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Policy

JCAS (Journal of China-ASEAN Studies) is an open-access, peer-reviewed bi-annual journal of China-ASEAN International College, Dhurakij Pundit University. It is the premiere forum for global researchers, teachers, policy makers, leaders, managers and administrators, interested in all aspects of Southeast Asian countries and China.

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Editor's Note

Dear Sir / Madam,

Irrefutably, the COVID-19 pandemic has actually disrupted business from all walks of life, and exerted substantially-irrecoverable impact on publisher industry in a vast and unprecedented scale. However, the pleasure and privilege would be always ours to kindly keep everyone updated concerning any Journal of China-ASEAN Studies-related positive news. Journal of China-ASEAN Studies (JCAS, ISSN (Print): 2730-4205, ISSN (Online): 2730-4256), the second issue was officially published without any interruption caused by coronavirus pandemic. This issue with the holding of DPU ICBISS 2021 International Conference has specially selected a few remarkable research articles to be published on the 2nd issue of JCAS, and to our strongly-held belief JCAS's 2nd issue would absolutely present you many different perspectives and ideas.

JCAS is a double-blind, peer-reviewed academic journal sets to be published in June and December annually in Thailand, which is a new comprehensive and great journal addressing various fields of study including Future Workforce, Thai-China, Marketing, Business & Management, Wellness, Tourism, Hospitality, Leisure Studies, Information Technology, Finance and Accounting, Communication Arts, Economics, Education & Teaching, Humanities, Arts & Design, Languages, Applied Science and Engineering or so forth. This journal aims to provide a platform for scholars, practitioners and students to publish outstanding-quality conceptual and research paper bilingually (Chinese and English) based on both theoretical and empirical studies along with encouraging knowledge to be equally shared in the related fields as notably valuable academic contributions. JCAS, furthermore, serves as a leading platform, enabling readers to learn, communicate, and exchange pertinent knowledge pertaining to new studies and best practices.

JCAS is considered as a long academic journey and mission from nowhere in the past to somewhere at present. It, thus, without considerable efforts, sacrifices, contributions made by all related committee members, would never become a reality. The 2nd issue of the first volume of JCAS is officially published. Furthermore, we still solidly sail and move towards the ultimate goal of being indexed in TCI 2, TCI 1, Scopus and SSCI or so forth. Once again, we'd extend our special thanks to all the authors who contributed and those who participated that let JCAS move towards a higher academic quality.

Your sincerely



Chief Editor
Assist. Prof. Dr. Chun-Shuo Chen
Journal of China-ASEAN Studies

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How Self-compassion Affects Work Engagement: Examining the Moderating Role of Difficulties in Emotion Regulation and Interpersonal Stress

Sen Liu* Ching-Chuo Chen
China-ASEAN International College, Dhurakij Pundit University, Thailand
*sascorst@gmail.com

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Abstract

This article aims to explore whether the level of employees' self-compassion has an impact on their own performance in the organization. And, this article explores related variables to establish a theoretical model, use the questionnaire survey method, through the network questionnaire, and collect 335 valid samples for analysis. The results show that self-compassion has a negative impact on emotional exhaustion, emotional exhaustion has a negative impact on work engagement, difficulties in emotional regulation have a negative moderating effect between self-compassion and emotional exhaustion. Moreover, self-compassion can alleviate the negative impact of employees when they are under pressure, bring benefits to the employees themselves, and lead to the employees having a positive impact on the organization.

Keywords: Self-Compassion, Emotional Exhaustion, Work Engagement, Difficulties in Emotional Regulation, Interpersonal Stress.

1. Introduction

When employees feel pain or encounter difficulties, if there is no better way to deal with them, they will fall into pain and cannot extricate themselves, which will affect their work and life. For example, employees work very hard in the organization, but do not get the support and rewards of their superiors. Instead, they are blamed by their superiors for not doing well enough. Then the employees will feel pain and feel wronged in their hearts, and they will think of themselves clearly. Working hard, so hard and so tired, why do you scold me? Under these pressures, employees will feel pain and uncomfortable, but some employees will still actively work, some employees may try to complete the work, and some employees fail to complete the work. Why? This may all be related to the self-compassion of employees.

Most employees will easily develop resistance to work due to setbacks and difficulties; a small number of employees will face difficulties squarely, face setbacks bravely, and find ways to overcome them. Therefore, it is particularly important for us to study the effect of employee self-compassion on ourselves and the organization. Through reviewing related literature, most of them are studying the relationship between self-compassion and self-abuse, suicide and other behaviors. This article is from the perspective of employee self-compassion, aiming to explore the impact of employee self-compassion on employees themselves and their organization. Based on the Resource Conservation Theory (COR), this article establishes a basic model

between employee self-compassion and work engagement.

2. Literature review

2.1 Theoretical basis

The point of view of Conservation of Resources (COR) theory is to reduce resource loss, preserve existing resources and obtain new resources. When people perceive the lack of resources, the threat of losing resources, or fail to get the rewards they deserve after investing resources, individuals will work hard to obtain what they think is valuable to reduce losses. Resources include material, conditional, and personality and energy. The theory contains 2 spiral effects:

First, the loss spiral effect means that when individuals lack resources, they are more likely to feel the pressure of losing resources, and the pressure may affect their investment in other areas. When an individual feels that he cannot get a return, it will lead to the failure of the individual's resource input, thus causing more resource loss.

Second, the value-added spiral effect is that when an individual has a lot of resources, it is easier to obtain other new resources. If the individual has more resources, the more resource output will be obtained. According to research findings, the loss of the spiral effect causes more resource loss than the value-added spiral effect brings more resources, but people generally fall into the loss of the spiral effect.

2.2 The effect of self-compassion on emotional exhaustion

Compassion was originally defined as being able to truly feel the pain of others, being able to understand others well, being tolerant of others without conditions, and treating personal mistakes and failures as part of life experience, which is inevitable. With the deepening of self-concept research, scholars have gradually changed the object of sympathy from others to themselves. Among them, Neff (2003) proposed the definition of "self-compassion", which refers to individuals who can be tolerant of difficulties or failures in important things. An attitude of dealing with the pain and misfortune encountered by the individual, but also accepting the defective self, focusing only on some positive emotions of oneself, not focusing on some negative emotions, and being able to evaluate oneself objectively, and the individual also thinks the personal hardship is only a necessary part of life experience.

Self-compassion can be explored from two perspectives. The first is to explore from the perspective of self. It is a positive and positive performance. It is an individual's ability to accept a flawed self, identify with oneself with tolerance, and consider failure as part of life experience. The individual only needs to focus on maintaining physical and mental health.

Yarnell and Neff (2012) found that people with high levels of self-compassion often take a compromise approach when facing interpersonal difficulties and conflicts. Breines and Chen (2012) found that people who are not sympathetic may be less likely to accept their own moral transgressions, while those who are compassionate not only admit their mistakes but also correct their own mistakes. When studying the relationship between fear of self-compassion and psychological inflexibility, scholars found that certain individuals may show fear and resistance when facing self-compassion, which is also known as fear of self-compassion. Homan and Sirois (2017) advocated that self-compassion is good for physical health, and these benefits are a behavior that promotes health. When facing difficulties or failures, individuals

will work hard with tolerance and they will also openly accept difficulties to reduce stress and promote personal health.

The definition of job burnout by Maslach and Jackson (1987) is caused by emphasizing that an individual pays too much emotional or emotional resources in work. They also define the three dimensions of emotional exhaustion, depersonalization, and low personal accomplishment.

Self-compassion means that an individual can treat important things with tolerance after suffering difficulties or failures, and then deal with their own misfortunes or feelings, accept imperfect self, and consider failure as part of their life experience. According to the COR Theory, when individual resources suffer loss, are threatened by resource loss or the resources invested have no corresponding return, the individual will try to reduce the loss of resources and protect existing resources. Employee self-compassion can be regarded as a kind of psychological resource. Reduce the generation of emotional exhaustion. Maslach and Leiter (2008) found in their research that an individual's personality and characteristics have an impact on emotional exhaustion. Stanton et al. (2000) pointed out that when individuals face stress, self-compassion strategies can effectively control the intensity and duration of emotional arousal, thereby changing the personal negative emotional state. Therefore, this article makes the following hypothesis:

H1: Employees' self-compassion has a negative impact on emotional exhaustion.

2.3 The impact of emotional exhaustion on work engagement

Schaufeli et al. (2002) advocate that work engagement is the three dimensions of concentration, dedication and vitality, and it is the positive emotions and states related to work. Vitality means that employees work hard voluntarily and are energetic at work. Concentration means that employees devote all their energy to work, and the individual will work single-mindedly, and feel that time passes quickly, especially at work. Dedication means that employees love their work, have a sense of identity with their work, and are proud of their work. The employee's work engagement is very important to the organization because it helps the organization increase its profits.

Emotional exhaustion refers to the feeling of exhaustion caused by an individual's excessive expenditure of emotional resources. According to the COR Theory, when an individual suffers from resource loss, threat of resource loss, or resource input but no corresponding return, the individual will work hard to reduce resource loss, protect existing resources, and work hard to add new resources. COR theory also points out that individuals with rich resources will bring enthusiasm and enthusiasm to work, and therefore show a higher level of work engagement. Employees at work, when employees work hard, in the case of excessive emotional resources, employees will feel the loss of resources, thereby reducing investment in work. Therefore, this article makes the following hypotheses:

H2: Emotional exhaustion has a negative impact on employee work engagement.

H2a: Emotional exhaustion negatively affects employee vitality.

H2b: Emotional exhaustion negatively affects dedication.

H2c: Emotional exhaustion negatively affects concentration.

2.4 The moderating effect of difficulties in emotional regulation

Gratz and Roemer (2008) summarized previous studies and proposed a comprehensive concept. They felt that emotional regulation involves six conceptual aspects: acceptance of emotions, effective emotional regulation strategies, control of emotions, and understanding of emotions, emotional clarity and goals, and difficulties in orientation. When an individual lacks a certain aspect of function, there will be difficulties in emotional regulation. Anestis et al. (2011) advocated that personal emotion regulation difficulties should be distinguished from the individual's internal, emotion-related qualities and the individual's emotional activities, and the individual's response to emotions should be emphasized. However, some scholars argue that the difficulty of emotional regulation is close to the failure of emotional regulation, that is, the individual has a functional disorder in the process of processing his own emotions. Weinberg and Klonsky (2009) found that a lack of emotional clarity in individuals leads to an increased risk of depression and suicidal ideation.

Difficulty in emotional regulation is when employees have emotional disturbances or disorders. This lack of ability is called difficulty in emotional regulation. According to the COR theory, employees who lack resources are more likely to suffer from the pressure of resource loss, which will cause other resource inputs to be more than make ends meet and accelerate resource loss. Difficulties in emotional regulation play a blocking role in self-compassion and emotional exhaustion and weaken this relationship. Therefore, this article makes the following hypothesis:

H3: Difficulties in emotional regulation play a negative moderating role in the relationship between employee self-compassion and emotional.

