by different transfer studies is in need of a correct interpretation. Second, it is critical to know what kinds of performances are measured. There is really no one correct performance measure to use in all cases. The third problem is the reliability and validity of experimental and

control-group performance. The degree of transfer of learning is often difficult to assess with complete confidence. Also, the applied environment often sets obstacles to the implementation of particular transfer paradigms or methodologies regardless of their accepted validity.

On top of the disappointment of Thorndike's study and problems of measuring transfer of learning, Winner and Cooper (2000) in their study *Mute Those Claims* found there is no evidence of a causal link between studying the arts and improved academic achievement. This finding challenged a strong belief that has developed among policymakers and arts advocates that the arts can play a powerful role in education because the skills and attitudes learned through the arts can help students in academic areas of learning.

The findings of Winner and Cooper's study sound gloomy if it indicates that the arts have failed to find success in academic areas, together with the thwart of Thorndike's study and problems of measuring transfer of learning, but we have learned not to be discouraged by murkiness, but to embrace it. A lot of researchers are still actively engaged in finding the link or evidence of the arts in students' academic performance and achievement. Baum, Owen, and Oreck (1997) found the opposite results in their study of talented arts students at the Arts Connection. The researchers studied talented art students' self-regulatory behaviors and their academic performances. They conducted a longitudinal study over six years and demonstrated that artistically talented students apply a range of self-regulatory behaviors and effective learning strategies to academic tasks. The researchers noticed students' improvement on standardized English-reading tests and provided evidence that successful learning strategies and behaviors in the arts can be transferred to learning

academic tasks. In their report, the researchers found the art-talented students had self-set performance goals and expressed confidence in their artistic abilities. Interviews revealed that the students were aware of the strategies necessary for success in their particular art forms. The students described how they set personal goals and criticized or complemented themselves for their performances. These students were not explicitly taught these regulatory behaviors. Baum, Owen, and Oreck's (1997) studies elucidated that self-regulatory behaviors are a promising area for studying transfer between the arts and other academic subjects because they can be developed and observed in both the arts and classrooms not focused on the arts.

Also, Catterall (2002) links the arts with academic and social outcomes from the book *Critical Links: Learning in the Arts and Student Social and Academic Development* which was sponsored by National Endowment for the Arts and the United States of Department of Education in 2002. He points out cognitive development through music, reading achievement through drama, problem-solving through the visual arts, and persistence through dance.

Moreover, psychologist Howard Gardner (1999) points out that certain kinds of learning in the arts are possibly spilling over. He links his multiple intelligences with the arts and specifies two different types of transfer from the arts. First, the arts is a wonderful way to develop a range of students with various intelligences. The conception implies that learning an art form can cultivate students' awareness, judgment, facility, sensibilities, connoisseurship, and other cognitive attributes that are associated with artistic or other intelligences more generally. These developments can affect the way students learn or the way they choose to express themselves within the various disciplines and perhaps across disciplines. He mentions that art skill and

artistic intelligence surely are close in kind, yet they may involve some dimension of transfer. Intelligence gained is a positive outcome lying beyond the initial conditions of learning to paint or to dance. Gardner also helps with another notion of transfer in the arts - a sort of transfer that does emerge in the Compendium's studies. He said that the compelling reasons for arts education are the possibilities that skill and craft gained in the arts helps students understand that they can improve in other consequential activities and that the arts hold no monopoly on creating transferable feelings of self-worth.

The arts has certain influence or connections with learning. This study mainly focused on studying English. Whether or not any evidence was found did not matter. What matters was that the arts students can use or understand the way they learnt their talents or professions, and that an awareness of this helped them with learning English. Positive transfer of learning could be manifested from their learning their profession, to studying English.

Aside from transfer of learning, fear of failure (FoF) plays a crucial role for students who are learning English as a foreign/second language (EFL/ESL). It has been regarded as a critical influence on students' achievement because it involves five aversive consequences: (a) experiencing shame and embarrassment, (b) devaluing one's self-estimate, (c) having an uncertain future, (d) important others losing interest, and (e) upsetting important others (Conroy, 2001; Conroy, Metzler, and Hofer, 2003; Conroy, Poczwardowski, & Henschen, 2001; Conroy, Willow, & Metzler, 2002). In achievement motivation theory, FoF is viewed as an avoidance-based disposition which leads students to seek to avoid failure. Arts students have abundant opportunities to attend performances, exhibitions, or contests, but the arts field is a

competitive domain where concerns about performance failure are prevalent for the arts students. For instance, a Music major practices piano day and night but when they stand on the stage, does the sense of fear of failure haunt them? Fishbein and Middlestadt (1987) reported many performers use beta medications without medical supervision to overcome their performance problems. Therefore, is the sense of fear of failure the same no matter when they present their performances or when studying English? FoF is highly associated with anxiety (Aydin, 2008; Horwitz, Horwitz, & Cope 1986; Huang, Eslami, & Hu, 2010; Liu & Jackson, 2008; Woodrow, 2006) or and the possible reasons why EFL does not like to speak English (Cheng, Horwitz, & Schallert, 1999; Craig & Tran, 2006; Mak, 2011; Tanveer, 2007), but no research has been conducted to compare if students carry the same sense of fear of failure in their professions and studying English.

Except fear of failure, procrastination is also an influential factor. It refers to delaying the completion of an assignment or putting off studying for an examination. It is prevalent among the worldwide student population (Kim & Seo, 2015). Studies have reported negative effects of procrastination on learning and achievement, such as lower grades and course withdrawals (e.g. Aremu, Williams, & Adesina, 2011; Balkis, 2013). Is procrastination related with students of different English proficiency levels? In Taiwan, approximately 93% of universities have set up English thresholds, according to the Annual Report by Ministry of Education (2010, 2011, 2012). It is a specific academic task that university students have to achieve. However, arts students usually focus much more on their major than on learning English. When managing their study time, do they choose to study their profession over learning English?

In addition to fear of failure and procrastination, self-efficacy has been proved to

be a powerful element in influencing students' academic achievement (Bandura, 1997; Pajares, 1997). In academic settings, self-efficacy has been shown to affect students' choices of activities, effort expended, persistence, interest, and achievement (Pajares, 1997; Schunk, 1995), and it is indeed a significant factor in training poor learners to overcome their difficulties (Williams & Burden, 1997).

Self-efficacy also refers to students' beliefs about their capabilities to effectively apply the knowledge and skills that they already possess and thereby learn new cognitive skills (Schack, 1989). It denotes that students may have all the necessary language skills to perform a certain task, but unless they believe they are capable of doing so, they are unlikely to perform those skills. Thus, self-efficacy influences the choice of tasks that they want to take on, and it affects the amount of effort that students are prepared to expend and the level of persistence they expended. For arts students, the development of their professions takes most of their time. However, English is also important for their profession. Are they willing to invest the necessary time and effort? In accordance with the discussion of the influences of transfer of learning, fear of failure, procrastination, and self-efficacy on students' English achievement, this study adopted a qualitative and quantitative research method and it is divided into three studies:

Study 1

In the first study, we investigated the issue of transfer of learning for arts students between their professions and English. Perkins and Salomon (1988) distinguished transfer of learning as low-road and high-road transfer. Low-road transfer occur "semi-automatically" when the learning and target domains are perceivably similar, but high-road transfer takes abstraction of principles and greater metacognitive

processing between the two domains. To address low-road transfer, Perkins and Salomon proposed a “hugging” strategy and tried to close the gap between the learning and the target domains. For example, emphasizing the similar features between the two domains, modelling or using role play and simulation, and giving students opportunities to use their learning in new contexts (Fogarty, Perkins, & Barel, 1992). Therefore, we predict that hugging strategies have positive and significant effects on students’ English achievement. However, failure is most likely to occur to investigate high-road transfer (Green, 2015). Perkins and Salomon proposed “bridging” strategies that focus mainly on metacognition and inferential reasoning (Butterfield & Nelson, 1989). For instance, encouraging students to plan, monitor, and reflecting on their thinking in completing an assignment, or helping them identify analogies between what they have learnt and somewhat different application. Therefore, we hypothesize that bridging strategy has no effect on students’ English achievement. In this study, we adopted the statement of hugging and bridging strategies as adopted by James (2006) in which he specifically suggested transfer of learning between ELT (English Language Teaching) and other disciplines. Therefore, the hypotheses are addressed as below:

Hypothesis 1.1: Hugging strategy has a positive and significant effect on students’ English proficiency level.

Hypothesis 1.2: Bridging strategy has a significant effect on students’ English proficiency level.

Hypothesis 1.3: Hugging strategy has a stronger effect than bridging strategy on students’ English proficiency level.

Study 2

There is a stereotype that arts students do not do well in academic subjects, including English, but some arts students indeed do very well in both their professions and their English language training. This has stimulated us to find a way to help other arts students who may be accomplished in their specialties but not in English. Therefore, in Study 2, we investigated the influences on fear of failure, procrastination, and self-efficacy on students' English proficiency levels. We divided students into two groups: High Proficiency Learners and Low Proficiency Learners. A SEM (Structural Equation Model) was implemented to examine whether or not fear of failure and procrastination play mediating factors between students' self-efficacy and their English proficiency levels. The hypotheses are addressed as below.

Hypothesis 2.1: Self-efficacy has a negative effect on students' fear of failure

Hypothesis 2.2: Self-efficacy has a negative effect on students' procrastination

Hypothesis 2.3: Fear of failure has a negative effect on students' English proficiency levels.

Hypothesis 2.4: Procrastination has a negative effect on students' English proficiency levels.

Hypothesis 2.5: Self-efficacy has a positive effect on students' English proficiency levels.

Hypothesis 2.6: Fear of failure mediates between students' self-efficacy and English proficiency levels.

Hypothesis 2.7: Procrastination mediates between students' self-efficacy and English proficiency levels.

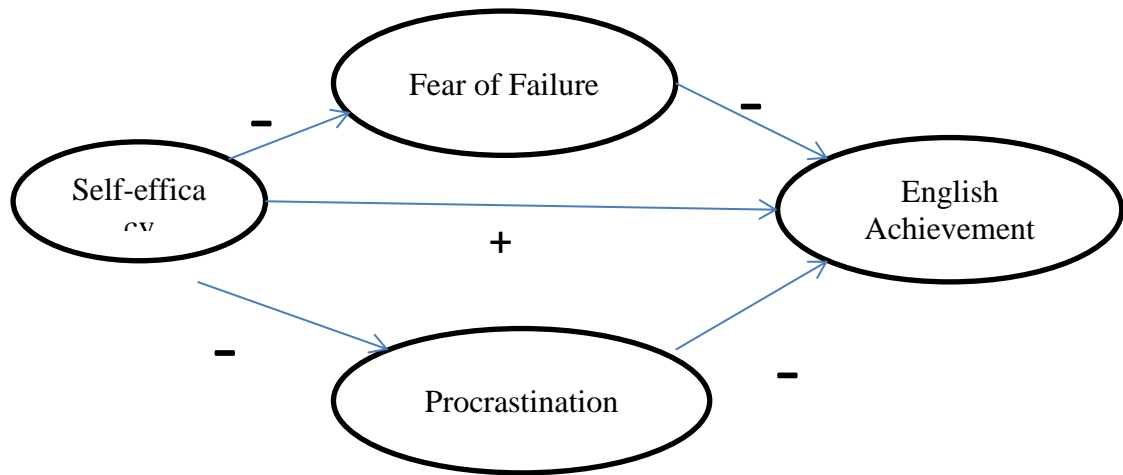


Figure 1. Hypothesized Model.

Study 3

English is one of the required courses for almost every university in Taiwan. The number of credits required varies from school to school. In some cases, certain universities have set an English proficiency level such as High-Intermediate or Advanced for students who are distinguished in English so that they do not need to take the required English classes. It is the same with the university we have been teaching in. Students who pass listening, speaking, reading and writing test of High-Intermediate level of GEPT (General English Proficiency Test) do not need to take the required four-hour English class. The name list of students who can waive English classes is sent to English teachers. We have found that several students who major in Fine Arts, Craft and Design, Dance, Chinese painting and calligraphy, and music are on the list. For the third study, we interviewed these students and try to find if there is any link of transfer of learning between their profession and English learning. In 2012, Forsyth conducted a case study of a Physics student who claimed that he uses physics to understand other subjects and he used Barnett and Ceci (2002)'s twelve types of transfer to analyze the student' answers. The results show

that the student uses physics as a means to better understand far transfer processes to other subjects. The study adopted interview questions and the purpose is to find any evidence of similarities or differences between the ways the arts students learn their profession and the way they learn English. Since the most difficult problem of investigating transfer of learning is the measurement, we carry slim hope for the results of this part. But we still believe that listening to what our students tell us when we ask them directly about their learning can yield useful information that has an impact on teaching and learning English.

CHAPTER TWO

REVIEW OF THE LITERATURE

While there are many different theoretical stances around which the study could have been framed, this study was informed by four major theoretical perspectives that we believe to lead ourselves to solid the ideas and applications for the experiment. The literature review started from the discussion of “transfer of learning”.

2.1 Transfer of Learning

Transfer of Learning is defined as learning in one context or with one set of materials affects on performance in another context or with other related materials. For example, learning mathematics prepares students to study physics (Perkins & Salomon, 1992). Transfer is a critical issue in educational and learning theory because most formal education aspires to transfer (Baldwin & Ford, 1988; Holton, Bates, Seyler, & Carvalho, 1997).

There are three major ways to define transfer of learning. Positive versus negative transfer: Transfer of Learning is defined as learning in one context enhances (positive transfer) or undermines (negative transfer) a related performance in another context. Positive transfer improves the performance in subject to the performance of another subject. For instance, speaker of one language find it easier to learning related than unrelated second language. Taiwanese students usually find it easier to learn Japanese than English. Negative transfer occurs when learning in one situation

impacts negatively on performance in another. For example, students commonly use word orders of their mother tongue when learning a new language such as Chinese English. Comparably, negative transfer is not as weighed as positive transfer, because it typically causes trouble only in early stages of learning a new domain. Learners correct for the effects of negative transfer with accumulating experiences. Therefore, positive transfer receives more attention. The desired positive transfer is the primary concern (Perkins & Salomon, 1987).

Near versus far transfer: Near transfer means the replication of the previously acquired knowledge and skills in all identical situations (Subedi, 2004). It is based on the theory that previous learning facilitates new learning only to the degree that the new learning task contains elements identical to those in the previous task (Perkins & Salomon, 1996). Near transfer often involves tasks that are procedural in nature. These tasks cover steps of operation in sequence, and the sequence of steps is repeated every time the task is performed. This type of procedural learning is relatively easy to learn and transfer rate of learning is usually high, but the students are unlikely to adapt such skills and knowledge when they are confronted with new environment and changed conditions (Misko, 1995). Far transfer means learning new skills or performing new tasks in one context that differs significantly from the context of original learning. Far transfer goes beyond repetitive application of learned behavior and involves cognition and analogy to adapt to new challenges. Because of entailing cognition and analogy, it makes far transfer more important than instances of near transfer from the perspective of higher order learning and retention.

High road versus low road transfer: high road transfer refers to a conscious process that can occur between two learning situations that lack obvious similarities.

On the other hand, low road means an unconscious process that is triggered when a situation that one is in is perceived as similar to a previous situation in which learning occurs (James, 2006).

Although there are other ways to categorize transfer of learning such as lateral and vertical, specific and nonspecific, literal and figural transfer, Royer (1979) points to view those various constructs as being on a continuum rather as being two distinct phenomena. Also, transfer of learning is important to in that it cannot be taken for granted (Perkins & Salomon, 1992).

2.2 Fear of Failure

Fear of failure (FoF) has played an important role on language learning. Earliest in 1938, Murray pointed out the need to avoid failure (Conroy and Elliot, 2004). FoF and test anxiety share an affective-motivational structure that lead students to avoid the existing threat posed by evaluation or demonstration of incompetence (Bedell & Marlowe, 1995; Elliot, 1997; Hagtvet & Benson, 1997; Herman, 1990). FoF is also an avoidance-based motive in the achievement domain, and it can be explained as the disposition tendency to reach toward and to seek to avoid failure in achievement settings because a student might feel ashamed on failure. In other words, it means that it is not failure itself that he/she fears and avoids but the shame accompanying failure. Shame involves with avoidance and withdrawal, an urge to run away the presents of others and hide her/himself. Elliot and Thrash (2004) point out that fear of failure is a type of achievement motive. It is grounded with the shame experience so it is inherently relational. FoF illustrates a framework for how students define and

experience failure, and how they think, feel, and act in competence-relevant settings (Heckhausen, 1975, 1984). More recent studies show that FoF is a tendency to appraise threat and feel anxious during situations that involve the possibility of failing (Conroy, Kaye, & Fifer, 2007).

In 1999, Elliot and McGregor stated that fear of failure and test anxiety were basically equivalent constructs that they provided the same function. Lazarus (1991) pointed out when beliefs or cognitive schemas about aversive consequences of failing are activated, failure is possible. The belief subsystem leads students to make appraisals of threat and experience the anxiety, which is related with FoF in evaluative situations. Beliefs in these different aversive consequences of failure can be linked with distinct cognitive and motivational profiles (Conroy, 2004). For instance, fears of experiencing shame and embarrassment are the only FoF-related beliefs that predict achievement goal adoption. Fears of devaluing one's self-estimate are related with a lack of purposeful engagement in an activity. Fears of having an uncertain future is highly related with high levels of intrinsic motivation and low levels of amotivation. As for students who fear important others losing interest in them when fail, they threat themselves in a more neglectful manner while failing. Those who fear upsetting important others are less assuring themselves while failing (Conroy, Kaye, & Fifer, 2007).

Numerous studies have been conducted to investigate the role of fear of failure on learning. Conroy, Metzler, and Hofer (2003) tested the validity of fear of failure and latent mean stability of Performance Failure Appraisal Inventory (PFAI). A total of 356 college students participated in the study and were asked to fill out both the long and short-form versions of PFAI. They evaluated the factor structure, latent mean

stability, and individual differences in PFAI scores by using longitudinal factorial invariance (LFI) and latent growth curve (LGC) analysis. The evidence of LFI on all first-order factors on the long form and the general FF factor (long and short versions) was found. In 2004, Conroy, together with Elliot, investigated the fear of failure and achievement goals in sport. The results revealed that FoF was positively related to mastery-avoidance, performance-approach, and performance-avoidance achievement goals. FoF scores predicted residualized change in mastery-avoidance and performance-avoidance goals scores. FoF may have a causal influence on achievement goals. In 2007, Conroy, Kaye, and Fifer tried to link the concepts of perfectionism and fear of failure. 372 college students enrolled joined the study and completed the Multidimensional Perfectionism Scale and Performance Failure Appraisal Inventory (PFAI). They delved that socially prescribed perfectionism (SPP) was highly associated with beliefs that failure led to aversive interpersonal consequences. Other-oriented perfectionism (OOP) showed a weak negative relation with beliefs that failure would lead to devaluation their self-estimate. Self-oriented perfectionism (SOP) was not related with any beliefs that failure led to aversive consequences. Elison and Partridge (2012) studied the relationships among shame-coping, fear of failure, and perfectionism for 285 college students who were asked to fill out the Compass of Shame Scale, the Performance Failure Appraisal Inventory (PFAI), and the Perfectionism Inventory. The result showed that differences in students' tendency to the four shame-coping styles significantly predict individual differences in toward fear of failure and perfectionism. This study investigated the relationship between students' fear of failure and their English proficiency level.

2.3 Procrastination

Procrastination is referred as the act of unnecessary delaying tasks to the point of experiencing subjective discomfort and it is an all-too-familiar problem (Solomom & Rothblum, 1984). It also means the tendency to put off doing something until a future date. Some studies (Ellis & Knaus, 1977; Solomom & Rothblum, 1984) indicate that one fourth to nearly all college students have problems with procrastination. O'Brien (2002) estimates that 80-95 % of college students are indulged in procrastination or at least 50% of students engage in procrastination. The prevalence of this situation is growing (Steel, 2007). In academic field, procrastination is often related with negative consequences (Rothblm, Solomon, & Murakami, 1986), poor grades and course withdrawal (Semb, Glick, & Spencer, 1979), perfectionism, frustration tolerance, high need for autonomy, high need for approval, and fears of failure, success, and separation (Burka & Yuen 1983; Ellis & Knaus, 1977). Lay and Schouwenburg (1993) and Solomon and Rothblum (1984) argued that the definitions of procrastination refer to both behavioral delay and psychological distress so it is necessary to consider the magnitude of procrastination in conjunction with the magnitude of its negative psychological consequences such as emotional discomfort, including guilt, depression, anxiety or stress. From this standpoint of view, procrastination is a completely dysfunctional behavior.

Abundant studies have shown that procrastination is generally a failure in self-regulation (Ferrari, 2001; Grunschel, Patrzek, & Fries, 2013; Park & Sperling, 2012; van Eerde, 2003). Procrastinators exhibit ineffective time and behavior management, which often results in counterproductive behaviors such as avoidance in starting or completing tasks, poor goals, or decisions (Howell & Watson, 2007; Steel,

2007; Wolters, 2003). Passive procrastinators cannot keep up with plans and have weak time management abilities (Bembenutty & Karabenick, 2004; Lay & Schouwenburg, 1993; Wolters, 2003). The impact of time, particularly meeting up deadlines, affects their behavioral direction. Also, studies reported that passive procrastinators were deficient in organization abilities, such setting goals, prioritizing tasks, or managing time in a disciplined way (Howell & Watson, 2007; Schouwenburg, 2004). Passive procrastinators also have difficulty following their original work plans and often fail to consider long-term responsibilities and instead pursue immediately gratifying activities (Steel, 2007). As a consequence, they are easily distracted and often fail to perform upon intended actions. Lay and Schouwenburg (1993) examined intention such as behavior discrepancies and behavior postponement in academic settings. They discovered that procrastinators reported engaging in more non-task-related behaviors during planned time. The difference between passive procrastinators and self-regulated student is in regulating their cognition. Self-regulated students enable them to plan, monitor, and evaluate their learning progress, and they demonstrate higher metacognitive awareness. It helps them select and perform appropriate cognitive strategies (Pintrich, 2000). On the contrary, passive procrastinators know fewer, or fail to adopt effective cognitive and metacognitive strategies when they try to complete academic tasks (Klassen, Krawchuk, & Rajani, 2008; Wolters, 2003). As a consequence, their work becomes effortful and time-consuming. Ferrari (2001) examined the effects of cognitive load on working under time limits. The study reported that students who frequently procrastinated had trouble regulating themselves and performed poorly under high cognitive demands

Several inventories are extensively used to assess students' procrastination. The most widely used one is Solomom & Rothblum's (1984) Procrastination Assessment Scale

for Students (PASS). There are two measures in PASS. The first is self-report measure. This section assesses the prevalence of procrastination in six areas of academic functioning. For each area, the questions include “to what degree do you procrastinate on this task?”, “what degree is procrastination on this task a problem for you?”, and “what extent do you want to decrease your tendency to procrastinate on this task?” Students were asked indicate on a 5-point Likert scale.

1. writing a term paper.
2. studying for an exam
3. keeping up with weekly reading assignment
4. performing administrative tasks: filling out forms, registration for classes, and getting ID card.
5. attending meetings: meeting with your advisor, making an appointment with a professor.
6. performing academic tasks in general.

The second section of this measure provides a procrastination scenario including evaluation anxiety, perfectionism, difficulty making decisions, dependency and help seeking, aversiveness of the task and low frustration tolerance, lack of self-confidence, laziness, lack of assertion, fear of success, tendency to feel overwhelmed and poorly manage time, rebellion against control, risk-taking, and peer influence. The behavioral measures include self-paced quizzes, timing of experimental participation, and course

grades.

Several studies have been using PASS to assess students' procrastination. Kim and Seo (2015) adopt a meta-analysis to investigate the relationship between procrastination and academic performance. They found that procrastination was negatively correlated with academic performance. The relationship was affected by the choice of measures or indicators. The possible variables were (a) the choice of procrastination measure; (b) the choice of performance indicator; (c) use of self-report data and (d) the demographic profile of the sample. Yockey and Kralowec (2015) adopt a confirmatory factor analysis to investigate students' procrastination by the use of PASS. Their participants comprised 345 students with various ethnicities. Their results show that two-factor model provided a better fit to the data than the one-factor model, but none of the models provided optimal fits. Also, a significant difference by ethnicity was found on the fear of failure subscale within the PASS. Whites have significantly lower scores than Asian Americans or Latino/as. Wang, Sperling, and Haspel (2015) delved to understand students' procrastination tendencies through focus from the perspectives of varied class formats and student abilities. They found that no significant differences in self-reported procrastination across class settings. The relationships between reported active procrastination and self-regulated learning constructs were, however, significant and in the expected direction for self-efficacy, test anxiety, and effort regulation. Significant negative relations between active procrastination and the rehearsal and organization subscales of the Motivated Strategies for Learning Questionnaire (MSLQ) were indicated.

Except Solomon & Rothblum's Procrastination Assessment Scale-Students (PASS), there are several scales that assess procrastination.

1. Decisional Procrastination Scale (DP; Mann, 1982): It is based on the conflict theory of decision making (Janis & Mann, 1977). According to which procrastination is a maladaptive coping behavior (Ferrari, Johnson, & McCown, 1995).
2. The Tuckman Procrastination Scale (TPS; Tuckman, 1991): It assesses academic procrastination resulting from inability of students to self-regulate.
3. Control task schedules (Ferrari et al., 1995): It is another inventory designed to measure procrastination as a maladaptive behavior (Hensley, 2014).
4. Active Procrastination Scale: It works within this framework Choi and Moran (2009) developed and validated this scale which consisted of items assessing outcome satisfaction, preference for pressure, intentional decisions to procrastinate and ability to meet deadlines.
5. Academic Procrastination State Inventory (APSI; Schouwenburg, 1995): It is a behavior-oriented measurement scale and it only assesses behavior during the preceding week.

The purpose of the study is to investigate the relationship between students' procrastination and their English proficiency level. We predicted that there was a negative correlation between the two variables.

2.4 Self-efficacy

In 1977, Bandura brought up the notion of self-efficacy from clinical work with

phobic patients from a cognitive-behaviorist perspective. He helped the patients overcome fear of snakes and enhanced their self-belief in their ability to do so. Why is self-efficacy important? It influences the way people make choices, the courses of action they pursue, the effort they will expend, how long they will persist in the face of problems, and how resilient when they will be facing different situations. The higher the sense of efficacy people have, the greater the effort, persistence, and resilience they show (Bandura, 1997). Self-efficacy also affects people's thought patterns and emotional reactions. People with high self-efficacy are calm and peaceful in approaching difficulties. Oppositely, people with low self-efficacy may believe things are tougher than they expect. They start to nurture a notion that feeds anxiety, stress, depression, and create obstacles for themselves in how best to solve a problem.