2.5 Moderation from interpersonal stress

Ajzen (1991) put forward the concept of interpersonal stress, which refers to the psychological pressure that individuals bring when dealing with interpersonal relationships. Such pressure often appears in the context of interpersonal communication and directly affects human behavior. Williams and Cooper (1998) in their research on work stress, divided work stress into six dimensions: work itself, management roles, interpersonal relationships, career development and achievement, organizational structure and atmosphere, and work-family conflicts. The research also defines interpersonal stress as the various objective psychological pressures that are generated in the context of interpersonal communication, which have an impact on the individual's psychology, physiology and behavior.

Interpersonal stress refers to a kind of psychological pressure brought by employees when dealing with interpersonal relationships in some situations of interpersonal communication. Interpersonal relationship is a kind of interpersonal resource. When employees feel the pressure of interpersonal relationship is great, that is, employees are paying in the interpersonal relationship. When employees feel a lot of pressure on interpersonal relationship, that is, employees are paying in interpersonal relationship. When they need help, they do not get positive feedback from colleagues and superiors. Being treated indifferently by colleagues and supervisors shows that employees lack interpersonal resources. According to the COR theory, individuals with lack of resources are more likely to suffer from the pressure of resource loss, and this pressure causes the resource input to prevent resource loss to make ends meet and accelerate resource loss. Therefore, the lack of interpersonal resources will hinder the return of employees' resource investment, and therefore will strengthen the reduction of employees' work investment, so interpersonal stress has an enhanced effect in emotional exhaustion and

work investment. Therefore, this article makes the following hypotheses:

H4: Interpersonal stress plays a positive moderating role in the relationship between employee emotional exhaustion and work engagement.

H4a: Interpersonal stress plays a positive moderating role in the relationship between emotional exhaustion and vitality of employees.

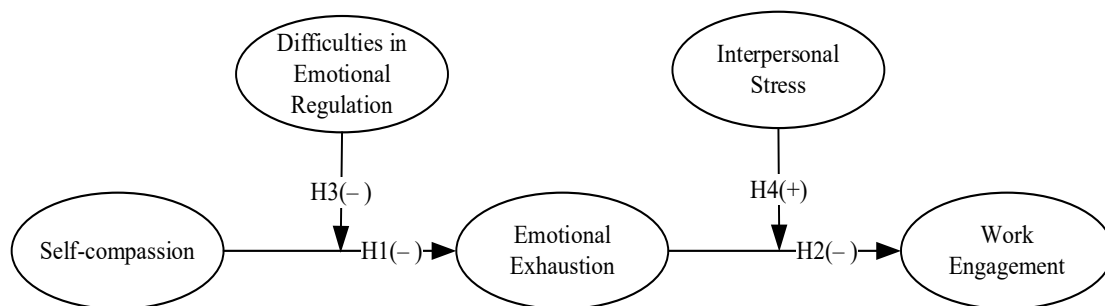
H4b: Interpersonal stress plays a positive moderating role in the relationship between employee emotional exhaustion and dedication.

H4c: Interpersonal stress plays a positive moderating role in the relationship between emotional exhaustion and concentration of employees.

To summarize the above research hypotheses, sort out the above-mentioned hypothetical relationships and display them as shown in Figure 1.

Figure 1

Research framework diagram



3. Research methods

3.1 Research participants and sampling

The research participants in this study are mainly in-service employees. The sampling method is to use online questionnaires to distribute through online platforms. After the collected samples have been eliminated invalid questionnaires, statistical analysis is processed based on these valid questionnaires.

3.2 The preparation process of the questionnaire

In the preparation of the questionnaire, the first step is to find a variable scale that meets the purpose of this research. This research finds that the measured scale conforms to the definition of the variable, and then selects the items on the scale to reflect the purpose of the research. Next, review and sort out the literature to see which variables will interfere with the external validity of this study. Then this article selects a total of 6 control variables, namely gender, age, working years, education level, job position and job category. In the questionnaire collecting process, in order to avoid people filling in randomly or filling out the questions without seeing clearly, the participants are also asked “Are you a current employee?” as a screening item. After a period of up to 2 months, this study began to screen the returned questionnaires.

3.3 The screening process of the questionnaire

Mainly through the screening of control variables, because the research object of this article is an in-service employee, so the questionnaire that answered “not an in-service employee” is

deleted, and then routine errors are deleted, for example, although the respondent is less than 20 years old, but fill in an employee who has been working for more than ten years, or a corporate executive.

4. Research results

The moderating analysis results of the four interactions are shown in Table 1 and Table 2. As the research hypothesizes the direct negative influence relationship between H1 and H2, both are statistically significantly supported.

In M2a, self-compassion and difficulties in emotional regulation can explain 26.6% of the variance in emotional exhaustion, and self-compassion and F is significant at the level of 0.001. In M3a, after the introduction of the interaction term, self-compassion and difficulties in emotional regulation can explain 27.5% of the variance of emotional exhaustion. At this time, the regression coefficient of the interaction term is -0.111, which is significant at the 0.05 level, and the F is 16.845 ($p < .001$) Therefore, it is concluded that difficulties in emotional regulation has a negative moderating effect between self-compassion and emotional exhaustion. The research hypothesis H3 is statistically significantly supported.

In order to further explain the moderating effect of difficulties in emotional regulation, a simple slope diagram is drawn based on the results of regression analysis. The low difficulties in emotional regulation group and the high difficulties in emotional regulation group all showed a downward trend from low self-compassion to high self-compassion. In the low self-compassion, the low difficulties in emotional regulation group were slightly higher than the high difficulties in emotional regulation group, and the high self-compassion. The low difficulties in emotional regulation group are significantly higher than the high difficulties in emotional regulation group, so the effect is attenuated, so it is negative moderation (refer to Figure 2).

Table 1*Test interactions from difficulties in emotion regulation and self-compassion (N=335)*

DV	Emotional Exhaustion			Vitality of Employees		
IV/Model	M1a	M2a	M3a	M1b	M2b	M3b
Gender	-.110*	-.092	-.090	.019	-.027	-.024
Age	.065	.016	.015	-.138	-.063	-.095
Education	-.057	-.016	-.016	.033	-.008	-.005
Experience	.112	.093	.100	-.100	-.021	-.040
Position	.053	.040	.045	.010	.012	.029
Self-compassion		-.501***	-.519***			
Difficulties in Emotion Regulation		-.072	-.085			
Emotional Exhaustion					-.316***	-.400***
Interpersonal Stress					.369***	.243***
Self-compassion x Difficulties in Emotion Regulation			-.111*			
Emotional Exhaustion x Interpersonal Stress						.192***
<i>Adj R²</i>	.009	.266	.275	-.007	.308	.327
ΔR^2		.258	.012		.314	.022
<i>F</i>	1.577	18.249***	16.845***	.549	22.187***	21.331***

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.**Table 2***Test interactions from interpersonal stress and emotional exhaustion (N=335)*

DV	Dedication			Concentration of Employees		
IV/Model	M1c	M2c	M3c	M1d	M2d	M3d
Gender	.052	.024	.025	.009	-.032	-.031
Age	-.019	.065	.057	-.126	-.052	-.065
Education	.069	.029	.030	.082	.042	.043
Experience	.066	.139	.134	-.215*	-.139	-.147
Position	.036	.020	.025	.009	-.011	-.004
Emotional Exhaustion		-.102*	-.124*		-.259***	-.293***
Interpersonal Stress		.522***	.488***		.390***	.339***
Emotional Exhaustion x Interpersonal Stress			.051			.078
<i>Adj R²</i>	.003	.319	.318	.006	.293	.294
ΔR^2		.315	.002		.287	.004
<i>F</i>	1.179	23.315***	20.479***	1.411	20.758***	18.411***

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

In M2b, emotional exhaustion and interpersonal stress can explain 30.8% of the variance in vitality. At this time, emotional exhaustion, interpersonal stress and F is significant at the level of 0.001. In M3b, after introducing the interaction term, emotional exhaustion and interpersonal stress can explain 32.7% of the variance in vitality. At this time, the regression coefficient of the interaction term is 0.192, which is significant at the level of 0.001, and the F is 21.331, significant at the level of 0.001. The research hypothesis H4a is statistically significantly supported, so it is concluded that interpersonal stress plays a positive role in moderating effect

between emotional exhaustion and vitality (refer to Figure 3).

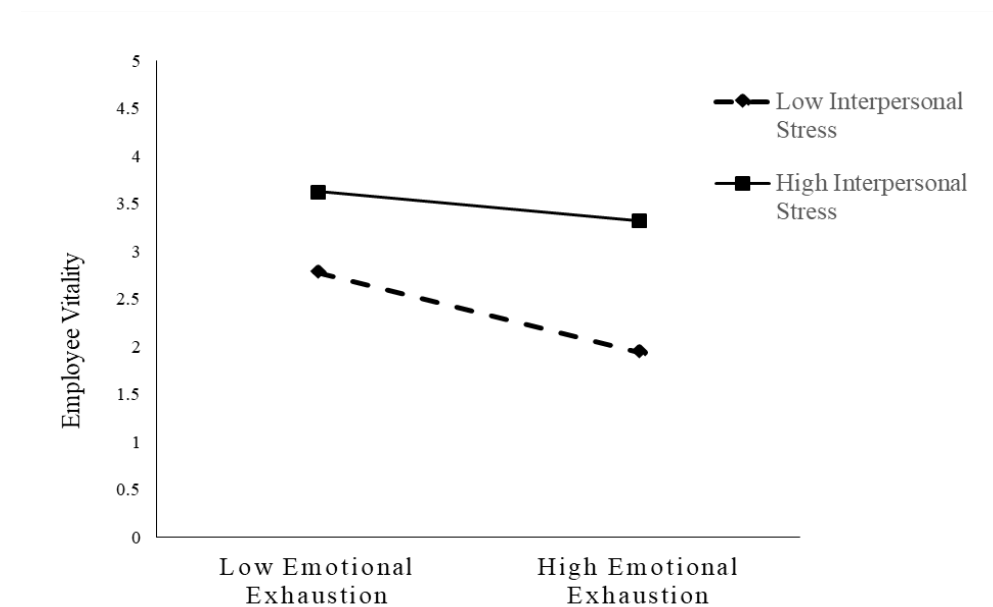
Figure 2

The moderating effects of difficulty in emotional regulation

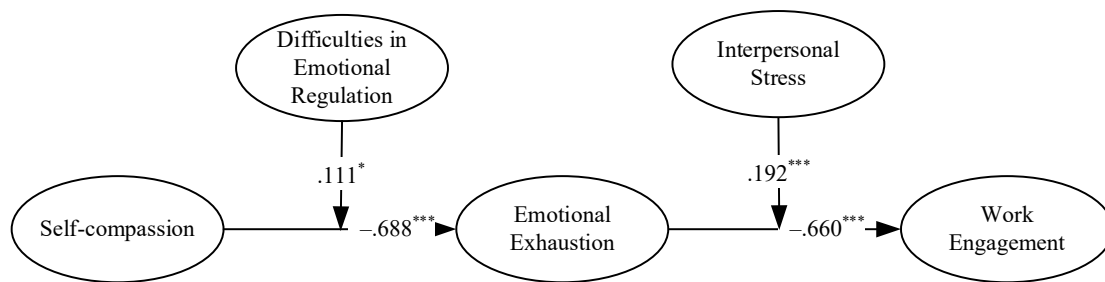


Figure 3

The moderating effect of interpersonal stress



As the research hypotheses H4b and H4c have no statistical support for their moderating effects. In this study, in-service employees were used as research participants, and data were collected through questionnaire surveys to analyze the theoretical relationship between self-compassion, emotional exhaustion, difficulties in emotional regulation, interpersonal stress, and work engagement (refer to Figure 4).