What is the difference between students of high self-efficacy and low self-efficacy? Students with a strong sense of efficacy tend to take difficult tasks as challenges. They try to master challenges instead of avoiding threats. When they set goals, they set challenges and maintain strong commitment to them, put more efforts in the face of failure, and more quickly recover the sense of self-efficacy after setbacks. They are also more likely to devise strategies that will help them accomplish these goals as compared to those with low efficacy (Bandura, 1997). Lerner and Locke (1995) investigated the relationship between goal-setting and self-efficacy. Students were assigned high and medium difficulty according to their ability level. The results show that the high difficulty group performed better than the medium difficulty group. The effects of goal difficulty on performance were deeply influenced by personal goal level and self-efficacy. Furthermore, students with high self-efficacy are less anxious when facing threats (Bandura, Cioffi, Taylor, & Brouillard, 1988), and they display superior performance on cognitive complex laboratory tasks

(Cervone & Wood 1995), everyday problem-solving tasks (Artistico, Cervone & Pezzuti, 2003), and tests of memory performance (Berry, West, & Dennehey, 1989). On the contrary, students with low self-efficacy may think things are more difficult than they really are. They foster a sense of anxiety, stress, and they do not do their best to solve a problem (Schunk & Pajares, 2009). Also, they are vulnerable to depression (Bandura, Pastoreli, Barbaranelli & Caprara, 1999; Cutrona & Troutman, 1986), and may dwell on task demands and their personal experiences during tasks performance (Elliott & Dweck, 1988).

According to Bandura (1997), self-efficacy is students' judgments of their ability to perform a task within a specific domain. It is important to bear in mind high efficacy in one academic subject does not guarantee high efficacy in another. Judgments of self-efficacy differ from performance in three ways (Bruning, Schraw, & Norby, 2011). The first is the level of task difficulty. Even students with high efficacy in one domain may be not willing to take another challenging class. Lack of prior knowledge or strategies necessary to do well in that class will hinder students from doing so. For arts students, they are highly efficacious in their professions such as painting, dancing, and playing musical instrument, but it does not help them to become successful learners in English. The second is the generality of students' self-efficacy. This means some students feel able to perform well in almost any academic setting, others feel confident in only one or two settings, and the rest have little self-efficacy in any domain. Shell, Colvin, and Bruning (1995) found elementary school students with high self-efficacy in reading also had high self-efficacy in writing. For medical students, their English performance is much higher than other students. For them, to enter medical schools, they need to receive top scores in every subject. The third difference is the strength of students' efficacy judgments. Students

with weak perceptions of efficacy doubt their ability to perform a task when observing poor performance. However, students with a strong sense of efficacy persevere in the face of difficulties.

Interest in students' self-efficacy in second or foreign language contexts has grown in the last 10 years. In 2007, Mills, Pajares, and Herron studied self-efficacy of French students in relation to achievement and motivation. A total of 303 students participated in their study. The result showed that self-efficacy for self-regulation was a stronger predictor of intermediate French language achievement. Students who thought themselves as capable of using effective metacognitive strategies to monitor their academic work effectively were more apt to experience academic success in learning French. In 2008, Coronade-Aliegro conducted a pilot study to study the relationship between self-efficacy and self-assessment in foreign language education. The results showed that a significant positive relationship between students' self-assessment scores and their global self-efficacy beliefs about future foreign language success. Tilfarlioglu and Cinkara (2009) investigated self-efficacy in EFL context among different proficiency groups and relationship with success in Turkey. The results revealed that EFL learners had high sense of self-efficacy in language learning tasks, and self-efficacy was proved to be an influential aspect in students' success in English language learning. In more recent years, Jabbarifar (2011) in Iran declared the importance of self-efficacy and foreign language learning in the 21st century. Two decades have passed since Bandura introduce the concept of self-efficacy. He re-emphasizes the importance of self-efficacy, the role it can play in foreign language learning and the pedagogical implications it may have for foreign language teachers and students. Yough (2012) from Purdue University presented a paper regarding self-efficacy and perceived classroom climate. The results represented

students' self-efficacy for speaking the target language specially. He said speaking was an active aspect of language that resulted in the enabling of close, interpersonal, and immediate relationship. Self-efficacy is rarely used to assess the performance for arts students. This study examined the relationship of students' self-efficacy and their English proficiency level.

CHAPTER THREE

METHODOLOGY

3.1 Participants

About 501 first-year undergraduate students of an arts university participated in study 1 and study 2. They all major in art-related fields and they are from the fourteen academic departments of four colleges. The undergraduate students are divided into fifteen classes (G1-G15) according to their scores in the subject of English in the General Scholastic Ability Test (GSAT), which is developed by the College Entrance Examination Center. In their first year of university, they are required by school to take online GEPT-style tests at intermediate level every semester. From the results of the tests, they are arranged into two groups: high and low proficiency learners. In Study 3, twenty students who are distinguished in English and apply for waving General English were invited to receive the interviews.

3.2 Materials

The project adopted a mixed research method including quantitative and qualitative research. An online GEPT test, a questionnaire, and an interview are implemented.

3.2.1 An Online GEPT-style Test

In the online GEPT-style test, the articles and questions are constructed by an online testing company that the school purchases. There is free access for every

participant who is registered as a full-time student in the arts university and receives the test. After reading articles and answering the questions, participants' answers are transmitted to a database and the students obtain their scores immediately. All freshmen are required to take an online GEPT test in the fall and spring semesters as a record of their progress. The scores from the test was adopted as a reference for teachers in the preparation of classes. In the real GEPT, the first phase consists of listening and reading, and the full score for each section is 120, with a passing score is 80. However, if students get above 72 in either the listening or reading section, and the total score is over 160. That is also regarded as passing the test and students will receive a certificate.

3.2.2 Questionnaires

Five parts are constructed within the questionnaire (See Appendix 1).

Part I. Demographic Information

There are six questions in this section, covering gender, age, and major. The participants are also asked about the time they spend with learning their professions and English, and also their English learning history. This section provides information about whether the questionnaires are distributed to a sufficiently broad sample to represent the study population.

Part II Transfer of Learning

The question items for transfer of learning were adopted from James' study (2006). Various strategies have been suggested for linking hugging and bridging methods in general education context (Perkins and Salomon, 1987; Forgarty, Perkins,

and Barell, 1992). James particularly connected the two methods with ELT (See Table 1). The question items are constructed according to his explanations. Also, James started questions of transfer from English to other courses, but in this study the direction reverses from students' arts professions to learning English. A 5-point Likert Scale is used where 1 = strongly disagree to 5 = strongly. Students are asked to indicate their agreement to the statements of question items.

Table 1

Strategies for Transfer of Learning

Hugging Strategy	Bridging Strategy
Setting expectations	Anticipating applications
Matching	Generalizing concepts
Simulating	Using analogies
Modeling	Parallel problem solving
Problem-based learning	Meta-cognitive reflection

From Table 1, within hugging strategies, setting expectations means that students can be told explicitly and reminded constantly that something they learn in the English classroom can be used directly in similar situations. Matching means students' learning experiences can be made as similar as possible to future applications of learning. Simulating means some instructional activities can simulate future applications of learning such as role play. Modeling meant that desired learning outcomes can be shown and demonstrated. That is directly applicable in target situations. Problem-based learning refers to that student can work through problem-solving tasks that are similar to real world problems they are likely to see. In the bridging strategies, anticipating applications mean that students can be asked to think different ways and contexts in which they might be able to use new knowledge and skills. Also, students can draw on their experiences in their profession to derive

general principles that are relevant elsewhere from generalizing concepts. They can be encouraged to find analogies for their profession. Moreover, students can solve problems that are in different contexts but that have similar structure between their profession and learning English. Students can be guided to plan, monitor and evaluate their learning procession from meta-cognition reflection.

Two open questions are listed to allow freedom of response while eliciting information concerning other related knowledge that may have been useful to the students. 1. Do you think learning English is very different or similar from learning your profession? What are the differences or similarities? 2. When learning your profession, do you try to use any techniques in learning English? What are they? Does it work on learning English?

Part III Performance Failure Appraisal Inventory (PFAI) – Short form

The five questions are from Conroy's User's Manual of Performance Failure Appraisal Inventory (2002), the short form. From the original 41 items, five were selected to ensure students can finish filling out all of the questions with the proper attention to them.

Part IV Procrastination

Solomon and Rothblum (1984) developed Procrastination Assessment Scale for Students (PASS). To fit the scope of the study, the section of studying for an exam (9 items) and writing for term papers or assignments (10items) are chosen. Part V Self-efficacy To evaluate self-efficacy of English learning, Pintrich and De Groot's (1990) Motivated Strategies for Learning Questionnaires (MSLQ) is used. Originally, the motivation section consisted of 31 items that assess students' goals and value

beliefs for a course, and the learning strategies section included 31 items regarding students' use of different cognitive and meta-cognitive strategies, as well as 19 items concerning student management of different resources. This project used the 9 items in self-efficacy. A 7-point Likert Scale is used where 1 = not at all true of me to 7 = very true of me. Duncan and McKeachie (2005) point out that the MSLQ has proven to be a reliable and useful tool for investigating the nature of motivation and the use of learning strategies in different types of content areas and target populations.

3.2.3 Interviews

The interview questions consist of two parts, with the first part focusing on establishing rapport, and the second part regarding transfer of learning between their professions and English.

Stage 1 Seeking Consent

About 20 students who are distinguished in English and applying for waving English class were invited to receive an interview. Personal invitation from the project leader was sent to students who were over 18 years old. The students were asked to sign a consent form provided by Research Ethics Office of National Taiwan University. The interview was recorded, and conducted in a classroom with the door half open. The researcher, an assistant, and a student helper in charge of recording were present. The interviewee was never be alone with either the researcher or the assistant. The process was transcribed for further analysis.

Stage 2 Constructing interview questions

The interview is divided into five parts. The first is intended to develop rapport.

These questions explain the purpose of the study, to answer students' questions regarding the study, and to discuss any concerns that they might have about joining the interview (Martin, Marsh, Williamson & Debus, 2003). We ensured that students agree to participate in the study on their own free will and that the time arranged is convenient for both parties (Arskey & Knight, 1999).

The second part concerns transfer of learning. In Forsyth's study (2012), he interviewed the physics student three times over a period of 2 months and a protocol analysis was used. In this study, the 12 aspects of transfer from Barnett and Ceci's (2002) study were used: 1. temporal context, 2. physical context, 3. functional context, 4. social context, 5. modality, 6. memory demands, 7. intentionality, 8. knowledge domain, 9. value, 10. learned skill, 11. performance change, and 12. relations of similarity. Due to the limitation of the interview time. Only five of the aspects were chosen. The third part contains questions from Conroy's User's Manual of Performance Failure Appraisal Inventory (2002) to assess the students' fear of failure. From the original eight questions, four were adopted and revised to fit the scope of this study. The fourth part contains five questions from Solomon and Rothblum's study (1984) to evaluate the student's procrastination. Originally, there are 26 questions for reasons of procrastination. Ten questions are used in the questionnaire. Another five questions were chosen for interview questions. The fifth part contains five questions to address self-efficacy, as adopted from Usher's (2009) study related to students' self-efficacy in math, with the context changed into English.

Stage 3 Interview

Students first gave the signed consent form to the research assistant. The entire time of the interview was recorded by a video camera. Both interviewer and research

assistant were with the interviewee in an unlocked and quiet room.

Questions to Transfer of Learning.

- In learning your profession, Do you need to do some memory work? Do you also apply memory work in learning English? Can you compare the differences?
- In learning your profession, what kind of knowledge can you think that you can apply it in learning English?
- In learning your profession, you might use something visual, auditory, written or verbal, linguistic or hands-on, do you apply it in learning English?
- In learning your profession, do you care about the quality of your work or performances? Do you also care your performance in learning English?
- In learning your profession, how do you solve the problems you encounter? Do you use the same way to solve the problems in learning English?

Questions to address fear of failure

- What do you see as the consequences of failure to pass the courses in your profession and English class?
- Can you describe what you are thinking and feeling when you realize you would fail in the classes of your profession and English class?
- What is it that you feel is irrevocably lost in your excellence domain in your profession and English class?

- If you were to try to summarize in a few words what you have told us about failing to pass the courses of your profession and the English proficiency test respectively and what it means to you, what words would you choose?

Questions to address procrastination

- How do you feel that if you did well in your profession and in the English class, do you worry if your classmates would resent you?

- Do you trust that you can do a good job in your profession and in the English class?

- Do you like to take the challenge of waiting until the deadline in your profession and in the English class?

- Do you feel too lazy to write a term paper in your profession and in the English class?

- Are your friends or classmates pressuring you to do other things, so you can not finish your term papers for your profession and English class?

Questions to address self-efficacy

- What kind of your study habits do you have for your profession and English?

- If you were asked to rate your ability in your profession and in English capability on a scale of 1 (lowest) to 10 (highest), where would you be?

- How do you rate your confidence in your profession and take an English proficiency test for graduation?