Figure 4*The research results of hypothesis testing*

5. Conclusion

With the answers to the questions in this research, employees with higher self-compassion can indeed improve their work engagement by reducing emotional exhaustion. Among them, if employees have lower difficulties in emotional regulation, it can also promote the positive effect of this influence. In particular, if employees have high interpersonal stress, they can only increase the vitality of employees in work engagement.

6. References

- Ajzen, I. (1991). The theory of planned behavior, organizational behavior and human decision processes. *Journal of Leisure Research*, 50(2), 176-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Anestis, M. D., Bagge, C. L., Tull, M. T., & Joiner, T. E. (2011). Clarifying the role of emotion dysregulation in the interpersonal-psychological theory of suicidal behavior in an undergraduate sample. *Journal of Psychiatric Research*, 45(5), 603-611. <https://doi.org/10.1016/j.jpsychires.2010.10.013>
- Breines, J. G., & Chen, S. (2012). Self-compassion increases self-improvement motivation. *Personality and Social Psychology Bulletin*, 38(9), 1133-1143. <https://doi.org/10.1177/0146167212445599>
- Demerouti, E., Cropanzano, R., (2010). From thought to action: Employee work engagement and job performance. In Bakker, A., & Leiter, M.P. (eds.), *Work Engagement: A Handbook of Essential Theory and Research*, (pp. 147-163). Psychology Press.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology & Behavioral Assessment*, 26(1), 41-54. <https://doi.org/10.1023/B:JOBA.0000007455.08539.94>
- Gratz, K. L., & Roemer, L. (2008). The relationship between emotion dysregulation and deliberate self-harm among female undergraduate students at an urban commuter university. *Cognitive Behaviour Therapy*, 37(1), 14-25. <https://doi.org/10.1080/16506070701819524>
- Gorgievski, M. J., & Hobfoll, S. E. (2008). Work can burn us out or fire us up: Conservation of resources in burnout and engagement. In Jonathan, R. B. H. (ed.) *Handbook of Stress and Burnout in Health Care*, (pp. 7-22). Nova Science Publisher.
- Gross, J. J., & Jazaieri, H. (2014). Emotion, emotion regulation and psychopathology an affective science perspective. *Clinical Psychological Science*, 2(4), 387-401. <https://doi.org/10.1177/2167702614536164>

- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Homan, K. J., & Sirois, F. M. (2017). Self-compassion and physical health: Exploring the roles of perceived stress and health-promoting behaviors. *Health Psychology Open*, 4(2), 1-9. <https://doi.org/10.1177/2055102917729542>
- Lynsey, R. M., Andrew, M. S., Holly, K., & Orcutt, H. K. (2015). Fear of self-compassion and psychological inflexibility interact to predict PTSD symptom severity. *Journal of Contextual Behavioral Science*, 4(1), 37-41. <https://doi.org/10.1016/j.jcbs.2014.10.003>
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3-30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>
- Maslach, C., & Jackson, S. E. (1982). Burnout in health professions: A social psychological analysis. In Sander, G. S., Suls, J. (eds.) *Social Psychology of Health and Illness*. (pp. 251-227). Lawrence Erlbaum.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498-512. <https://doi.org/10.1037/0021-9010.93.3.498>
- Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-102. <https://doi.org/10.1080/15298860309032>
- Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223-250. <https://doi.org/10.1080/15298860309027>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmative factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92. <https://doi.org/10.1023/A:1015630930326>
- Stanton, A. L., Kirk, S. B., & Cameron, C. L., Danoff-Burg, S. (2000). Coping through emotional approach: Scale construction and validation. *Journal of Personality and Social Psychology*, 78(6), 1150-1169. <https://doi.org/10.1037/0022-3514.78.6.1150>
- Weinberg, A., & Klonsky, E. D. (2009). Measurement of emotion dysregulation in adolescents. *Psychological Assessment*, 21(4), 616-621. <https://doi.org/10.1037/a0016669>
- Williams, S., & Cooper, C. L. (1998). Measuring occupational stress: Development of the pressure management indicator. *Journal of Occupational Psychology*, 4, 306-321. <https://doi.org/10.1037/1076-8998.3.4.306>
- Wispé, L. (1991). *The Psychology of Sympathy*. Springer.
- Yamell, L. M., & Neef, K. D. (2012). Self-compassion, interpersonal conflict resolutions and well-being. *Self and Identity*, 12(2), 146-159. <https://doi.org/10.1080/15298868.2011.649545>

The Study of Accounting Problems and Their Relationships with Accounting Profile in Community Enterprise in Sa Kaeo province

Kanchana Phalaphon Apapan Tiyawong* Chariya Bunnak
Faculty of Social Technology, Rajamangala University of Technology Tawan-Ok
Chanthaburi Campus, Thailand
*absudsud29@gmail.com

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Abstract

The purposes of this research were to study accounting problems and their relationships with accounting profiles in community enterprise in Sa Kaeo province. The population of this study was 213 accountants. The questionnaire was used for collecting the data. The statistics for analyzing the data were frequency distribution, percentage, mean, and standard deviation. There were statistical tests using t-test. One way ANOVA and Scheffe' method. The results revealed the overall of accounting problems and their relationships with accounting profiles in community enterprise in Sa Kaeo province is great. The first accounting problem was equipment used in operating. The second was cooperation and coordination. The last problem was document and accounting method respectively. The results of hypothesis testing were accountants in community enterprise in Sa Kaeo province having different in gender, level of education and number of members had the similar accounting problems and their relationships with accounting profiles with statistically significant differences at a level of 0.05. In addition, accountants in community enterprise in Sa Kaeo province having different age, experience, area in community enterprise, types, and accounting record had different accounting problems and their relationships with accounting profiles with statistically significant differences at level of 0.05.

Keywords: Community Enterprises, Accounting problems, Accounting Profiles, Documents and Accounting Methods, Thailand Accounting

1. Introduction

Community enterprise was important to the development of the country because it can develop the economy by creating jobs, creating a stable and sustainable career, and eradicating poverty. Self-sufficiency in family and community were conducted by using resources, raw materials and local wisdom. This could improve the quality of people's life in the province to be happy as it appeared in The Twelfth National Economic and Social Development Plan of Thailand (2017-2021) to be guidelines for strengthening the economy of the community. Community enterprise was the development of capabilities of the people in the community in resource management and community capital to create a variety of economic activities to fix and improve the economy to be the foundation for the important development of Thailand. Community enterprise emphasized on the community economy, focused on production for sale, and developed a community enterprise incubation system along with creating new entrepreneurs by developing accounting management knowledge and skills. Moreover, knowledge of the production of local unique products and the development of professional

skills of various groups corresponded with the diversity of the community in order to reduce economic risks (Office of the National Economics and Social Development Council, 2019)

Recently, Sa Kaeo province, Thailand has the second largest number of community enterprise groups in the eastern region such as Mueang Sa Kaeo, Ta Phraya, Wang Nam Yen, Aranyaprathet, Khok Sung, Khlong Hat, Wang Sombun, Khao Chakan and Watthana Nakhon. Community enterprises in Sa Kaeo province are agriculture / crop production, livestock production / fisheries, food / beverage processing, invention etc. For the reason that they lack of operational planning and information that can be used for management of the community business, community enterprise business operations are difficult to achieve. For instance, they don't have an appropriate accounting system to improve business efficiency.

For this reason, the researchers realize the importance of the study accounting problems in and their relationships with accounting profiles in community enterprise in Sa Kaeo province to find guidelines to develop accounting in community enterprises. This can help community enterprise in Sa Kaeo province to know about their accounting condition. Furthermore, the guidelines will be useful for community enterprises in other area.

1.1 The objectives of the study

- 1) To study accounting problems in community enterprise in Sa Kaeo province, Thailand
- 2) To study relationship between accounting problems and accounting profiles in community enterprise in Sa Kaeo province, Thailand

1.2 Hypothesis

- 1) Accountants in community enterprise in Sa Kaeo province who have different profiles i.e. gender, age, level of education and experience will have different accounting problems
- 2) Accountants in community enterprise in Sa Kaeo province who work in different enterprises i.e. area, number of member, type of enterprise and accounting records will have different accounting problems

2. Literature Review

2.1 Concept and theories

2.1.1 Concepts of community enterprise

This concept meant a small business in a small community basing on self-reliance in family and community. There were seven characteristics to define a community enterprise. 1. The community was the owner of the business. 2. Products were produced by the community. 3. Each of communities was unique. 4. Local wisdom combined with universal wisdom. 5. There was the integration with other activities. 6. Learning was the main point. 7. The goal was self-reliance.

2.1.2 Concepts of document and accounting method

The concept meant to collect and to analyze the data in operating about finance such as recording, classifying, summarizing and analyzing.

2.1.3 Concepts of accounting finance in community enterprise

This concept was to improve and support the good accounting system in community enterprise under Cooperative Auditing Department.

2.1.4 Concepts of accountant's profession

The concept meant knowledge and skills which related to accounting profession. Accountants' professions consisted of knowledge, professional ethics, skills and work experience.

2.1.5 Concepts of tools used in work

The concept meant accounting software, online presentation and resource planning program.

2.2 Related Studies

Hanwiwat (2011) who studied Problems and obstacles in conducting the account of local enterprise in Nakhon Si Thammarat province revealed most of community enterprises in Nakhon Si Thammarat province which answered the questionnaire were enterprises that produce gift and souvenir. Their material resources were from their province. Accountants who were a committee in the community enterprise graduated from primary school which didn't relate to accounting, administration and economics field. They recorded accounting by hand. There were account books and supporting documents for accounting records such as cash book, general entry notebook, product control registration, and receipt. Accountants who worked in community enterprises had work for 5 years, and they had trained for accounting 1 time a year. There were a lot of problems in accounting. The participants indicated the most important problem was tools using in work (mean = 4.31), and the next problems were problem in cooperation and coordination, document and accounting method and knowledge and capability of accountants respectively.

3. Methods

The population in the study was 213 accountants from community enterprises from three districts such as 91 Watthana Nakhon district, 85 Mueang Sa Kaeo district and 37 Aranyaprathet District (Department of Agriculture Extension, 2019).

The equipment used in this study was questionnaire consisting of four parts: 1. general information, 2. General information of community enterprises, 3. Opinions on accounting problems in the accounting of community enterprises in Sa Kaeo Province and 4. Development guidelines and other suggestions. The reliability of this questionnaire was 0.798 from 30 samples. The statistics for analyzing the data were frequency distribution, percentage, mean, and standard deviation. There were statistical for analyzing hypothesis were One way ANOVA and Scheffe' method.

In questionnaire, the criterion of Likert was applied to define the range of interval as follow:

The level of excellent accounting problems mean = 4.51 – 5.00.

The level of great accounting problems mean = 3.51 – 4.50

The level of moderate accounting problems mean = 2.51 – 3.50

The level of poor accounting problems mean = 1.51 – 2.50

The level of least accounting problems mean = 1.00 – 1.50

4. Results

Table 1.

Mean and standard deviation of accounting problems in community enterprise in Sa Kaeo Province

Accounting problems of accounting in community enterprise in Sa Kaeo Province	\bar{x}	S.D.	Level of problems and obstacles	Rank
1. Capability of accountants	3.89	0.40	Great	4
2. Accounting documents and methods	4.04	0.30	Great	3
3. Cooperation and coordination	4.17	0.34	Great	2
4. The tools used in the operation	4.49	0.33	Great	1
Overall	4.15	0.19	Great	

Table 1 reveals the overall of information about accounting problems in community enterprise in Sa Kaeo Province is great (mean = 4.15). The first problem and obstacle is the tools used in the operation (mean = 4.49). The second is cooperation and coordination (mean = 4.17). The next is accounting documents and methods (mean = 4.04) and capability of accountants (mean = 3.89) respectively.

Table 2.

Mean and standard deviation of accounting problems in community enterprise in Sa Kaeo Province (Capability of accountants)

Accounting problems of accounting in community enterprise in Sa Kaeo Province (Capability of accountants)	\bar{x}	SD	Level of problems and obstacles	Rank
1. Have completely knowledge and understanding about the accounting.	4.03	0.45	Great	1
2. Can solve problems from the preparation of accounts	3.96	0.52	Great	3
3. Understand operating procedure which is group regulations	3.66	0.78	Great	5
4. Trained in new knowledge about accounting from experts	4.00	0.64	Great	2
5. Good understanding of the purpose of group formation	3.80	0.79	Great	4
Overall	3.89	0.40	Great	

From table 2, it discloses the overall of accounting problems in community enterprise in Sa Kaeo Province in capability of accountants aspect is great (mean = 3.89). The first accounting problem is to have completely knowledge and understanding about the accounting (mean = 4.03). The next is to be trained in new knowledge about accounting from experts (mean = 4.00). The last problem and obstacle is to solve problems from the preparation of accounts (mean = 3.96) respectively.

Table 3.

Mean and standard deviation of accounting problems in community enterprise in Sa Kaeo Province (Accounting documents and methods)

Accounting problems in community enterprise in Sa Kaeo Province (Accounting documents and methods)	\bar{x}	<i>SD</i>	Level of problems and obstacles	Rank
1. Too many documents used in the accounting record	4.24	0.55	Great	2
2. Recording journal entries, buy daily, sell daily, receive daily, pay and general daily.	3.97	0.45	Great	7
3. Posting from the primary journal to the ledger account.	3.56	0.66	Great	9
4. Classifying items as private assets off the entity's assets.	4.03	0.71	Great	3
5. Classifying of production costs (production costs) from selling and administrative expenses.	3.98	0.60	Great	6
6. The validity and the process of approving the withdrawal of raw materials, inventories and office supplies	3.96	0.59	Great	8
7. Check the balance of raw materials, inventories and office supplies	3.99	0.55	Great	5
8. Too many type of raw material, inventory and office materials in organizational management	4.00	0.55	Great	4
9. Too many account names	4.61	0.66	Excellent	1
Overall	4.04	0.30	Great	

Table 3 shows accounting problems in community enterprise in Sa Kaeo Province in accounting documents and methods aspect is great (mean = 4.04). There are two level of problems that are great and excellent. The excellent problem is too many account names (mean = 4.61). The three great accounting problems are too many documents used in the accounting record (mean = 4.24), classifying items as private assets off the entity's assets (mean = 4.03) and too many type of raw material, inventory and office materials in organizational management (mean = 4.00) respectively.

Table 4.

Mean and standard deviation of accounting problems in community enterprise in Sa Kaeo Province (Cooperation and coordination)

Problems and obstacles of accounting in community enterprise in Sa Kaeo Province (Cooperation and coordination)	\bar{x}	SD	Level of problems and obstacles	Rank
1. Cooperation in sending documents related to accounting	4.03	0.57	Great	5
2. Collaboration from group members in the preparation of accounts	4.28	0.68	Great	2
3. The president well cooperated in providing accounting information	4.29	0.75	Great	1
4. Auditors giving an advice on the preparation of correct accounts	4.17	0.49	Great	3
5. Coordinating with other community enterprise groups in accounting	4.10	0.48	Great	4
Overall	4.17	0.34	Great	

Table 4 reveals the overall accounting problems in community enterprise in Sa Kaeo Province in cooperation and coordination aspect is great (mean = 4.17). The first problem and obstacle is the president cooperated in providing accounting information as well (mean = 4.29). The next is collaboration from group members in the preparation of accounts (mean = 4.28). The last problem is auditors giving an advice on the preparation of correct accounts (mean = 4.17) respectively.

Table 5.

Mean and standard deviation of accounting problems in community enterprise in Sa Kaeo Province (The tools used in the operation)

problems and obstacles of accounting in community enterprise in Sa Kaeo Province (The tools used in the operation)	\bar{x}	SD	Level of problems and obstacles	Rank
1. Convenient and easy in operation	4.52	0.62	Excellent	3
2. Security in access accounting	4.59	0.57	Excellent	1
3. Accuracy and complement in recording	4.27	0.58	Great	6
4. Historical data comparison	4.51	0.55	Excellent	4
5. Account model basing on the needs	4.50	0.59	Great	5
6. Storage of accounting information	4.58	0.57	Excellent	2
overall	4.49	0.33	Great	

Table 5 exposes the overall of accounting problems in community enterprise in Sa Kaeo Province, Thailand in the tools used in the operation aspect is great (mean = 4.49). There are two levels of problems that are excellent and great. The three excellent accounting problems are security in access accounting (mean = 4.59), storage of accounting information (mean = 4.58) and convenient and easy in operation (mean = 4.52) respectively.

5. The result of hypothesis

Table 6

Statistics Result of Hypothesis 1

Problems and obstacles in the accounting	Gender		Age		Level of Education		Experience	
	<i>F</i>	Sig	<i>F</i>	Sig	<i>F</i>	Sig	<i>F</i>	Sig
1. Capability of accountants	0.96	0.33	1.93	0.13	0.77	0.55	1.84	0.14
2. Accounting documents and methods	0.00	0.98	4.73	0.00**	1.36	0.25	3.80	0.01**
3. Cooperation and coordination	0.06	0.81	1.28	0.28	0.28	0.89	0.79	0.52
4. The tools used in the operation	1.38	0.24	1.37	0.25	0.68	0.61	0.60	0.62
Overall	0.00	0.97	1.70	0.17	0.60	0.67	1.10	0.35

** statistically significant at a level of 0.01

From Table 6, the result of analyzing relationship between accounting problems and accounting profile finds accountants who have similar gender and level of education have the same accounting problems. However, accountants who have different age and experience have different accounting problems statistically significant at a level of 0.01 in accounting documents and methods aspect.

Table 7

Statistics Result of Hypothesis 2

Problems and obstacles in the accounting	Area		Number of Member		Type		Accounting Records	
	<i>F</i>	Sig	<i>F</i>	Sig	<i>F</i>	Sig	<i>F</i>	Sig
1. Capability of accountants	20.78	0.00**	0.49	0.61	1.73	0.15	12.89	0.00**
2. Accounting documents and methods	3.21	0.04*	0.58	0.56	0.82	0.51	0.54	0.59
3. Cooperation and coordination	0.41	0.67	0.94	0.39	2.41	0.05*	5.22	0.01**
4. The tools used in the operation	5.57	0.00**	0.06	0.94	0.86	0.49	2.68	0.07
Overall	3.32	0.04*	0.06	0.95	1.20	0.31	2.93	0.06

* statistically significant at a level of 0.05 ** statistically significant at a level of 0.01

From Table 7, the result of analyzing relationship between accounting problems and accounting profile finds accountants who have different number of member have the same accounting problems, but accountants who have different area, type and accounting records have different accounting problems statistically significant at a level of 0.05 and statistically significant at a level of 0.01.

6. Discussion

1. The overall of capability of accountants in information about the study of problems and obstacles was great. Considering each issue, it was found that the first priority was that you had complete knowledge and understanding about the accounting. This was consistent with Hanwiwat (2011) who studied problems and obstacles in conducting the account of local enterprise in Nakhon Si Thammarat province. In her research, it exposed the overall of problems and obstacles was great, and the first aspect of the problems was to complete knowledge and understanding about the accounting.

2. The overall of accounting documents and methods in information about the study of problems and obstacles was great. The first problem in accounting documents and methods was that there were too many account names. This was consistent with Hanwiwat (2011) who studied problems and obstacles in conducting the account of local enterprise in Nakhon Si Thammarat province. The research exposed the overall of problems and obstacles was great, and the first aspect of the problems was too many account names.

3. The overall of cooperation and coordination in information about the study of problems and obstacles was great. The first problem in cooperation and coordination was the president well cooperated in providing accounting information and consistent with Hanwiwat (2011) who studied problems and obstacles in conducting the account of local enterprise in Nakhon Si Thammarat province. The study demonstrated the overall of problems and obstacles was great, and the first aspect of the problems was the president well cooperated in providing accounting information.

4. The overall of the tools used in the operation in information about the study of problems and obstacles was great. The first problem in the tools used in the operation was security in access accounting. This point was consistent with KositKanin (2019) who studied problems, obstacles and development on Bookkeeping of Community Enterprises in Nakhonpathom province. The research found the overall of the study was great, but the first problem was accuracy and complement in recording.

7. Suggestion

1. The government should support in training about accounting in community enterprise to accountants from the accounting experts

2. Because of a lot of documents, it makes accountants difficult to work. The relevant departments should present the data in an easy accounting form to make people understand clearly and easily.