- Tell me a story that explains to me something about the type of student you are in your profession and in English class. On other words, share with me something that happened to you that involves your profession and English ability and perhaps your teachers, friends or classmates.

Reliability of the Questionnaires

An indicator of the trustworthiness of quantitative research tools is the questionnaire's reliability. This indicates that the developed questionnaire would give the same results if it measures the same thing (Neuman, 2001). The proposed questionnaire's reliability was evaluated by the Internal Constancy Approach. This approach is based on calculating the correlation coefficient between each item score and the score of the whole scale, using Cronbach's alpha coefficient. In the pilot study, the Cronbach's alpha of questionnaire for transfer of learning was .93 and it was .82 for part III: Performance Failure Appraisal Inventory (Short-Form). It was .74 for the fourth part - procrastination. The Cronbach's alpha for the fifth part self-efficacy was .93. As a whole, the Cronbach's alpha for the questionnaire was .86, indicating a high reliability.

Validity of the Questionnaires

Before being able to consider whether a study is reliable and ethical, the validity of the questionnaires must be considered (Neuman, 2001). The main rationale behind using this form of validity is that there is a high possibility that the involved experts

would know and could comment on the investigated topic since the students' linguistic needs are familiar to them. It would be less useful if the research theme related to assessing personalities or attitudes' scores. In order to use feedback from a panel of judges or experts feedback regarding the extent to which the new scale measures, the questionnaires were distributed to five specialists from TESOL and Educational Statistics fields. They were interviewed formally in person asking them to read the items and determine the suitability of each item to measure students' linguistic needs and to provide their comments regarding clarity of the items, thoughts and presentation and appropriateness of the translation (if included). Following this step, some of the terms in the questionnaire may be revised to simpler language to facilitate understanding. Some of the items may be deleted if they are considered as irrelevant skills.

3.3 Pilot Study

The questionnaires had gone through a piloting stage. In November of 2016, 55 students majoring in the arts were invited to fill out the questionnaires. Their contribution was to give comments on the language of the questionnaires, their suitability, and statistical processing after the completion of questionnaires. It provided information about the extent to which participants were cooperative and keen to help in finishing the questionnaire. It also helped in testing the study's trustworthiness in terms of the validity and reliability of the study instrument. The pilot study gave useful information for the study and indications of flaws and incorrectness within the questionnaire.

The comments included:

1. The time spent with answering the questionnaires was adequate and students finished it in time and did not miss any question.
2. The second, third, and fourth part of the questionnaire adopted a 5-point scale, but the fifth part used a 7-point scale. Some participants felt this was confusing. However, the two scales were adopted from well-known studies by noted scholars, so they were not changed. The scales were explained to the students before the real experiment.
3. The questionnaire reached a high reliability except part III (Performance Failure Appraisal Inventory, PFAI), which was .74. We ran a SPSS, choose a Reliability Analysis, and tick the box of “Scale if item deleted”. Then from the SPSS output of Item-total Statistics, we chose the question items which reach a high reliability from the column of “Alpha if item deleted”.

3.4 Procedure

Before the experiment, students were told that their identities, scores, and responses were kept confidential. Only the researchers had access to process the data and information. Upon the completion of questionnaires, the data was analyzed using the SPSS (Statistical Package for the Social Sciences) 21.0 software for Windows, Microsoft Excel, and the AMOS 20.0 software. A stepwise regression model was adopted to assess the hypothesis 1.1, 1.2, and 1.3 in Study 1 and test the effects of hugging and strategies on students' English proficiency levels. A Structural Equation Modeling (SEM) model was used to answer hypotheses in Study 2 to test if fear of failure and procrastination mediated between students' self-efficacy and their English

proficiency.

4. Difficulties in the Study and Possible Solutions

Difficulties inherent in this study and possible solutions are discussed as follows:

(1) Statistical processing will be an obstacle for this study. The associate coordinator of the study, Dr. Chia-cheng Chen, is an expert and a full professor in motivational studies and educational statistics. His expertise is in educational psychology, educational statistics, and advanced statistics. With his help, the analytical and statistical processing will be thus resolved.

(2) Obtaining a sufficient number of returned questionnaires will also be a big problem since their school schedule always keeps students very busy and there is no obligation for them to fill out the questionnaire. However, before they start the questionnaires, the author or the assistant of the project will explain to students that the results will benefit and improve future English education, and that their contribution is extremely valuable.

5. Potential Goals

Nowadays, internationalization is a critical aspect of different fields. Being an arts student does not mean only practicing one's own performance skills. An arts student needs to participate in international concerts, contests, performances, or exhibitions. The outcomes from this study could be used as the basis for improving the current methods of English education, and thus it will benefit both of the students and teachers. Taiwan's art has already reached a high standard, and it is the

responsibility of art students not only to learn new information from foreign countries, but also to introduce and promote the art of Taiwan to the world. Good English is essential to fulfilling this goal. This will enable more art students from Taiwan to be internationally recognized and promote international “soft power.”

The expected results of the study are discussed as follows:

(1). The study will review several significant research directions regarding motivational theories for learning English from national and international journals, as well as conference papers. This literature review will not only benefit the author, but also can provide a reference for Taiwanese researchers and English teachers who are concerned with this topic.

(2). After retrieving the results of the study, I will submit papers to international conferences or to SSCI journals such as *Learning and Individual Differences*, *Journal of Psycholinguistics*, *International Educational Development*, TSSCI journals, and other refereed journals. Doing so will help increase the popularity and recognition of research on Taiwan’s English education.

CHAPTER FOUR

RESULTS

A total of 501 arts students participated in this study. The average age was 19.19. The average score for listening is 80.75 ($SD = 23.53$) and it was 71.77 ($SD = 24.30$) for reading section. The mean score for GEPT is 152.50 ($SD = 44.21$). The median score was 161, which would be the score the divide the participants into High Proficiency Learners (HPL) and Low Proficiency Learners (LPL). Students spent an average of 16.57 ($SD = 14.23$) hours per week for their majors and 2.48 ($SD = 5.31$) hours for studying English. In their study time, they spent an average of 80% with their majors and 14% for English. There is a significant difference between the time and percentage of study time they spend with their majors and English. Among the 501 students, 10 students did not spend time with their majors and 80 students did not study English at all (See Table 2).

Table 2

Summary of Demographic Information

	Minimum	Maximum	Mean	SD
Listening	16.00	120.00	80.7505	23.52572
Reading	12.00	114.00	71.7745	24.29928
Total scores	49.00	231.00	152.4970	44.20872
Age	17	46	19.19	2.926
Time for Majors	0	80	16.57	14.226
Time for English	0	100	2.48	5.310
Percentage of Study time for Majors	0	100	80.00	19.645
Percentage of Study time for English	0	100	14.00	13.518

Study 1

In the first study, we investigated the issue of transfer of learning for arts students. Table 3 lists a summary of the results. The questions was one direction, which meant students were asked to think from the way how they learnt their majors and see if they applied it in learning English. Among the ten questions, the top three mean scores were Q5, Q2, and Q6. Students used problem-solving strategy, note-taking, predication, and anticipation from their profession to learn English. The lowest mean scores were Q3, Q8, and Q10. Students did not find analog from their profession to learning English, and they did not plan, monitor, or evaluate their learning process and outcomes they learn their profession the way they as they did it with learning English.

For hugging strategy, the highest mean score was Q5, which students thought they would try to solve any problems that occur when studying their profession, and they would use it in learning English too. The second highest one was Q2, which students took notes in their words when learning their profession and it was the same when learning English. The lowest mean score was Q3, indicating that students did not usually simulate the way when they stood on the stage or in the exhibitions and they did not use it in learning. For bridging strategy, the highest mean score was Q6, which students would predict and think how to use what they have learnt in real work or performance. They would use it too in learning English. The lowest mean score was Q8, which they had not thought about finding analogies from my profession to learn English. It could be two possibilities: One was the students never thought about there were similarity of learning methods between their profession and English. The other possibility was that they was no analogy between the way they have learnt their majors and English.

Table 3

A Summary of Transfer of Learning

	M	SD	
Hugging Strategy	Q1. In my profession, I make an effort to learn. I also use it in learning English.	3.10	1.61
	Q2. When I learning my profession, I write notes in my own words. I use it in learning English too.	3.38	1.61
	Q3. In my profession, I usually simulate the way when I stand on the stage or in the exhibitions. I use it in learning English too.	2.65	1.15
	Q4. In my profession, I usually see the teachers or senior classmates to model the way of performance or their artworks. In English class, I also see how teachers demonstrate how to use the language.	3.26	1.09
	Q5. When studying my profession, I try to solve any problems that occur. I use it in learning English too.	3.46	1.03
Bridging Strategy	Q6. In my profession, I would predict and think how to anticipate what I have learnt in real work or performance. I would use it too in English Class. For example, I would try to think of different situation in which I might use speaking skill outside class, such as on conversations with friends or neighbors in formal meetings at work or in various written documents	3.33	1.06
	Q7. I could generalize the learning experiences, different skills and knowledge in my profession to learn English. For example, I would apply the presentation skills in English class when I am required to give formal oral presentations.	3.03	1.07
	Q8. I would try to find analogies from my profession to learn English. It means that I learn how to look for and finds ways to apply knowledge and skills in my profession to learn English.	2.94	1.12
	Q9. In my profession, I can work on solving problems that are in different areas but that have similar structure in learning English.	3.11	1.03
	Q10. In my profession, I plan, monitor and evaluate my learning process and outcomes. I would use the same way when learning English.	3.01	1.08

To examine the opinions between High Proficiency Learners and Low proficiency learners, a t-test was implemented. From the perspective of hugging strategy, the total mean score for HPL was 14.09 ($SD=3.47$), and it was 12.05 for LPL ($SD=3.58$). For bridging strategy, the total mean score for HPL was 13.81 ($SD=3.77$), and it was 12.22 for LPL ($SD=3.66$). Significant differences were shown for both hugging and bridging strategy for HPL and LPL groups. Table 4 reveals the differences from Q1 to Q10. All the ten questions indicated significant differences. It meant that students in HPL group used more hugging and bridging strategy than students in LPL.

Table 4

A Summary of Transfer of Learning between High Proficiency Learners and Low proficiency Learners

	Group	Numbers	M	SD	P-value
Q1	LPL	249	2.80	1.11	.000***
	HPL	248	3.41	1.34	
Q2	LPL	249	3.14	1.19	.000***
	HPL	248	3.60	1.08	
Hugging Strategy Q3	LPL	249	2.41	1.07	.000***
	HPL	248	2.89	1.19	
Q4	LPL	249	3.06	1.11	.000***
	HPL	248	3.44	1.04	
Q5	LPL	249	3.21	1.06	.000***
	HPL	248	3.71	.94	
Q6	LPL	249	3.11	1.06	.000***
	HPL	248	3.55	1.03	
Bridging Strategy Q7	LPL	249	2.84	1.06	.000***
	HPL	248	3.23	1.05	
Q8	LPL	249	2.81	1.06	.007*
	HPL	248	3.08	1.17	

Q9	LPL	249	2.90	1.01	.000***
	HPL	248	3.31	1.01	
Q10	LPL	249	2.80	1.05	.000***
	HPL	248	3.23	1.07	

Note. HPL = High Proficiency Learners, LPL = Low Proficiency Learners.

* $p < .05$. *** $p < .001$.

To answer Hypothesis 1.1 (Hugging strategy has a positive and significant effect on students' English proficiency level), a correlational test was implemented. A significant correlation was found ($r = .301$, $p < .000$). It indicated that the more students applied hugging strategy, the more they used it in learning English. To answer hypothesis 1.2: Bridging strategy has a significant effect on students' English proficiency level, a significant correlation was also found ($r = .262$, $p < .000$). It indicated that the more students applied bridging strategy, the more they used it in learning English. For hypothesis 1.3: Hugging strategy has a stronger effect than bridging strategy on students' English proficiency level, a stepwise regression analysis was used to predict students' English language ability between hugging and bridge strategies (See Table 5). One positive predictor was found in hugging strategy.

Table 5

Significant Predicators of Hugging and Bridging Strategy in Learning English on Students' English Proficiency Levels

Subscales	B	SE(B)	β	t	Sig.
Hugging Strategy	2.796	.723	.231	3.868	.000***
Bridging Strategy	1.164	.699	.100	1.665	.097

Note. *** $p < .001$.

Study 2

To investigate the influences on fear of failure, procrastination, and self-efficacy on students' English proficiency levels, a total of 501 students participated in this study. They were equally divided into two groups: High Proficiency Learners (HPL) and Low Proficiency Learners (LPL). The students in the HPL group obtained a mean score of 189.87 ($SD = 15.64$) on a GEPT-Style test, whereas the students in the LPL group received a mean score of 115.14 ($SD = 29.97$) on the same test (see Table 4). For the listening comprehension test, students in the HPL group obtained a mean score of 98.27 ($SD = 9.44$), but students in the LPL group had a mean score of 63.21 ($SD = 20.23$). From the reading comprehension test, a big discrepancy appeared between the two groups, as the students in the HPL group achieved a mean score of 91.61 ($SD = 11.36$), while the students in the LPL group got a mean score of 51.98 ($SD = 16.53$). A t-test was used to compare the differences between the scores of the two groups. It showed a significant difference among the GEPT scores. The findings suggest learners in the HPL group obtained a significantly higher score than the ones in the LPL group. If there had been no significant difference, it would have signaled there was no difference between the total scores of learners from the HPL group and the LPL group. Therefore, the HPL group scored significantly higher than the LPL group on the GEPT-style test.

Table 4

T-test Results of the GEPT-style Test Scores for the HPL and LPL Group

	Groups	<i>N</i>	<i>M</i>	<i>SD</i>	<i>P-value</i>
GEPT-style Total Score	HPL Group	248	189.87	15.64	.000***
	LPL Group	249	115.14	29.97	
Listening	HPL Group	248	98.27	9.44	.000***
	LPL Group	249	63.21	20.23	
Reading	HPL Group	248	91.61	11.36	.000***
	LPL Group	249	51.98	16.53	

Note. HPL = High Proficiency Learners, LPL = Low Proficiency Learners.

*** $p < .005$.

To answer the hypothesis 2.1-2.7, a measurement model and structural equation model were implemented.

Measurement Model

Before a structural model is prepared, Anderson and Gerbing (1988) suggested conducting a confirmatory factor analysis to examine whether the measurement model provides an acceptable fit to the data. Once an acceptable measurement model is developed, the structural model can be tested. As suggested by Tucker and Lewis (1973), Byrne (1994), Hu and Bentler (1999), five fit indices were used to assess goodness of fit for the models: the goodness of fit index (GFI; values $> .90$ indicate good fit), the comparative fit index (CFI; values $> .90$ indicate good fit), the Tucker-Lewis Index (TLI; values $> .90$ indicate good fit), the non-normed fit index (NFI; values $> .90$ indicate good fit), and the root-mean-square error of approximation (RMSEA; values $< .08$ indicate good fit).

A test of the measurement model resulted in a relatively good fit to the data ($\chi^2 = 223.07^{***}$, $df = 58$, GFI = .94, CFI = .94, TLI = .92, NFI = .92, RMSEA = .075). All of

the standardized loadings of the measured variables on the latent variables were statistically significant ($p < .001$, see Table 9).

Table 9

Model Fit Indices

Indices	Measurement model	Criteria
N	501	
χ^2	223.07***	
df	58	
GFI	.935	>.90
CFI	.941	>.90
TLI	.921	>.90
NFI	.923	>.90
RMSEA	.075	<.08

*** $p < .001$

From Table 10, the CR of latent variables ranged from .76~.90, and AVE ranges from .46~.71. Both CR and AVE fit to the standard suggested by Fornell and Larcker (1981), and Hair, Black, Babin, and Anderson (2010).

Table 10

Factor Loadings for the Measurement Model

Factors & Items	Standardized factor loading	SE.	t	AVE	CR
Fear of Failure				.51	.80
1. FF1	.63				
2. FF2	.59	.08	10.84		
3. FF3	.76	.10	12.95		
4. FF4	.84	.10	13.34		

Procrastination				.46	.76
5. P1	.52				
6. P2	.84	.16	10.57		
7. P3	.65	.15	9.79		
8. P4	.65	.13	9.77		
Self-efficacy				.71	.90
9. SE1	.71				
10. SE2	.95	.06	19.60		
11. SE3	.90	.06	19.39		
12. SE4	.78	.06	17.71		

Note: All standardized factor loading are significant ($p < .001$).

All the latent variables had been adequately operationalized by their respective indicators (See Table 11). Correlations among the independent latent variables, the mediator latent variable, and dependent latent variables were statistically significant ($p < .001$).

Table 11

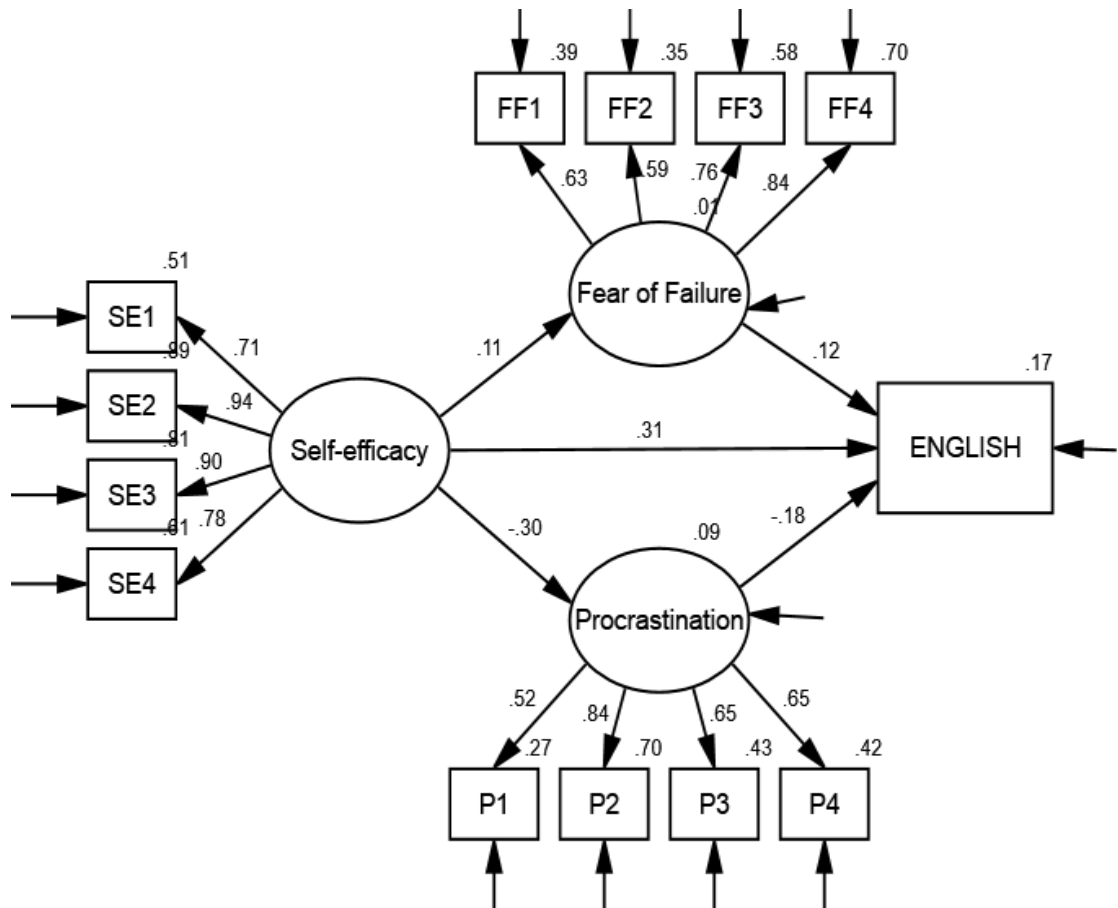
Correlations Matrix for the Measurement Model

Latent Variables	1	2	3
1. Fear of Failure (FF)	1		
2. Academic Self-handicapping Strategies (ASHS)	-.30***	.1	
3. Self-efficacy (SE)	.11*	.34***	1

Note: * $p < .05$ *** $p < .001$

Structural Model for Testing Predicting Effects

In the structural model, the results showed a good fit of the model to the data ($\chi^2 = 22307^{***}$, $df = 58$, $GFI = .94$, $CFI = .94$, $TLI = .92$, $NFI = .92$, $RMSEA = .068$). Figure 9 shows the SEM.



From Figure 9 and answer Hypothesis 2.1 “Self-efficacy has a negative effect on students’ fear of failure”, the self-efficacy show a significant and positive effect on students’ fear of failure. Standardized coefficient was .11. It was not the same as the hypothesis. To answer hypothesis 2.2 “Self-efficacy has a negative effect on students’ procrastination”, the results show that self-efficacy indeed has a negative effect on

students' procrastination. For hypothesis 2.3 "Fear of failure has a negative effect on students' English proficiency levels", fear of failure has a positive and significant effect on students' English proficiency levels. For hypothesis 2.4 "Procrastination has a negative effect on students' English proficiency levels", the answer is consistent with the hypothesis that there was a significant and negative effect. For hypothesis 2.5 "Self-efficacy has a positive effect on students' English proficiency levels", the result is consistent with hypothesis that there is a positive and significant effect..

To investigate whether or not fear of failure and procrastination have mediating effect between students' self-efficacy and English achievement and answer hypothesis 2.6 "Fear of failure mediates between students' self-efficacy and English proficiency levels" and hypothesis 2.7 "Procrastination mediates between students' self-efficacy and English proficiency levels", self-efficacy has significant effect on Fear of failure and fear of failure has significant effect on students' scores of English proficiency test. Also, self-efficacy has significant effect on students' procrastination and students' procrastination has significant effect on students' scores of English proficiency test. According to Baron and Kenny (1986), fear of failure and procrastination individually have mediating effects between students' self-efficacy and English proficiency levels.

CHAPTER FIVE

DISCUSSION

A total of 501 arts students join this study. The time they have spent with their profession is 16.57 hours per week. For studying English, they use 2.48 hours. In their study time, they use 80% of their study time for their majors and 14% of time for English. Obviously, a significant difference is found between the time and percentage they have spent with their profession and English.

Study 1

For Study 1, both the hugging and bridging strategies were significantly correlated with students' English proficiency. This verifies our teaching experiences and affirms the connection that some arts students who are distinguished both in their professions and in English learning share certain common ways of learning. One of them is problem-solving, which had the highest mean score.

Students stated that they encounter some problems when learning their profession, and they try hard to confront them. It was the same for learning English. A significant correlation also confirms this statement: the higher the students' English proficiency levels are, the more they tend to agree with the question statements. In addition, students take notes when they are studying their majors, and they do the same when learning English. The other way of learning that shares a common similarity is to do prediction and anticipation. Students predict and anticipate how to

apply what they have learned in real work or in a performance. They also use this strategy in English class. For example, when they are practicing speaking skills, they try to think of different situations in which they have real conversations with English-speaking friends.

Unlike Perkins and Salomon's study, which encourages students to plan, monitor, and reflect on their thinking in completing an assignment or helps them identify analogies between what they have learned and somewhat different applications, the results do not confirm this statement. The lowest mean score for Q3 indicates that students do not find analogies between their learning for their profession and learning English. Although the results are not consistent with Perkins and Salomon's study, it is of interest to know whether this is because students have not thought about linking the way they learn their profession with learning English or because they are certain that the way they have learned their profession is completely different from the way they are studying English.

Study 2

For Study 2, the SEM shows that self-efficacy has a positive and significant effect on fear of failure and students' English achievement. This is contradicted in the current literature, but the significant effect indicates that fear of failure plays a mediating role between self-efficacy and students' English achievement. The relationship between students' fear of failure and English achievement has been extensively studied (Cutrone, 2009; Kayaoglu, 1997; Lei & Qin, 2009). All previous studies show a negative relationship between fear of failure and English achievement,

but this study does not. Is this because of the special learning styles of arts students? Since they have been involved in different types of competitions, contests, performances and exhibitions, is fear of failing the English proficiency test crucial to them? In my previous study (Tseng, 2017), fear of failure had no significant effect on students' English proficiency level in an SEM. In addition, in a comparison of students from three universities – comprehensive, agricultural and arts universities – the mean of fear of failure for arts students was the lowest; significant differences were shown in fear of failure between arts and comprehensive university students and between arts and agricultural university students through a post-hoc test. Therefore, more studies are needed to confirm the influence of fear of failure for arts students. Few studies focus on the relationship between self-efficacy and fear of failure. The result is not consistent with Lin, Fong, and Wang's study (2017) indicating that high fear of failure was associated with greater endorsements of available help, which was an important source in increasing self-efficacy. Since not enough research has been done to investigate the relationship between fear of failure and self-efficacy, we determine that further study is needed for the investigation of prospects.

Regarding self-efficacy, procrastination, and English achievement, negative and significant effects are shown. Procrastination plays a mediating role between self-efficacy and students' English achievement. Procrastination means that students put off doing something until a future date (Ellis & Knaus, 1977). The results reflect arts students' tendency to place more value on studying for their majors than studying for English. Music students spend eight hours practicing the piano. Although English is critical to their future, they cannot see any immediate benefits. A recital or performance is a more compelling factor because they need to be on stage to give

performances. Therefore, the result confirms the hypothesis that procrastination has a significant and negative effect on students' English proficiency level.

CHAPTER SIX

CONCLUSION

The SEM reveals that self-efficacy has a positive effect on students' fear of failure, and fear of failure has a positive effect on students' English achievement. Further studies are needed to test if fear of failure plays a crucial role for arts students in learning English. Alternatively, a qualitative study, such as one using interviews, can be conducted to delve into students' opinions.

In the transfer of learning, hugging strategies, such as setting expectations, matching, stimulating, modeling, and problem-based learning, are a positive predictor. The arts and language learning are two different disciplines, but they share certain similarities. We teachers should exploit these similarities and help arts students learn English. From the SEM, procrastination mediates between self-efficacy and students' English achievement. Students always put off studying English until tomorrow. It is critical to encourage or urge students to study English on a regular basis.