3. The accounting in community enterprise has not received the expected cooperation from group administrators and members including the lack of coordination with other community enterprises. Therefore, the relevant departments should hold a meeting to discuss and understand the preparation of accounts for group administrators and group members.

4. Community enterprises should select accountants who have a basic knowledge of computer usage or send them to be trained on the use of computer equipment and up-to-date program for accounting.

8. References

- Community Enterprise Information System. (2020). *Community enterprise information*. <https://smce.doae.go.th>.
- Hanwiwat, W. (2011). *Problems and obstacles in conducting the account of local enterprise in Nakhon Si Thammarat province*. [Master Degree Thesis, Rajamangala University of Technology Thanyaburi]. RMUTT Research Repository. <http://www.research.rmutt.ac.th/?p=7088>
- Hunnak, C., Fuengian, S., & Montriwat, P. (2019). Guideline for developing the accounting system of community enterprises Mahasawat Agriculture Housewife Group in Salaya, Phuttamonthon, Nakhon Pathom province. *Journal of Valaya Alongkorn Review*, 10(3), 85-97. <https://so06.tci-thaijo.org/index.php/var/article/view/186005>
- Kositkanin, C., Deesukanan, C., & Threerijit, V. (2019). The study of problems, obstacles and development on Bookkeeping of Community Enterprises in Nakhonpathom province. *Veridian E-journal Silpakorn University*, 10(13), 2138-2151. <https://he02.tci-thaijo.org/index.php/Veridian-E-Journal/article/view/110255>
- Manotham, C. (2018). The study of the bookkeeping of community enterprises in Chiang Mai Province according to the guidelines of the Cooperative Auditing Department. *Payap University Journal*, 25(1), 133-148. <https://doi.org/10.14456/pyuj.2015.8>
- Office of the National Economic and Social Development Council. *The Twelfth National Economic and Social Development Plan*. <http://www.nesdb.go.th>.
- Office of the Secretariat of Committee on Community Enterprise Promotion Division. *Community enterprise*. <http://www.sceb.doae.go.th/Sceb2.htm>.
- Office of the Vocational Education Commission. *Accounting*. <https://sites.google.com/site/websiteteachingeducationconvey/khwam-hmay-khxng-karbaychi>.

A Study on Experiential Marketing of an Underground Tourist Attraction in Bangkok

Nan Wi Lai * A Darsh Batra

MBA, Hospitality and Tourism Management, Assumption University of Thailand

*weilaizhang88@gmail.com

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Abstract

Maintaining consumer loyalty/revisit to a company, which leads to revisit or repurchase purpose, is a critical element in today's highly competitive market climate. To ensure long-term market growth in every industry, businesses must first consider their consumers' desires and then build unique brands. As consequence, if the tourism sector of the country is developing very well, it can help and implement other sectors of the country at the same time. The primary purpose of this research is to study the Experiential Marketing of an underground tourist attraction in Bangkok, Thailand. The objectives of this study are to analyze the influence of experiential marketing on emotion, to identify the influence of experiential quality on experiential satisfaction, to examine the influence of emotion on experiential satisfaction, and to investigate the influence of experiential satisfaction on revisit intention. The data collected at a specified time from February 23, 2021, to March 10, 2021. The questionnaires were hand distributed on weekdays and weekends from 12.00 pm to 6.00 pm at around Siam Square One, Siam Centre, and Siam Paragon in Bangkok by using five-point Likert scale survey questionnaires. The questionnaires were distributed until the sample size was achieved. After the data collecting process, the researchers analyzed all primary data by utilizing the Statistical program. The descriptive analysis and inferential analysis including linear regression analysis were used to test all the hypotheses. According to the study's findings, experiential marketing (Feel, Sense, Think, Act, Relate) influence is statistically relevant to emotion. Then, experiential quality and emotion also influence experiential satisfaction. Moreover, experiential satisfaction positively influences revisit intention. This study has both time and place limitations which can be difficult to obtain relevant information and difficult to compile data. The value of this study is to promote marketing strategies and to pursue the visitors of Sea Life Bangkok Ocean World.

Keywords: Experiential Marketing, Underground Tourist Attraction, Covid-19 Pandemic, Customer Experience.

1. Introduction

Nowadays, the swiftly growing consumer market and their beliefs towards advertising give a new challenge to the marketer to find new modern methods to capture the intention of the audience. If marketers think about only traditional marketing during these years, their business will be late behind in the market. Experiential marketing is one of the modern successful marketing methods that focus on customer experience. Experiential marketing provides a sensory experience, cognitive-emotional performance, imaginary perception and rational value to the customers during the marketing process. The implementation stage of experiential

marketing experiences providing to customers by using 5 senses: sight, sound, smell, taste and feel. By using experiential marketing, marketers can provide the value of products or services that customers expected. Therefore, in these days most of the marketer tries to launch their product or service before the product or service distribute in the market to catch the customer mind. And also, the hospitality and tourism industry start using these marketing tactics widely now (Datta, 2017).

As long as experiential marketing becomes more and more beneficial in many industries, it also can be regarded as an important weapon in the tourism industry. Furthermore, the foreign currency of Thailand mainly depends on the tourist industry and so, this industry has been seriously affected by the Covid-19 pandemic, therefore, the economic income slightly dropped. Therefore, both the reverent authority organizations and professional marketers of tourism are trying to apply this new marketing strategy instead of using traditional marketing. Utilizing this tactic as a competitive advantage, not only the popular tourist destinations but also unwell known tourist destination places might become popular in near future.

Especially for tourist attractions, the firms can persuade the tourists or the visitors through experiential marketing. That means that the marketers can create the virtual events and/or promotions that introduce their tourist sites as a taste of sample, leading to getting the tourist attention to come and visit. Moreover, travel blogs and vlogs can also provide a part of experiential marketing because the visitors can get experience through that Vlogs. If the vloggers or celebrities can create great quality vlogs, which offer the feeling of real taste, these videos and/or blogs can draw attention not only to their fans but also to the new visitors.

This research explores how much advantageous can get from applying the new modern concept of experiential marketing in the underground tourist attraction of Thailand. Therefore, the researcher selects sea life Bangkok as an example of an underground tourist attraction. Because one of the parts for the tourist attraction in Thailand is Sea Life Bangkok Ocean World which is located at Siam Paragon shopping mall in Bangkok and considering that the Sea Life Bangkok is the larger aquarium in South East Asia. And the span of an area of over 10,000 square meters with hundreds of fishes.

1.1 Statement of Problem

To do marketing in hospitality and tourism industry is not the same as like other industries because their main product is like giving the service to the customers. In previous years, they use both traditional and digital marketing but the experiential marketing is rarely used in this industry. When the start of the covid-19 pandemic, the traditional marketing methods have many barriers for the marketers to promote their tourist attraction place. Therefore, they need to apply the concept of experiential marketing.

In the 21 centuries, every industry needed to survive in the competitive world. If they cannot extend and promote their market, their businesses will be shrunk in different ways and it is very difficult for them to survive in the market for a long time. Therefore, marketers need to consider to take competitive advantages by using alternative marketing theories to compete with other competitors. Experiential marketing is a new modern technique for marketing profession during these years and some industries achieved their goals by using experiential marketing concepts. There are many difficult issues also in tourism industry of Thailand in 2020 and Thailand economy mainly depend on tourism sector. So, experts of tourism industry in Thailand have a

big issue to solve these problems urgently to maintain the economy of Thailand. By using experiential marketing concepts, these experts may overcome this crisis and it may be alternative way of solution for current problems of an underground tourist attraction of Bangkok.

1.2 Research Objectives

RO1. To analyze the influence of experiential marketing on emotion.

RO2. To identify the influence of experiential quality on experiential satisfaction.

RO3. To examine the influence of emotion on experiential satisfaction.

RO4. To investigate the influence of experiential satisfaction on revisit intention.

1.3 Theory

1.3.1 Experiential marketing

Pine and Gilmore (1998) indicated that experiential marketing emerges when a business creates a stage with services and uses goods as props for customers. When services are intangible and products are tangible, experiences are memorable. Moreover, four main elements of experiential marketing were developed: (1) an emphasis on consumer experiences; (2) a concentration on purchase as a holistic experience; (3) an assumption that consumers are logical and emotional beings; and (4) a knowledge that methods and instruments are assorted.

The concept of strategic experience modules (SEMs) that administrators can use to develop suitable kinds of customer interactions for their customers was suggested by Schmitt (1999a; 1999b). In experiential marketing, the experiential modules to be handled include sensory experiences (SENSE), affective experiences (FEEL), imaginative cognitive experiences (THINK), physical experiences, activities and lifestyles (ACT), and perceptions of life experiences arising from a reference community or culture (RELATE). Thus why this can be supposed that experiential marketing aims to build experiences having holistic integration at the same time.

1.3.1.1 Sense

Sensory experiences are created through sight, sound, touch and smell. Then, the sense is the primary reaction in an experiential event where one person participates (Tsaur, 2006).

1.3.1.2 Feel

One of the basic concepts of life is to pursue satisfaction and to avoid pain or, more commonly, to feel good and avoid feeling bad. The feelings are the ones that appear during consumption are most effective, and the contacts and interactions are the product of intense emotions, and they develop throughout.

1.3.1.3 Think

Schmitt (1999a; 1999b) suggested that Think marketing contributes to intelligence to develop cognitive, problem-solving interactions that creatively engage customers. Moreover, think marketing appeals to the inductive and deductive thought of customers through industry, excitement and aggression.

1.3.1.4 Act

Schmitt (1999a; 1999b) proposes that even by targeting their physical encounters, representative new ways of doing things, alternative lifestyles and interactions, ACT marketing enriches the lives of consumers. Life-style and behavioural improvements are often more motivational, encouraging and emotional, and often inspired by role models.

1.3.1.5 Relate

Relate initiatives attract the desire of the individual for self-improvement (e.g., a potential “ideal self” to which he or she wishes to relate), appeal to the need for individual others to be observed favourably and relate the individual to the social system abroad.

1.3.2 Experiential Quality

Experiential quality operationalization requires a visitor's affective reaction to the psychological value they want from a visiting experience (Chen, 2011). According to (Brady, 2001), the assessment of experience quality focuses on the reflection of the attitude of the customer and psychological towards the technological and functional advantage of the external service environment provides to the customer. Besides, experiential quality refers to the quality performance of the attribute level in the sense of tourism, where experiential quality refers to the emotional outcomes acquired by the involvement of the visitor in the tourism operation (Chen, 2011). Concentrating on nature-based tourism experiences, the comprehensive perception of aesthetics, and operationalizes as six experiential qualities: cleanliness, scenery, harmony, architecture, and genuineness.