REFERENCES

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411.
- Aremu, A. O., Williams, T. M., & Adesina, F. T. (2011). Influence of academic procrastination and personality types on academic achievement and efficacy of in-school adolescents in Ibadan. *IFE Psychologia*, *19*, 93-113. <http://dx.doi.org/10.4314/ifep.v19i1.64591>.
- Arskey, H., & Knight, P. (1999). *Interviewing for social sciences*. London: Sage.
- Artistico, D., Cervone, D., & Pezzuti, L. (2003). Perceived self-efficacy and everyday problem solving among young and older adults. *Psychology and Aging*, *18*, 68-79.
- Aydin, S. (2008). An investigation on the language anxiety and fear of negative evaluation among Turkish EFL learners. *Asian EFL Journal*, *42*, 1-444.
- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, *41*(1), 63-105.
- Balkis, M. (2013). Academic procrastination, academic life satisfaction and academic achievement: The mediation role of rational beliefs about studying. *Journal of Cognitive and Behavioral Psychotherapies*, *13*(1), 57-74.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bandura, A., Cioffi, D., Taylor, C. B., & Brouillard, M. E. (1988). Perceived

- self-efficacy in coping with cognitive stressors and opioid activation. *Journal of Personality and Social Psychology*, 55, 479-488.
- Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and Social Psychology*, 76, 258-269.
- Barnett, S. M., & Ceci, S. J. (2002). When and where do we apply what we learn?: A taxonomy for far transfer. *Psychological bulletin*, 128(4), 612.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Baum, S. M., Owen, S. V., & Oreck, B. A. (1997). Using art processes to enhance academic self-regulation. *Critical links: Learning in the arts and student academic and social development*, 64-65.
- Bedell, J., & Marlowe, H. (1995). An evaluation of test anxiety scales: Convergent, discriminant, and predictive validity. In Spielberger, C. and Vagg, P. (Eds.), *Test anxiety: Theory, assessment, and treatment*, pp. 35-45. Taylor & Francis, Washington, DC.
- Bembenutty, H., & Karabenick, S. A. (2004). Inherent association between academic delay of gratification, future time perspective, and self-regulated learning. *Educational Psychology Review*, 16(1), 35-57.
- Berry, J. M., West, R. L., & Dennehey, D. M. (1989), Reliability and validity of the memory self-efficacy questionnaire. *Developmental Psychology*, 25, 701-713.

- Bruning, R. H., Schraw, G. J., & Norby, M. M. (2011). *Cognitive psychology and instruction*. 5th ed. Boston, MA: Pearson Education, Inc.
- Burka, J. B., & Yuen, L. M. (1983). *Procrastination: Why you do it, what to do about it*. Reading, MA: Addison-Wesley.
- Burton, J. M., Horowitz, R., & Abeles, H. (2000). Learning in and through the arts: The question of transfer. *Studies in Art Education*, 41(3), 228-257.
- Burka, J. B., & Yuen, L. M. (1983) *Procrastination: why you do it and what to do about it*. Reading, MA: Addison-Wesley.
- Butterfield, E. C., & Nelson, G. D. (1989). Theory and practice of teaching for transfer. *Educational Technology Research and Development*, 37(3), 5-38.
- Byrne, B. M. (2009). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. CRC Press.
- Catterall, J. S. (2002). The arts and the transfer of learning. *Critical links: Learning in the arts and student academic and social development*, 151-157.
- Cervone, D., & Wood, R. (1995). Goals, feedback, and the differential influence of self-regulatory processes on cognitively complex performance. *Cognitive Therapy and Research*, 19, 521-547.
- Cheng, Y. S., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning*, 49(3), 417-446.
- Choi, J. N., & Moran, S. V. (2009). Why not procrastinate? Development and

- validation of a new active procrastination scale. *Journal of Social Psychology*, 149, 195–211. <http://dx.doi.org/10.3200/SOCP.149.2.195-212>.
- Conroy, D. E. (2001). Progress in the development of a multidimensional measure of fear of failure: The Performance Failure Appraisal Inventory (PFAI). *Anxiety, Stress and Coping*, 14, 431-452.
- Conroy, D. E. (2004). The unique psychological meanings of multidimensional fears of failing. *Journal of Sport & Exercise Psychology*, 26, 484-491.
- Conroy, D. E., & Elliot, A. J. (2004). Fear of failure and achievement goals in sport: Addressing the issue of the chicken and the egg. *Anxiety, Stress & Coping*, 17(3), 271-285.
- Conroy, D. E., Kaye, M. P., & Fifer, A. M. (2007). Cognitive links between fear of failure and perfectionism. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 25(4), 237-253.
- Conroy, D. E., Metzler, J. N., & Hofer, S. M. (2003). Factorial invariance and latent mean stability of performance failure appraisals. *Structural Equation Modeling*, 10, 401-422.
- Conroy, D. E., Poczwadowski, A., & Henschen, K. P. (2001). Evaluative criteria and consequences associated with failure and success for elite athletes and performing artists. *Journal of Applied Sport Psychology*, 13, 300-322.
- Conroy, D. E., Willow, J. P., & Metzler, J. N. (2002). Multidimensional measurement of fear of failure: The Performance Failure Appraisal Inventory. *Journal of Applied Sport Psychology*, 14, 76-90.

- Cormier, S. M., & Hagman, J. D. (Eds.). (2014). *Transfer of learning: Contemporary research and applications*. Academic Press.
- Coronado-Aliegro, J. (2008). The relationship between self-efficacy and self-assessment in foreign language education: a pilot study. *Journal of Literature, Language, and Linguistics*, 2(1), 1-4.
- Craig, A., & Tran, Y. (2006). Fear of speaking: chronic anxiety and stammering. *Advances in Psychiatric Treatment*, 12(1), 63-68.
- Cutrona, C. E., & Troutman, B. R. (1986). Social support, infant temperament, and parenting self-efficacy: A meditational model of postpartum depression. *Child Development*, 57, 1507-1518.
- Cutrone, P. (2009). Overcoming Japanese EFL learners' fear of speaking. *Language Studies Working Papers*, 1, 55-63.
- Duncan, T. G., & McKeachie, W. J. (2005). The making of the motivated strategies for learning questionnaire. *Educational Psychologist*, 40(2), 117-128.
- Elison, J., & Partridge, J. A. (2012). Relationships between shame-coping, fear of failure, and perfectionism in college athletes. *Journal of Sport Behavior*, 35(1), 19.
- Elliot, A. J. (1997). Integrating the “classic” and “contemporary” approaches to achievement motivation: A hierarchical model of approach and avoidance achievement motivation. In Maehr, M. and Pintrich, P. (Eds.), *Advances in Motivation and Achievement*, 10, 143-179. JAI Press, Stamford, CT.
- Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and

- achievement. *Journal of Personality and Social Psychology*, 54(1), 5-12.
- Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 76, 628-644.
- Elliot, A. J., & Thrash, T. M. (2004). The intergenerational transmission of fear of failure. *Personality and Social Psychology Bulletin*, 30(8), 957-971.
- Ellis, A., & Knaus, W. J. (1977). *Overcoming procrastination*. New York: Institute of Rational Living.
- Fallon, D., Lahar, C. J., & Susman, D. (2009). Taking the high road to transfer: Building bridges between English and Psychology. *Teaching English in the Two-Year College*, 37(1), 41-55.
- Ferrari, J. R., Johnson, J., & McCown, W. G. (1995). *Procrastination and task avoidance: Theory, research, and treatment*. New York: Plenum Press.
- Ferrari, J. R. (2001). Procrastination as self-regulation failure of performance: effects of cognitive load, self-awareness, and time limits on working best under pressure? *European Journal of Personality*, 15(5), 391-406.
- Fishbein, M. & Middlestadt, S. E. (1987). The ICSOM medical questionnaire. *Senza Sordino*, 25(6), 1-8.
- Fogarty, R., Perkins, D., & Barell, J. (1992). *How to teach for transfer: The mindful school*. IRI/Skylight Training and Publishing.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with

- unobservable variables and measurement error, *Journal of Marketing Research*, 18, 39-50.
- Forsyth, B. R. (2012). Beyond physics: A case for far transfer. *Instructional Science*, 40(3), 515-535.
- Gardner, H. (1999). The happy meeting of multiple intelligences and the arts. *Harvard Education Letter*, 15(6), 1-6.
- Green, J. H. (2015). Teaching for transfer in EAP: Hugging and bridging revisited. *English for Specific Purposes*, 37, 1-12.
- Greenwich, CT: JAI. Park, S. W., & Sperling, R. A. (2012). Academic procrastinators and their self-regulation. *Psychology*, 3(1), 12-23. doi: <http://dx.doi.org/10.4236/psych.2012.31003>
- Greenwich, CT: JAI. Hensley, L. C. (2014). Reconsidering active procrastination: Relations to motivation and achievement in college anatomy. *Learning and Individual Differences*, 36, 157-164. <http://dx.doi.org/10.1016/j.lindif.2014.10.012>.
- Grunschel, C., Patrzek, J., & Fries, S. (2013). Exploring reasons and consequences of academic procrastination: An interview study. *European Journal of Psychology of Education*, 28(3), 841-861. doi: <http://dx.doi.org/10.1007/s10212-012-0143-4>.
- Hagtvet, K.A., & Benson, J. (1997). The motive to avoid failure and test anxiety responses: empirical support for integration of two research traditions. *Anxiety, Stress and Coping*, 10, 35-57.

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. 7th ed. Prentice Hall, Upper Saddle River, New Jersey.
- Heckhausen, H. (1975). Fear of failure as a self-reinforcing motive system. In I. Sarason & C. Spielberger (Eds.), *Stress and anxiety* (pp.117-128). Washington, DC: Hemisphere.
- Heckhausen, H. (1984). Emergent achievement behavior: Some early developments. In J. Nicholls & M. Maehr (Eds.), *Advances in Motivation and Achievement*, 3, 1-32.
- Herman, W. (1990). Fear of failure as a distinctive personality trait measure of test anxiety. *Journal of Research and Development in Education*, 23, 180-185.
- Holton, E. F., III, Bates, R. A., Seyler, D. L., & Carvalho, M. B. (1997). Toward construct validation of a transfer climate instrument. *Human Resource Development Quarterly*, 8(2), 95-113.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132.
- Howell, A. J., & Watson, D. C. (2007). Procrastination: Associations with achievement goal orientation and learning strategies. *Personality and Individual Differences*, 43(1), 167–178. doi:10.1016/j.paid.2006.11.017
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.

- Huang, S., Eslami, Z., & Hu, R. J. S. (2010). The relationship between teacher and peer support and English-language learners' anxiety. *English Language Teaching*, 3(1), 32.
- Jabbarifar, T. (2011). The importance of self-efficacy and foreign language learning in the 21st century. *Journal of International Education Research*, 7(4), 117-126.
- James, A. M. (2006). Teaching for transfer in ELT. *ELT Journal*, 60(2), 151-159.
- Janis, I. L., & Mann, L. (1977). *Decision making: A psychological analysis of conflict, choice, and commitment*. New York: Free Press.
- Kayaoglu, M. N. (1997). *An investigation of the learning strategies of Turkish EFL and ESL adult learners and the relationship between their beliefs about different aspects of language learning and their strategy use* (Doctoral dissertation, University of Bristol).
- Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, 82, 26-33.
- Klassen, R. M., Krawchuk, L. L., & Rajani, S. (2008). Academic procrastination of undergraduates: Low self-efficacy to self-regulate predicts higher levels of procrastination. *Contemporary Educational Psychology*, 33(4), 915–931. doi:10.1016/j.cedpsych.2007.07.001
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press, New York.
- Lay, C. H., & Schouwenburg, H. C. (1993). Trait procrastination, time management,

- and academic behavior. *Journal of Social Behavior and Personality*, 8, 647–662. [http://dx.doi.org/10.1016/0191-8869\(94\)00176-S](http://dx.doi.org/10.1016/0191-8869(94)00176-S).
- Lei, L., & Qin, X. (2009). An empirical study of success and failure attributions of EFL learners at the tertiary level in China. *Asian EFL Journal*, 11(3), 29-51.
- Lerner, B., & Locke, E. A. (1995). The effects of goal setting, self-efficacy, competition, and personal traits on the performance of an endurance task. *Journal of Sport & Exercise Psychology*, 17, 138-152.
- Lin, S., Fong, C. J., & Wang, Y. (2017). Chinese undergraduates' sources of self-efficacy differ by sibling status, achievement, and fear of failure along two pathways. *Social Psychology of Education*, 20(2), 361-386.
- Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *The Modern Language Journal*, 92(1), 71-86.
- Martin, A. J., Marsh, H. W., & Debus, R. L. (2001b). Self-handicapping and defensive pessimism: Exploring a model of predictors and outcomes from a self-protection perspective. *Journal of Educational Psychology*, 93, 87–102.
- Mak, B. (2011). An exploration of speaking-in-class anxiety with Chinese ESL learners. *System*, 39(2), 202-214.
- Mann, L. (1982). *Decision-making questionnaire*. Unpublished inventory. Flinders University of South Australia, Australia.
- Mills, N., Pajares, K., & Herron, C. (2007). Self-efficacy of college intermediate

- French students: Relation to achievement and motivation. *Language Learning*, 57(3), 417-422.
- Misko, J. (1995). *Transfer: Using learning in new contexts*. Leabrook, Australia: NCVET.
- Neuman, L. W. (2009). *Social research methods: qualitative and quantitative approaches*. Allyn and Bacon, A division of Simon & Schuster, Inc.
- O'Brien, W. K. (2002). *Applying the trans-theoretical model to academic procrastination*. Unpublished doctoral dissertation. University of Houston.
- Pajares, F. (1997). Current directions in self-efficacy research. In Maehr, M., & Pintrich, R. P. (Eds.), *Advances in motivation and achievement* (pp. 1-49).
- Park, S. W., & Sperling, R. A. (2012). Academic procrastinators and their self-regulation. *Psychology*, 3(1), 12.
- Perkins, D. N., & Salomon, G. (1987). Transfer and teaching thinking. In *Thinking: The second international conference* (Vol. 2, p. 285). Lawrence Erlbaum Associates.
- Perkins, D. N., & Salomon, G. (1988). Teaching for transfer. *Educational Leadership*, 46(1), 22-32.
- Perkins, D. N., & Salomon, G. (1992). Transfer of learning. *International Encyclopedia of Education*, 2, 6452-6457.
- Perkins, J. N. and Salomon, G. (1996). Learning transfer. In A. Tuijman, (Ed.)