Furthermore, central experiential qualities, especially harmony and architecture are the main factors of numerous experiential consequences over the perceived quality, satisfaction and intent to suggest to the others. Furthermore, the findings from observational tourism study on aesthetic principles regarding events in nature and landscape preferences note that scenery (Chi, 2008), and cleanliness (Hazen, 2009). Besides, “genuineness” or unique encounters are stressed in many experiential struts connected to the senses of touch, smell and taste, such as enjoying unique accommodation or sampling local food and beverages (Chi, 2008).

1.3.3 Experiential Satisfaction

The influence of the concept of experiential satisfaction examines service satisfaction and customer control under certain circumstances. According to Oliver (1980), the fact that satisfaction is an important component of inexperience, too because of being based on product or service satisfaction. Then, the first assessment after purchasing or the wonderful experience of the new transaction experience was customer satisfaction from one transaction. Then, the impact caused by the product was very much connected to satisfaction after purchasing experience. Moreover, experience satisfaction represents the satisfaction perceived from the content of the service relevant to such communications through an experience perspective.

1.3.4 Revisit Intention

Oliver (1997) defined the behavioural intention among the customer's repurchase and word-of-mouth intention as “a situation where everything in behaviour is associated.” The definition of purpose to revisit is derived from the intention to perform. Therefore, one of the most significant inspirations that have influenced a customer's revisit intention is possibly satisfaction. Moreover, it is quite important to satisfy customers because it directly affects the expectation and intent of the consumer repurchase decision to revisit the site. Then, satisfaction affects the tendency to revisit. There is, however, a lack of theoretical and empirical evidence that can relate to the background of the intention to revisit a tourism site.

2. Literature review

2.1 The related literature on experiential marketing and emotion

Schmitt (1999a; 1999b) implies that, through sight, sound, touch, taste and smell, the SENSE module or SENSE marketing appeals to the senses to generate creative experiences. SENSE marketing can be used to identify industries and services, motivate customers and add value to

consumers (e.g., through aesthetics or excitement). Schmitt (1999a; 1999b) believes that FEEL marketing appeals to the inner feelings and emotions of consumers, intending to generate affective interactions ranging from slightly optimistic moods linked to a brand to intense emotions of happiness and pride. Strong feelings are the product of experiences and interactions, and they evolve. A customer accepts an optimistic feeling, followed by positive emotions in the consumption scenario.

Schmitt (1999a; 1999b) argues that THINK marketing calls on the intellect to construct cognitive, problem-solving interactions that creatively engage consumers. For a visitor to a science museum, for example, his exhibits and certain triggers activate emotions such as amazed, curious, fascinated, and inspired. Schmitt (1999a; 1999b) suggests that ACT marketing enriches the lives of visitors by targeting their physical experiences, showing them different ways of doing stuff, alternative behaviours and interactions. A well-designed experiential environment may remind their clients to think about their lifestyle or ways of doing stuff.

Schmitt (1999a; 1999b) argues that there are elements of SENSE, FEEL, THINK and ACT marketing in RELATE marketing. RELATE marketing, however, reaches beyond the intimate, private feelings of the individual, thereby linking the individual to something beyond his/her private state.

2.2 The related literature on experiential quality and experiential satisfaction

Customer quality appraisal shows a significant element in customer satisfaction. Previous studies focused primarily on the content of a product or service (Fornell, 1992), where the analysis considered the experience and indicated that experiential quality would contribute to experiential satisfaction.

2.3 The related literature review of emotion and experiential satisfaction

At the heart of all marketing activities is customer satisfaction (Machleit, 2001). Customer satisfaction assessment and management is essential for the sustainability, growth and success of service industries such as tourism (Sirakaya, 2004). In the tourism and travel industry, the satisfaction of visitors is essential to the effective marketing of destinations because it affects the choice of destination and the decision to return. In the sense of the tourism and travel industry, some efforts have also shown that emotion has a major influence on satisfaction.

2.4 The related literature review of experiential satisfaction and revisit intention

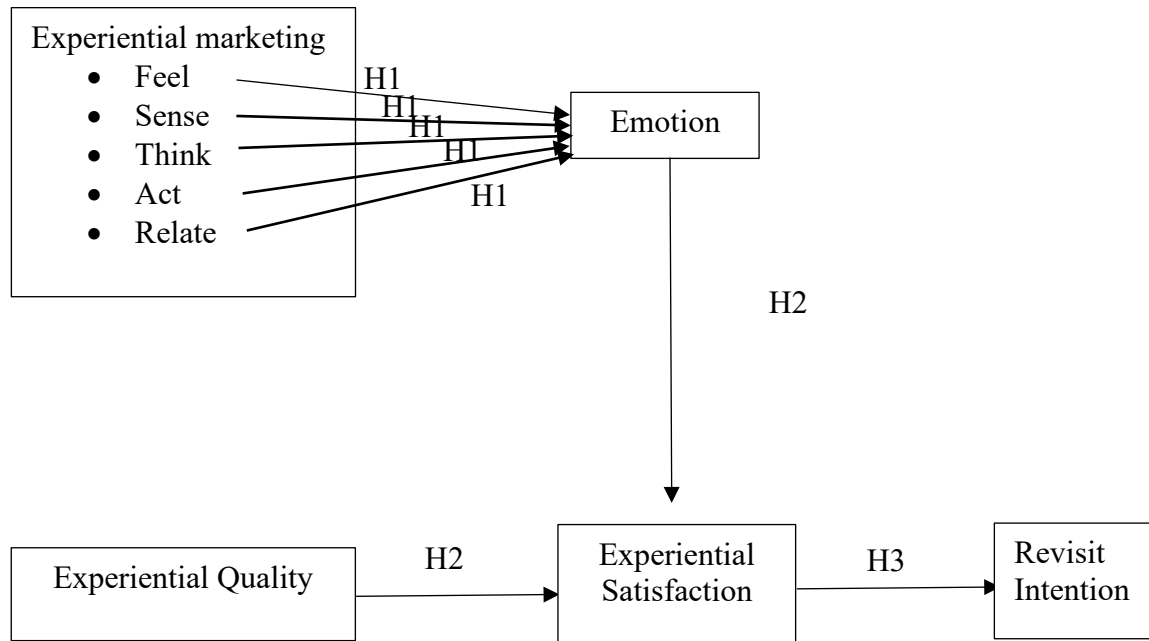
Marketing research has shown that the intention to revisit depends on the level of satisfaction of the consumer with their product or service experience. Then, the positive perception of tourists on their vacation would increase the likelihood of their purpose and willingness to revisit. Likewise, when visitors have more fun than they planned, most like to come back in the future instead of visiting another tourism location (Ross, 1993).

3. Conceptual Model

The researcher applied the three previous studies and relevant theories to develop the new conceptual framework. The variables, experiential marketing (feel, sense, think, act, and relate, and emotion is taken from the study of “The Visitors Behavioral Consequences of Experiential Marketing: An Empirical Study on Taipei Zoo” to test the relationship between these two variables. Moreover, to study the relationship between experiential quality and satisfaction, the researcher applied the study of “The role of aesthetic experiential qualities for tourist satisfaction and loyalty”. Then, the researcher applied the study of “A Study of Revisit Intention:

Experiential Quality and Image of Muara Beting Tourism Site in Bekasi District.” to study the relationship of experiential quality, experiential satisfaction, and revisit intention. The conceptual framework used in this research is to investigate the factors that influence revisit intention by considering variables, which are consumer experiences with Sea Life Bangkok Ocean World.

Figure 1:
The Conceptual Framework



Hypothesis 1

H1o: Experiential marketing (Feel, Sense, Think, Act, Relate) has no statistical influence on emotion.

H1a: Experiential marketing (Feel, Sense, Think, Act, Relate) statistically influences emotion.

Hypothesis 2

H2o: Experiential quality and emotion do not statistically influence experiential satisfaction.

H2a: Experiential quality and emotion statistically influence experiential satisfaction.

Hypothesis 3

H3o: Experiential satisfaction does not statistically influence revisit intention.

H3a: Experiential satisfaction statistically significant influence revisit intention.

4. Research Methodology

The purpose of this study is to determine the experiential marketing of an underground tourist attraction in Bangkok by using experiential quality, emotion, experiential satisfaction and revisit intention. To find out the research questions, this study applied the descriptive research method as it is used to evaluate which factor may or may not influence the other variables (Zikmund, 2003). The survey research technique is used to collect the primary data in this research. According to Zikmund (2003) and Cooper (2014) the use of questionnaires in descriptive research is an optimal way of gathering primary and raw data. This study used a

Likert Scale questionnaire and distributed it to respondents to collect data on the importance of respondents, views of respondents, and attitude.

In this study, the target populations were tourists who had experienced visiting Sea Life Bangkok Ocean World at Siam Paragon. Siam area is located in the center of Bangkok, the main tourist shopping district, and has the largest population of tourists. So, the researchers selected Siam Paragon and around the Siam area for collecting data from respondents.

The visitors' population of Sea Life Bangkok Ocean World at Siam Paragon in Bangkok is unknown. Therefore, the researchers determined the sample size by using the population proportion and distributed the questionnaire to respondents at Siam Paragon and around the Siam area in Bangkok, Thailand.

In this study, the researchers applied the questionnaires as the research instrument to collect the data for experiential marketing of an underground tourist attraction, Sea Life Bangkok Ocean World, Bangkok, Thailand. In this study, the questionnaire was divided into seven parts: screening questions, experiential marketing, experiential equality, emotion, experiential satisfaction, revisit intention, and demographic factors.

There is only one screening question whether the respondents have been visited Sea Life Bangkok Ocean World or not. Moreover, the five-point Likert scale is applied as 1= strongly disagree, 2= disagree, 3= normal, 4= agree, and 5= strongly agree for the other variables. The Likert scale is a descriptive rating scale consisting of statements that identify either a favourable or an unfavourable perception of the studied subject that will be answered by the respondents and is the common method because it is simple and easy to construct (Cooper, 2014).

5. Data Collection

The questionnaires were distributed to customers drawn from the sampling procedure. The data were obtained from 400 respondents who had experienced of visiting in Sea Life Bangkok Ocean World. The data collected at a specified time from February 23, 2021 to March 10, 2021. The questionnaires were hand distributed on weekdays and weekends from 12.00 pm to 6.00 pm at around Siam Square One, Siam Centre, and Siam Paragon until the sample size was achieved. After the data collecting process, the researcher analysed all primary data by utilizing the Statistical program.

5.1 Finding

According to the result of this study, the researchers found that 290 respondents were female (72.5%), which is higher than 110 females (27.5%). Then, the nationality of 245 respondents (61%) were Thai and 155 respondents (39%) were Foreigner customers. Moreover, 54% of the respondents were 21-30 years old, and the majority of the respondents are employee, accounting for 36% and the second most are students which have 35% of the respondent.

5.2 Hypothesis testing

In this research, three hypotheses were analysed from objectives and research questions to study experiential marketing of an underground tourist attraction in Bangkok, Sea Life Bangkok Ocean World.