Industrial psychology (2nd edition). London: Routledge.

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In *Handbook of self-regulation* (pp. 451-502), in M. Boekaerts, P. Pintrich, & M. Zeidner, (Eds.), Academic Press, San Diego, CA. doi: <http://dx.doi.org/10.1016/B978-012109890-2/50043-3>

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33.

Rothblum, E. D., Solomon, L. J., & Murakami, J. (1986). Affective, cognitive, and behavioral differences between high and low procrastinators. *Journal of Counseling Psychology*, 33(4), 387.

Royer, J. M. (1979). Theories of the transfer of learning. *Educational Psychologist*, 14, 53-69.

Schack, G. D. (1989). Self-efficacy as a mediator in the creative productivity of gifted children. *Journal for the Education of the Gifted*, 12, 231-249.

Schouwenburg, H. C. (1995). Academic procrastination: Theoretical notions, measurement, and research. In J. R. Ferrari, J. L. Johnson, & W. G. McCown (Eds.), *Procrastination and task avoidance: Theory, research, and treatment* (pp. 71–96). New York, NY: Plenum Press.

Schouwenburg, H. C. (2004). Procrastination in academic settings: General introduction. In H. C. Schouwenburg, C. H. Lay, T. A. Pychyl, & J. R. Ferrari (Eds.), *Counseling the procrastinator in academic settings* (pp. 3-17).

American Psychological Association, Washington, DC. doi:
<http://dx.doi.org/10.1037/10808-001>

Schunk, D. H. (1995). Self-efficacy and education and instruction. In *Self-efficacy, adaptation, and adjustment* (pp. 281-303). Springer US.

Schunk, D. H., & Pajares, F. (2009). Self-efficacy theory. *Handbook of motivation at school*, 35-53.

Semb, G., Glick, D. M., & Spencer, R. E. (1979). Student withdrawals and delayed work patterns in self-paced psychology courses. *Teaching of Psychology*, 6, 23-25.

Shell, D. F., Colvin, C., & Bruning, R. H. (1995). Self-efficacy, attribution, and outcome expectancy mechanisms in reading and writing achievement: Grade-level and achievement-level differences. *Journal of Educational Psychology*, 87(3), 386.

Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioral correlates. *Journal of Counseling Psychology*, 31, 503–509. <http://dx.doi.org/10.1037//0022-0167.31.4.503>.

Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133(1), 65–94. doi:10.1037/0033-2909.133.1.65

Subedi, B. S. (2004). Emerging trends of research on transfer of learning. *International Education Journal*, 5(4), 591-599.

- Tanveer, M. (2007). *Investigation of the factors that cause language anxiety for ESL/EFL learners in learning speaking skills and the influence it casts on communication in the target language*. Doctoral dissertation, Faculty of Education, University of Glasgow.
- Tilfarlioglu, F. T., & Cinkara, E. (2009). Self-efficacy in EFL: Differences among proficiency groups and relationship with success. *Novitas Royal: Research on Youth and Language*, 3(2), 129-142.
- Tseng, M. C. (2017). *A 3x2 achievement goal, fear of failure, self-handicapping strategies, and self-efficacy: Why don't students pass the English threshold?* Tung-Hua Bookstore.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1-10.
- Tuckman, B. W. (1991). The development and concurrent validation of the procrastination scale. *Educational & Psychological Measurement*, 51, 473–480. <http://dx.doi.org/10.1177/0013164491512022>.
- Usher, E. L. (2009). Sources of middle school students' self-efficacy in mathematics: A qualitative investigation. *American Educational Research Journal*, 46(1), 275-314.
- Van Eerde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences*, 35(6), 1401-1418.
- Wang, J., Sperling, R. A., & Haspel, P. (2015). Patterns of Procrastination, Motivation, and Strategy Use across Class Contexts and Students' Abilities. *Journal of*

Psychology, 3(2), 61-73.

Williams, M., & Burden, L. R. (1997). *Psychology for language teachers: A social constructivist approach*. Cambridge University Press.

Winner, E., & Cooper, M. (2000). Mute those claims: No evidence (yet) for a causal link between arts study and academic achievement. *Journal of Aesthetic Education*, 34(3/4), 11-75.

Wolters, C. A. (2003). Understanding procrastination from a self-regulated learning perspective. *Journal of Educational Psychology*, 95(1), 179–187.
doi:10.1037/0022-0663.95.1.179

Woodrow, L. (2006). Anxiety and speaking English as a second language. *RELC Journal*, 37(3), 308-328.

Yockey, R. D., & Kralowec, C. J. (2015). Confirmatory factor analysis of the procrastination assessment scale for students. *SAGE Open*, 5(4), 2158244015611456.

Yough, M. (2012). *Self-efficacy and perceived classroom climate: Implications for language learning*. Paper presented at the American Educational Research Association's Annual Meeting, Vancouver, BC.

Appendix 1

Transfer of Learning, Fear of Failure, Procrastination, and Self-efficacy in Learning English: Any Evidence from the Arts?

=====
Instructions: The questionnaire is designed to investigate transfer of learning, fear of failure, procrastination, and self-efficacy for arts students. It should require about 10 to 15 minutes of your time to complete the survey. Usually it is best to respond it with your first impression without giving any single question much thought. Your answers will remain confidential and only researchers of this study will have access to your responses. Your participation will certainly benefit the revision and adjustment of English education. Thank you for your precious time!
=====

Part I Demographic Information:

1. English Class: _____ Student No.: _____
2. Major: _____
3. Gender: Male Female (Put a tick)
4. Age: _____
5. The time you spend with your profession: _____ hours (after class).
The time you spend with learning English per week: _____ hours (after class).
6. In your study time, do you study for your profession or English first? And what is the percentage of your “study time”? For example: 30% assignment, 60% practice for my profession 10% study English.

7. English learning history
 - a. When do you first learn English? About _____ years old. At that time, how many hours per week? About _____ hours
 - b. Do you learn English at elementary school? No
 Yes. At that time, how many hours per week?
 About _____ hours

After school, do you go to any private language or
cram school? No
 Yes. At that time, how many hours per week? About _____ hours

- c. Do you learn English at junior school? No
 Yes. At that time, how many hours per week?
 About _____ hours
 After school, do you go to any private language or
 cram school? No
 Yes. At that time, how many hours per week? About _____ hours
- d. Do you learn English at senior school? No
 Yes. At that time, how many hours per week?
 About _____ hours
 After school, do you go to any private language or
 cram school? No
 Yes. At that time, how many hours per week? About _____ hours

“Profession” is related to your major such as music, dance, painting, communications and performing arts.

Part II Transfer of Learning

Please indicate your agreement to the following statements.

1=strongly disagree 2=disagree 3=neutral 4=agree 5=strongly agree

H	1	2	3	4	5
1. In my profession, I make an effort to learn. I also use it in	1	2	3	4	5
2. When I learning my profession, I write notes in my own words. I use it in learning English too.	1	2	3	4	5
3. In my profession, I usually simulate the way when I stand on the stage or in the exhibitions. I use it in learning English too.	1	2	3	4	5
4. In my profession, I usually see the teachers or senior classmates to model the way of performance or their artworks. In English class, I also see how teachers demonstrate how to	1	2	3	4	5
5 When studying my profession, I try to solve any problems that occur. I use it in learning English too.	1	2	3	4	5
B	1	2	3	4	5
6 In my profession, I would predict and think how to anticipate what I have learnt in real work or performance. I would use it too in English Class. For example, I would try to think of different situation in which I might use speaking skill outside class, such as on conversations with friends or neighbors in	1	2	3	4	5
7 I could generalize the learning experiences, different skills and knowledge in my profession to learn English. For example, I would apply the presentation skills in English class when I am	1	2	3	4	5

8	I would try to find analogies from my profession to learn English. It means that I learn how to look for and finds ways to apply knowledge and skills in my profession to learn English.	1	2	3	4	5
9	In my profession, I can work on solving problems that are in different areas but that have similar structure in learning	1	2	3	4	5
10	In my profession, I plan, monitor and evaluate my learning process and outcomes.	1	2	3	4	5

Open questions:

1. Do you think learning English is very different or similar from learning your profession? What are the differences or similarities?

2. When learning your profession, do you try to use any techniques in learning English? What are they? Does it work on learning English?

Part III The Performance Failure Appraisal Inventory (Short-Form)

Please rate the following items based on your behavior in this class. Your rating should be on a 5- point scale where A= not at all true of me to E = very true of me.

My Profession					Circle your answer.	English				
1	2	3	4	5		1	2	3	4	5
1	2	3	4	5	1. When I am failing, I am afraid that I might not have enough talent.	1	2	3	4	5
1	2	3	4	5	2. When I am failing, it upsets my “plan” for the future.	1	2	3	4	5
1	2	3	4	5	3. When I am not succeeding, people are less interested in me.	1	2	3	4	5
1	2	3	4	5	4. When I am failing, important others are disappointed.	1	2	3	4	5
1	2	3	4	5	5. When I am failing, I worry about what others think about me.	1	2	3	4	5

Part IV Procrastination

Studying for exams in your profession and English

Please rate the following items based on your behavior in this class. Your rating should be on a 5- point scale where 1=Never, 2=Almost, 3=Never, 4=Sometimes, 5=Nearly Always, and 6=Always

My Profession					Procrastination Studying for Exams	English				
1	2	3	4	5		1	2	3	4	5
1	2	3	4	5	1. Compared with other students, I expect to do well.	1	2	3	4	5

1	2	3	4	5	7. My study skills are excellent compared with others in the class.	1	2	3	4	5
1	2	3	4	5	8. Compared with other students in this class I think I know a great deal about the subject.	1	2	3	4	5
1	2	3	4	5	9. I know that I will be able to learn the material for English class.	1	2	3	4	5

Reasons for procrastination for your profession and studying English

Instructions: Think of the last time the following situation occurred. It's near the end of the semester. The term paper you were assigned at the beginning of the semester is due very soon. You have not begun work on this paper. There are reasons why you have been procrastinating on this task. Please rate the following items based on your behavior in this class. Your rating should be on a 5- point scale where 1=Not At All Reflects, 2= Somewhat, 3= natural, 4= It reflects why I Procrastinated, and 5 = Definitely Reflects why I Procrastinated.

My Profession					Procrastination Reasons why you procrastinate	English				
1	2	3	4	5		1	2	3	4	5
1	2	3	4	5	1. You were concerned the professor wouldn't like your work.	1	2	3	4	5
1	2	3	4	5	2. You waited until a classmate did his or hers, so that he/she could give you some advice.	1	2	3	4	5
1	2	3	4	5	3. You had too many other things to do.	1	2	3	4	5
1	2	3	4	5	4. You were worried you would get a bad grade.	1	2	3	4	5
1	2	3	4	5	5. You didn't think you knew enough to write the paper	1	2	3	4	5
1	2	3	4	5	6. You really disliked writing term papers.	1	2	3	4	5
1	2	3	4	5	7. You felt overwhelmed by the task.	1	2	3	4	5
1	2	3	4	5	8. You looked forward to the excitement of doing this task at the last minute.	1	2	3	4	5
1	2	3	4	5	9. You knew that your classmates hadn't started the paper either.	1	2	3	4	5
1	2	3	4	5	10. You were concerned that if you got a good grade, people would have higher expectations of you in the future.	1	2	3	4	5

Part V Motivated Strategies for Learning Questionnaire (MSLQ)

Please rate the following items based on your behavior in this class. Your rating should be on a 7-point scale where 1= not at all true of me to 7=very true of me. Please circle your answer.

My Profession							Self-efficacy	English						
1	2	3	4	5	6	7		1	2	3	4	5	6	7
1	2	3	4	5	6	7	1. Compared with other students, I expect to do well.	1	2	3	4	5	6	7
1	2	3	4	5	6	7	2. I'm certain I can understand the ideas taught in this course.	1	2	3	4	5	6	7
1	2	3	4	5	6	7	3. I expect to do very well in this class.	1	2	3	4	5	6	7
1	2	3	4	5	6	7	4. Compared with others in this class, I think I'm a good student.	1	2	3	4	5	6	7

1	2	3	4	5	6	7	5. I am sure I can do an excellent job on the problems and tasks assigned for English class.	1	2	3	4	5	6	7
1	2	3	4	5	6	7	6. I think I will receive a good grade in English class.	1	2	3	4	5	6	7
1	2	3	4	5	6	7	7. My study skills are excellent compared with others in English class.	1	2	3	4	5	6	7
1	2	3	4	5	6	7	8. Compared with other students in this class I think I know a great deal about the subject.	1	2	3	4	5	6	7
1	2	3	4	5	6	7	9. I know that I will be able to learn the material for English class.	1	2	3	4	5	6	7

The end of the questionnaire!

Thank you!