Table 1:
The Summary of Hypothesis Test Results

Hypothesis	Level of Significance	Standardized Beta Coefficient Value	Result
H1o: Experiential marketing (Feel, Sense, Think, Act, Relate) has no statistical influence on emotion.			
Experiential marketing (Feel)	.025	.101	Rejected H1o
Experiential marketing (Sense)	.335	.044	Failed to reject H1o
Experiential marketing (Act)	.001	.283	Rejected H1o
Experiential marketing (Think)	.001	.415	Rejected H1o
Experiential marketing (Relate)	.002	.122	Rejected H1o
H2o: Experiential quality and emotion is not statistically significant influence on experiential satisfaction.			
Experiential quality	.001	.530	Rejected H2o
Emotion	.001	.429	Rejected H2o
H3o: Experiential satisfaction is not statistically significant influence on revisit intention.			
Experiential satisfaction	.001	.842	Rejected H3o

The data and information were collected from the visitors who have experienced with Sea Life Bangkok Ocean World. The sample size of this research is 400 respondents. The researchers applied non-probability sampling involving purposive and convenience sampling techniques to collect the data from the sampling units. The descriptive and inferential analysis is applied to test all research hypotheses based on both Simple and Multiple Linear Regression analysis.

According to the result of this study, the researchers found that 290 respondents were female (72.5%), and the nationality of 245 respondents (61%) were Thai, who are local visitors. Moreover, 54% of the respondents were 21-30 years old, and the majority of the respondents are employee, accounting for 36% and the second most are students which have 35% of the respondents. Regarding the research findings of hypothesis one, the researcher found that four of all five independent variables, which are experiential marketing (Feel, Think, Act, Relate) has a positive significant influence on emotion. However, experiential marketing (Sense) has no influence on emotion, and is failed to reject. According to the value of Beta coefficient (β)

obtained from the multiple regression analysis, the researcher found that experiential marketing (Feel, Think, Act, Relate) has a high positive significant influence on emotion.

Based on the findings of hypothesis two, the researcher found that two independent variables which are experiential quality and emotion have a positive significant influence on experiential satisfaction. According to the value of Beta coefficient (β) obtained from the multiple regression analysis, the researcher found that experiential quality and emotion had the highest positive influence on experiential satisfaction. Along with the result of hypothesis three, the researcher found that experiential satisfaction has a positive significant influence on revisit intention. According to the value of Beta coefficient (β) obtained from the simple regression analysis, the researcher found that experiential satisfaction has a high positive significant influence on revisit intention.

6. Conclusions and Recommendations

Nowadays, the development of tourism industry is reflected in an increasing demand of the population for an ever-increasing range of customer goods and services, a demand that stimulates manufacturing of host country and this leads to better economy of the country. The tourism sector is also related with social, political, cultural, and economic sector of the country. As consequence, if the tourism sector of the country is developing very well, it can help and implement other sectors of the country at the same time.

Along with the data analysis, the results can help the marketers and also the management team of Sea Life Bangkok Ocean World to understand the Thailand's tourism market and the customers' revisit intention. As to the research findings, the answers from the questionnaires of this research paper and based on the researchers' investigation, the researchers has made suggestions as follows:

As the result of the demographic factors, most of the visitors are over 20 years old female, who are employee. So, Sea Life Bangkok Ocean World can focus on the company employee when they do marketing. For example, the marketing team can do business to business collaboration with other company, like providing the discount coupon or special offer to those employee of that company. Moreover, they should attract more students visitors, as the population student is very high and the word of mouth, which lead to recommendation each other. Furthermore, Sea Life Bangkok Ocean World should prepare for the time after COVID (New Normal Life) as there might be many restricted rules for long run journey.

According to the result of Hypothesis 1, the researcher found that four independent variables among five ones, which are: Experiential marketing Feel (EMF), Experiential marketing Act (EMA), Experiential marketing Think (EMT), and Experiential marketing Relate (EMR), have a significant positive effect on customers' emotion with a visit to Sea Life Bangkok Ocean World in Bangkok. Moreover, the finding show the beta of experiential marketing (Think) is .415 and the highest one. However, Experiential marketing Sense (EMS) doesn't have a significant effect on emotion. Therefore, Sea Life Bangkok Ocean world need to improve to get the visitors' sense. It means to make sure to engage the destination, which are all decorations, with the sense of all customers.

Based on the investigation of hypothesis 2, the beta of experiential quality is .530 and strongly affected experiential satisfaction. Therefore, Sea Life Bangkok Ocean World should provide

pure natural environment, and make the visitors to explore about the underwater wildlife to attract more customers. Along with the result of hypothesis 3, the beta of experiential satisfaction is .342 and strongly influence on revisit intention. So, Sea Life Bangkok Ocean World should support to get engagement with customers and visitors' satisfaction to maintain the current customers and to attract more new visitors. Finally, according to the trends, most customers make purchasing decisions based on "What is invested" and "What is received," which causes consumers to be concerned about visiting a location.

6.1 Future Study

This study is designed to study the experiential marketing of an underground tourist attraction. The researcher focus on the population only in Thailand.

First of all, the researcher collected the data only from the people in Bangkok which cannot cover up the other areas in Thailand. If the researcher will change other geographical area in the future study, it may get a different results of the research. Secondly, the researcher applied quantitative analysis by using questionnaires in this study. In the future study, the researcher can apply qualitative or quantitative analysis with interview methods or secondary data to get different opinions, results, and analysis of this topic.

Finally, Covid-19 had many impact for this study. During these pandemic, many visitors of Sea Life Bangkok Ocean World were local tourists and few international tourists because of lockdown conditions. After these pandemic, many international tourists will come and visit Thailand. If the researcher will do these topic at that time, it will cover many international tourists and may affect the results of this study.

7. References

- Brady, M. K., & Cronin, J. J. (2001). Some new thoughts on conceptualizing perceived service quality. *Journal of Marketing*, 65(3), 34-49. <https://doi.org/10.1509/jmkg.65.3.34.18334>
- Chen, C. M., Lee, H. T., Chen, S. H., & Huang, T. H. (2011). Tourist behavioural intentions in relation to service quality and customer satisfaction in Kinmen national park, Taiwan. *International Journal of Tourism Research*, 13(5), 416-432. <https://doi.org/10.1002/jtr.810>
- Chi, C. G. Q., & Qu, H. (2008). Examining the structural relationship of destination image, tourist satisfaction and destination loyalty: an integrated approach. *Tourism Management*, 29(4), 624-636. <https://doi.org/10.1016/j.tourman.2007.06.007>
- Cooper, D. R. (2014). *Business Research Methods (12th ed)*. McGraw-Hill/Irwin.
- Datta, V. (2017). A Conceptual Study on Experiential Marketing: Importance, Strategic Issues and Its Impact. *International Journal of Research - Granthaalayah*, 5(7), 26-30. <https://doi.org/10.5281/zenodo.826667>
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56(1), 6-21. <https://doi.org/10.2307/1252129>
- Hazen, H. (2009). Valuing natural heritage: Park visitors' values related to world heritage sites in the USA. *Current Issues in Tourism*, 12(2), 165-181. <https://doi.org/10.1080/13683500802538260>
- Machleit, K. A., & Mantel, S. P. (2001). Emotional response and shopping satisfaction: Moderating effects of shopper attributions. *Journal of Business Research*, 54(2), 97-106. [https://doi.org/10.1016/S0148-2963\(99\)00093-4](https://doi.org/10.1016/S0148-2963(99)00093-4)
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469. <https://doi.org/10.2307/3150499>
- Oliver, R. L. (1997). *Satisfaction: A Behavioural Perspective on the Consumer*. McGraw Hill.
- Pine, B. J. II., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business*

- Review*, 76(4), 97-105. <http://enlillebid.dk/mmd/wp-content/uploads/2012/03/Welcome-to-the-Experience-Economy-Pine-and-Gilmore.pdf>
- Ross, G. F. (1993). Ideal and actual images of backpacker visitors to northern Australia. *Journal of Travel Research*, 32(2), 54-57. <https://doi.org/10.1177/004728759303200208>
- Schmitt, B. (1999a). Experiential marketing. *Journal of Marketing Management*, 15(1-3), 53-67. <https://doi.org/10.1362/026725799784870496>
- Schmitt, B. (1999b). *Experiential Marketing: How to Get Customers to Sense, Feel, Think, Act, and Relate to Your Company and Brands*. Free Press.
- Sirakaya, E., Petrick, J., & Choi, H. S. (2004). The role of mood on tourism product evaluations. *Annals of Tourism Research*, Elsevier, 31(3), 517-539. <https://doi.org/10.1016/j.annals.2004.01.009>
- Tsaur, S. H., Chiu, Y. T., & Wang, C. H. (2006). The visitors behavioral consequences of experiential marketing: an empirical study on Taipei Zoo. *Journal of Travel & Tourism Marketing*, 21(1), 47-64. <https://doi.org/10.1016/j.annals.2004.01.009>
- Zikmund, W. G. (2003). *Business Research Methods* (7th ed.) Thompson Southwestern

The Effectiveness of an Intervention Programme on Working Memory Plus Arithmetic Knowledge (WM+A) Title

Kuan-Chun Tsai^{1*} Terezinha Nunes² Rossana Barros³

^{1*} Harrow International School Bangkok, Thailand

²⁻³ University of Oxford, England

^{1*} angel_ts@harrowschool.ac.th

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Abstract

The aim of the study is to examine the effectiveness of an intervention programme (WM+A) which is designed to improve children's maths attainment. The intervention programme consists of two parts: working memory intervention and arithmetic knowledge intervention. Three research questions are asked: (1) What is the effect of WM+A intervention on children's numeracy skills? (2) What is the effect of WM+A intervention on children's working memory? (3) What is the effect of WM+A intervention on children's attention and behaviour in class? The investigation will be carried out at international schools in Thailand, which follow the National Curriculum in England and use English as a medium of instruction for teaching and learning. Pre-tests will be given to assess children's numeracy skills, working memory, attention and behaviour in class, followed by intervention session for 10 weeks. Children will receive 5 weeks of working memory intervention, followed by 5 weeks of arithmetic knowledge intervention. During the intervention session, half of the time will be one-to-one teacher led activities, and the other half will be computer games that reinforce the strategy and concepts which have been learned in the teacher led activities. Post-tests will then be conducted to measure the outcomes and evaluate the effectiveness of the WM+A intervention programme. It is expected that the current study will contribute both to the theory of children's maths attainment and on the practice of maths education.

Keywords: Working Memory, Arithmetic Knowledge, Intervention Programme, Mathematics Attainment, Mathematics Education

1. Introduction

Educational research from Baddeley, Allen and Hitch (2011) has suggested that the reason some children struggle with numeracy may be due to their poor working memory capacity.