英語文之學習遷移、害怕失敗、遲滯拖延和自我效能：
我們可否在藝術相關科系學生中找到證據嗎？

說明：本問卷之目的在於調查藝術相關科系學生在學習英語文時所發生學習轉移、害怕失敗、停滯不前、自我效能的現象。作答時間約為 15 分鐘左右。通常請用第一個直覺來回答選項。你的答案將不會公開，所有的資訊也只有研究人員可以處理。你的認真作答將幫助提升藝術相關科系學生的英文能力。謝謝。

第一部分、基本資料

1. 英文班級 G _____ 學號 _____ 系所別 _____ 性別 _____ 年齡 _____
2. 在下課後，你每週總共大約花多少時間在主修科目當中： _____ 小時
3. 在下課後，你每週總共大約花多少時間在學習英文當中： _____ 小時
4. 在你的個人讀書時間當中你花多少百分比的時間在你的主修領域上和多少百分比的時間在學習英文上，例如：30%在主修、60%在學習英文。 _____ % 在主修、 _____ %在學習英文

第二部分、學習轉移

此部分請注意專業的部分是指你的系所別，例如：音樂、舞蹈、繪畫、傳播、設計和表演藝術。

請依據下列敘述回答，「1」代表一點都不符合、「2」代表還算符合、「3」代表有一符合、「4」代表符合、「5」代表非常符合。請圈選答案(請務必不要漏答)

Hugging strategy	1	2	3	4	5
1. 在我的專業領域裡面，我會努力的學習，在學習英文時，我也是	1	2	3	4	5
2. 當我在學習我的專業領域的時候，我會用我自己的話來做筆記，在學習英文時，我也是用一樣的方式	1	2	3	4	5
3. 在學習我的專業領域的時候，我會經常模擬我站在台上展覽，或是拍片完的成品，在學習英文時，我也是模擬我說英文時的情境	1	2	3	4	5
4. 在我的專業裡面我經常看到老師和學長姊如何示範他們最後的藝術成品。在學習英文時，我也會看老師或其他同學如何示範	1	2	3	4	5
5. 當我在學習我的專業領域時，我會試著解決任何發生的困難。在學習英文時，發生困難我也會努力解決	1	2	3	4	5
Bridging Strategy	1	2	3	4	5
6. 在我的專業領域裡面我會先預測和思考如何把我所學的用在未來的工作上，我也會用同樣的方法在學習英文上	1	2	3	4	5
7. 在學習專業時，我會把我學習的經驗、不同的技巧和知識條列出來，我也會用相同的方法在學習英文上。	1	2	3	4	5
8. 我會試著找出我的專業領域和學習英語文有沒有類似相同的學習	1	2	3	4	5
9. 在我的專業領域裡面，我會解決不同方面的問題，我也會用同樣	1	2	3	4	5
10. 在我的專業領域裡面我會計畫、監督和評估我的學習過程和成果，我也會用同樣的方式在學習英文上	1	2	3	4	5

簡答題：

1. 你覺得在學習你的專業和學習英文有什麼不同和相似的地方？

不

同：_____

相

似：_____

2. 你有沒有嘗試用任何你在專業領域裡面的學習方法或技巧轉移到學習英文上？可否舉例呢？例如：在我的專業領域裡面時，需要背誦專業知識時，我也會用在背誦英文單字上。

第三部分、害怕失敗量表

此部分請注意專業的部分是指你的系所別，例如：音樂、舞蹈、繪畫、傳播、設計和表演藝術。

專業學習的部分回答左方欄，英語學習部分回答右方欄 1 代表此項敘述根本不符合、5 代表此項敘述完全符合，**請圈選答案**(請務必不要漏答)

專業					害怕失敗量表 (專業領域請圈選左邊、英語學習圈選右邊，以下如此)	英文				
1	2	3	4	5		1	2	3	4	5
1	2	3	4	5	1. 當我在學習表現失敗時，我很擔心我沒有這樣的	1	2	3	4	5
1	2	3	4	5	2. 當我在學習表現失敗時，對我的未來會有非常大	1	2	3	4	5
1	2	3	4	5	3. 當我在學習表現失敗時，同學對我就比較沒有興	1	2	3	4	5
1	2	3	4	5	4. 當我在學習表現失敗時，我擔心對我很重要的人，例如：父母師長同學朋友會很失望	1	2	3	4	5
1	2	3	4	5	5. 當我在失敗時，我擔心別人如何看我	1	2	3	4	5

第四部分、停滯不前量表 讀書篇：請依據敘述來判斷你在專業領域裡面和英文的差異，1 代表此項敘述根本不符合、5 代表此項敘述完全符合，**請圈選答案**(請務必不要漏答)

專業					停滯不前量表 (專業領域學習請圈選左欄、英語文學習圈選右欄，以下如此)	英文				
1	2	3	4	5		1	2	3	4	5
1	2	3	4	5	1. 做作業時我會擔心教授不喜歡我的報告	1	2	3	4	5
1	2	3	4	5	2. 我會等其他同學先交報告以後，再請他們給我建	1	2	3	4	5
1	2	3	4	5	3. 我有太多其他的事情要做，所以一直拖延	1	2	3	4	5

1	2	3	4	5	4. 我擔心我會得到一個不好的成績	1	2	3	4	5
1	2	3	4	5	5. 我覺得我對這個科目了解不夠，所以無法寫報告	1	2	3	4	5
1	2	3	4	5	6. 我真的不喜歡寫報告	1	2	3	4	5
1	2	3	4	5	7. 我真的覺得被課堂上的作業給嚇壞了	1	2	3	4	5
1	2	3	4	5	8. 我喜歡享受最後一刻再交作業的刺激感	1	2	3	4	5
1	2	3	4	5	9. 我一直不寫作業，因為我知道我的同學也還沒開	1	2	3	4	5
1	2	3	4	5	10. 我擔心我得到一個很好的成績，在未來，老師同學父母會對我有更高的期望	1	2	3	4	5

Part V Part IV 自我效能：請基於你的學習表現選出最適當的敘述：「1」代表一點都不符合、「2」代表還算符合、「3」代表有一符合、「4」代表符合、「5」「6」「7」以此類推代表非常符合。**請圈選答案**(請務必不要漏答)(專業領域學習請圈選左欄、英語文學習圈選右欄)

專業							自我效能 (專業領域學習請圈選左欄、英語文學習圈選右欄， 以下如此)							英文								
1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
1	2	3	4	5	6	7	1.	跟其他同學比較起來，我期待自己可以表現很好	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	2.	我確定我瞭解這個課目所教的內容	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	3.	我要在考試中，答對很多答案	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	4.	我期待自己可以表現很好	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	5.	我確定我所遇到的問題和作業，我都可以表現很好	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	6.	我覺得我可以拿到很好的分數	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	7.	我的讀書技巧比其他同學，好太多了	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	8.	跟其他同學比較起來，我覺得我懂得比他們多	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	2	3	4	5	6	7	9.	我知道我有能力，學會老師所教的內容	1	2	3	4	5	6	7	1	2	3	4	5	6	7

科技部補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現（簡要敘述成果是否有嚴重損及公共利益之發現）或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

說明：本研究依照原訂計畫完成。本計劃之目的在於探討藝術相關科系學生學習遷移的潛力，以及害怕失敗、遲滯拖延和自我效能對學習英語文的關係與影響。學習遷移已經研究超過一百年以上，它是一個非常重要但是卻是一個難以找出答案的議題，最主要的困難有三：第一、遷移的程度是相對性的，實驗組如何表現的比對照組還好呢？第二、什麼樣的遷移行為該被衡量？幾乎沒有一種評量方法可以適用所有例子，第三、在做學習遷移實驗時，實驗組和對照組的行為表現其信度和效度難以衡量(Cormier & Hagman, 2014)。這樣聽起來，能夠找到學習遷移的證據機會是很小的，但是 Baum, Owen, 和 Oreck (1997)發現藝術和學生的課業表現是有關連的。Catterall (2002)亦發現透過音樂可以促進認知發展，戲劇可以幫助英文閱讀能力，視覺藝術可以幫助問題解決能力，以及舞蹈可以培養學生持續力。Gardner (1999)指出在藝術領域裡所學到的技巧可以幫助學生了解其他的學習活動，而且可以轉移學生的自信心到其他學科上面，

2. 研究成果在學術期刊發表或申請專利等情形：

論文：已發表 未發表之文稿 撰寫中 無

其他：(以 100 字為限)

本研究之成果預計發表在國際期刊，以英語教學期刊為優先例如: Language Learning (Impact Factor 1.61), System (Impact Factor 0.721), English in Education (Impact Factor 0.50), Language and Education (0.34)等，希冀引起更多有多藝術相關科系學生英語學習之相關研究，或是跨國性研究。

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性），如已有嚴重損及公共利益之發現，請簡述可能損及之相關程度（以 500 字為限）

本研究實驗結果顯示學習轉移理論中擁抱策略和搭橋策略與學生的英文程度都有顯著性的相關。迴歸分析也顯示擁抱策略像是設定期待值、相配、刺激、示範和解決問題的學習方法都是正向的預估值。從結構方程式來看，害怕失敗和學習遲滯拖延在學生的自我效能和英文能力，具有中介效果臺灣許多藝術家和藝術工作者在國際大放異彩，政府在推廣軟實力的同時，語言能力是不可或缺，本計劃找

出學生專業和英文的學習遷移，藉以幫忙學生增加英語學習動機和增進其英語文能力。本計劃找出學生在專業科目和英語學習中學習方法的不同，藉以幫忙英文程度較差的藝術類的學生，增加英語學習動機和增進英語文能力。

106年度專題研究計畫成果彙整表

計畫主持人：曾敏珍			計畫編號：106-2410-H-144-001-				
計畫名稱：英語文之學習遷移、害怕失敗、遲滯拖延和自我效能：我們可否在藝術相關科系學生中找到證據嗎？							
成果項目			量化	單位	質化 (說明：各成果項目請附佐證資料或細項說明，如期刊名稱、年份、卷期、起訖頁數、證號...等)		
國內	學術性論文	期刊論文		0	篇		
		研討會論文		0			
		專書		0	本		
		專書論文		0	章		
		技術報告		1	篇	結案報告	
		其他		0	篇		
	智慧財產權及成果	專利權	發明專利	申請中	0	件	
				已獲得	0		
			新型/設計專利		0		
		商標權		0			
		營業秘密		0			
		積體電路電路布局權		0			
		著作權		0			
		品種權		0			
		其他		0			
	技術移轉	件數		0	件		
		收入		0	千元		
	國外	學術性論文	期刊論文		1	篇	目前投稿SSCI JOURNAL
			研討會論文		0		
專書			0	本			
專書論文			0	章			
技術報告			0	篇			
其他			0	篇			
智慧財產權及成果		專利權	發明專利	申請中	0	件	
				已獲得	0		
			新型/設計專利		0		
		商標權		0			
		營業秘密		0			
		積體電路電路布局權		0			
		著作權		0			
		品種權		0			

		其他	0		
	技術移轉	件數	0	件	
		收入	0	千元	
參與計畫人力	本國籍	大專生	0	人次	
		碩士生	3		兼任助理
		博士生	0		
		博士後研究員	0		
		專任助理	0		
	非本國籍	大專生	0		
		碩士生	0		
		博士生	0		
		博士後研究員	0		
		專任助理	0		
其他成果 (無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)					

科技部補助專題研究計畫成果自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現（簡要敘述成果是否具有政策應用參考價值及具影響公共利益之重大發現）或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以100字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形（請於其他欄註明專利及技轉之證號、合約、申請及洽談等詳細資訊）

論文： 已發表 未發表之文稿 撰寫中 無

專利： 已獲得 申請中 無

技轉： 已技轉 洽談中 無

其他：（以200字為限）

本研究之成果預計發表在國際期刊，以英語教學期刊為優先例如：Language Learning (Impact Factor 1.61), System (Impact Factor 0.721), English in Education (Impact Factor 0.50), Language and Education (0.34)等，希冀引起更多有多藝術相關科系學生英語學習之相關研究，

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性，以500字為限）

本研究實驗結果顯示學習轉移理論中擁抱策略和搭橋策略與學生的英文程度都有顯著性的相關。迴歸分析也顯示擁抱策略像是設定期待值、相配、刺激、示範和解決問題的學習方法都是正向的預估值。從結構方程式來看，害怕失敗和學習遲滯拖延在學生的自我效能和英文能力，具有中介效果臺灣許多藝術家和藝術工作者在國際大放異彩，政府在推廣軟實力的同時，語言能力是不可或缺，本計劃找出學生專業和英文的學習遷移，藉以幫忙學生增加英語學習動機和增進其英語文能力。本計劃找出學生在專業科目和英語學習中學習方法的不同，藉以幫忙英文程度較差的藝術類的學生，增加英語學習動機和增進英語文能力。

4. 主要發現

本研究具有政策應用參考價值：否 是，建議提供機關教育部, 文化部,
(勾選「是」者，請列舉建議可提供施政參考之業務主管機關)

本研究具影響公共利益之重大發現：否 是

說明：(以150字為限)

本研究實驗結果顯示學習轉移理論中擁抱策略和搭橋策略與學生的英文程度都有顯著性的相關。迴歸分析也顯示擁抱策略像是設定期待值、相配、刺激、示範和解決問題的學習方法都是正向的預估值。從結構方程式來看，害怕失敗和學習遲滯拖延在學生的自我效能和英文能力，具有中介效果