“Working memory (WM) is a cognitive system that strongly relates to a person's ability to reason with novel information and direct attention to goal-relevant information” as defined by Shipstead, Redick and Engle (2012). It is the ability to keep vital information in mind and to use it to guide behaviour without the support of external cues. In arithmetic calculation, we often have to follow several steps in order to obtain correct answers. In the process of calculation, we need to keep track of the previous results. For example, when children calculate $35+18$, if they do it on their mind, they could first partition 18 to 10 and 8, using working memory to calculate and remember $35+10$ is 45; then add 8, which they might partition again for 8 to be 5 and 3, remember their previous outcome of 45, $45+5=50$, then $50+3=53$, to get

the correct answer. In each step, they have to remember the results of the previous calculation. If children are unable to retain information in any of the steps, they would not arrive in correct answers.

Psychologists have helped us to understand how working memory is organised. There are two systems which receive, organise and store information over short time-frames: a verbal system, which is from what we hear; and a visual system, which is what we see. The verbal system is called *phonological loop*. The visual system is called *visuospatial sketchpad*. They are influenced by two other elements in the working memory system: the *central executive*, which is the attention control system; and *episodic buffer*, which connects the information we receive to previous knowledge or long-term memory (Baddeley, 2010). Both systems are vital for children's learning. For the central executive system, if children see or hear teachers' demonstration or instruction but pay no attention to it, the information is not processed further and would not be stored in memory. For the episodic buffer system, what children see or hear is processed differently depending on what they already know.

These findings might explain why working memory (Nunes et al., 2007) and attention (LeFevre et al., 2013) are reliable predictors for mathematical attainment, even after controls for general cognitive ability (Liew et al., 2010). However, correlation does not mean causation. A combination of longitudinal and intervention studies is necessary for unambiguous support for a causal argument (Bradley & Bryant, 1983). Without intervention studies, it is unclear whether working memory and attention cause better mathematics learning or whether becoming better at mathematics leads to improvements in working memory and attention measures.

On the basis of this research, one can expect that improving children's working memory and attention would lead to better mathematical achievement. Previous studies have found positive effects of working memory training programmes. For example, Holmes, Gathercole and Dunning (2009) adopted computer-based working memory training for children with learning difficulties and found significant improvement on working memory and mathematical reasoning. Holmes and Gathercole (2014) used working memory training with a sample of 50 children in years 5 and 6. The training was found to be associated with significant improvements in maths scores as well as for English scores. Passolunghi and Costa (2016) used a programme of working memory to develop early numeracy skills in 5-years-old preschool children. After 5 weeks of training, those children in the working memory group demonstrated working memory enhancement.

Some systematic reviews (Melby-Lervåg & Hulme, 2013) have established that WM is in fact malleable and can be improved by training but have cast doubt regarding transfer to other types of task, such as arithmetic. However, other reviews (Von Bastian & Oberauer, 2014) that distinguished different types of WM intervention reached the conclusion that transfer might depend on the type of intervention used. WM interventions that do not combine this training with activities designed to affect long term memory and, consequently, affect the episodic buffer, are less likely to show transfer. The comparison between a WM intervention and a WM+A intervention, which targets long term memory, carried out by an Oxford University team showed this to be the case: the WM intervention had a positive effect on WM but did not show transfer to number skills, whereas the same amount of training, but using a combination of WM and arithmetic activities, had both a positive impact on WM and on number skills.

Finally, one might ask whether training that focuses only on number skills might have the same impact as a combination of WM and number skills training. This was investigated by Barahmand (2008) and it was found that when the total time in training was divided in two, with some time dedicated to WM training and sometime dedicated to number skills, the combined training had a higher impact on number skills than a training that focused exclusively on number skills.

The Working Memory + Arithmetic knowledge intervention programme (WM+A) in this study has been developed and tested in previous research by Oxford University (Wright et al., 2019). It follows a series of development of the intervention programmes. Nunes, Evans, Bell and Campos (2008) is one of the pioneer studies which used guided rehearsal to improve working memory. This study targeted central executive system (WM-CE), the attention system, which is required for various school tasks. Thirty-five children aged between 5 and 7 participated in the study and were randomly assigned to either a WM-CE training group or a control group. The training included three half-hour sessions delivered on a computer aimed to promote listening recall, counting recall and backward digit recall. The results showed a significant effect of the training on all three WM-CE outcome measures. In another study by Nunes, Barros, Evans and Burman (2014) a working memory (WM) intervention was given to deaf children. There were 77 children in a comparison group and 73 in an intervention group, with the mean age of 8 years and 5 months. They were given three WM tasks and the intervention was implemented by two types of games: teacher led games and web-based games. The teacher led games, during which the teachers taught the children rehearsal strategies that combined linguistic and visual-spatial encoding. The web-based games, which children played independently and involved the element of competition aimed to develop attention control. The results showed that those children who were in the intervention group differed significantly from the control group. It was concluded that it is possible to improve deaf children's performance in WM measures by training that targets their attention problems and teaches them rehearsal strategies.

The studies that included only WM training were useful for establishing the amount of working memory activities required for the impact on WM to be measurable. In a subsequent project, an intervention that contained only WM activities was compared with one that combined WM with arithmetic activities, ensuring that the latter group participated in an amount of training that was sufficient for a measurable impact on WM tasks.

In a later project Wright et al., 2019 funded by the EEF, two types of WM training were adopted: WM and WM+A. The WM training programme aimed to promote changes in central executive component and focused on promoting children's attention and strategies for remembering. The second training, the WM+A included training on attention and strategies for remembering as well as training to develop children's understanding of relations between numbers and between arithmetic operations. Therefore, this part of training aimed to impact the children's long-term memory or knowledge. It was a large-scale intervention that 1,475 pupils in Year 3, aged 7-8, across 127 primary schools in England participated in. The project applied a randomised controlled trial (RCT) that randomised at school level to three groups - WM, WM+A and control condition. The intervention combined explicit teaching of working memory strategies and independent practice of these strategies using web-based games. The intervention programme was delivered in 10 one-hour sessions. The WM+A also had 10 sessions, but only 5 were focused on working memory, while the other 5 were focused on arithmetic knowledge. The

primary outcome measure was maths attainment. The secondary outcome measures were working memory, attention and behaviour in class. The independent evaluators found that pupils in both the WM and WM+A schools made the equivalent of 3 additional months of progress in arithmetic on average, compared to children in control schools. The WM+A also showed better results in working memory and the attention rating scale, whereby attention difficulties decreased.

Based on the results of these studies, the current study will adopt the working memory plus arithmetic knowledge (WM+A) intervention. We hypothesise that WM+A programme can lead to changes in WM as well as in long term memory and have a positive impact on children's arithmetic learning.

The design of the tasks used in the intervention is based upon previous studies. Fisher et al., (2013) Howard-Jones and Demetriou (2009) found that participants showed better performance in play contexts than in laboratory tasks. Therefore, game contexts were chosen for the design of the tasks. The games are used in combination with adult scaffolding of children's learning, which was found effective in previous study by Hammond et al. (2012) on improvement of children's attention and executive function measures. The combination of games and adult scaffolding showed that WM intervention was effective in improving working memory and attention in previous studies (Nunes et al., 2008; 2012). The EEF project showed that 10 one-hour sessions were sufficient for the impact of the intervention to be measurable.

Even though the previous studies have shown the effectiveness of the intervention to improve children's attainment, working memory, attention and behaviour in England, to the best of the authors' knowledge, no similar studies have been carried out in Thailand.

The aim of the study is to examine the effectiveness of an intervention programme which is designed to improve children's maths achievement.

Three research questions for the current study are:

- (1) *What is the effect of WM+A intervention on children's numeracy skills?*
- (2) *What is the effect of WM+A intervention on children's working memory?*
- (3) *What is the effect of WM+A intervention on children's attention and behaviour in class?*

2. Research Method

2.1 Participant selection

This study intends to recruit Y3 (aged 7-8) children who are currently studying in the international schools in Thailand. The schools follow National Curriculum in England and use English as a medium of instruction for teaching and learning.

In the previous EEF project, Y3 children with limited WM capacity found it difficult to keep in mind the amount of information required to understand relations between numbers and between operations. Those who do not access these concepts in the first two years in school approach arithmetic tasks differently from children who do access the concepts. This ends up in a vicious cycle: for lack of WM, they do not learn the concepts and falling further behind. By given intervention at this stage could have potential effect to break the vicious cycle.

Teachers will be asked to nominate children who are in the lower third or lower half of their class, by their KS1 arithmetic attainment. The intervention is not designed for children with special educational needs (SEN) thus would be excluded in the selection process. The current study will follow the ethical principle that a parental information sheet with a consent form about the aim of the research and the use of data will be provided to allow parents to make an informed decision. There is also an opt-out opportunity for parents of all eligible pupils. Those children who are selected as participants will then be randomly assigned to a WM+A group or a control group.

2.2 Design

2.2.1 Pre-tests

Before the intervention, several pre-tests will be carried out. Two baseline measure will be used: GL Assessment British Ability Scales 3rd Edition numeracy skills test (BAS3) and Progress Test in Maths (PTM) to assess children's numeracy skills and curriculum learning in mathematics.

Children's working memory will also be assessed using the three central executive subtests (Counting Recall, Backward Digit Recall and Listening Recall) of a working memory scale for children, a standardised measure used in the UK (Alloway, 2007). The Counting Recall subtest requires children to count dots on subsequent pages of a book and later recall the number of dots on each paper. In the Backward Digit Recall test, the children listen to a series of digits and are asked to recall them in the reverse order. During the Listening Recall test, the children hear a sentence, have to judge if it is true or false, and are asked to try to remember the last word of each sentence.

Attention and behaviour in class will be assessed by teachers using the 'Attention Rating Scale for Teachers' (Swanson et al., 2001). This is a 4-point rating scale with 15 items relevant to children's sustained attention in the classroom.

2.2.2 The WM + A intervention

The intervention comprises of two parts. Part 1: WM intervention for 5 weeks, and Part 2: Arithmetic intervention for another 5 weeks after WM intervention. The dose of intervention is 1 hour per weeks for 5 weeks for WM and 1 hour per week for 5 weeks for Arithmetic training. The WM intervention must be completed before starting Arithmetic intervention.

2.2.3 WM intervention

In a one-hour WM session, 30 minutes will be one-to-one teacher led activities, which focus on strategies for improving working memory (deliver by the first author of this paper) and 30 minutes of computer games, which focus on reinforcement of the strategies learned in the training sessions.

In teacher led activities, children play three games: Word games, Colour games and Missing digit games. In Word games, children are presented with a sentence while looking at a picture. They need to say whether the sentence is true or false for the picture. Then the children are asked to recall the last word in the sentence. The level of difficulties relates to the number of sentences they hear and number of words they need to recall. In Colour game, the children are presented with a strip of colours and memorise their positions. After the initial presentation, they see a blank strip on which one colour is illuminated in its original position. They are asked to recall the colours and can use position as a cue. The level of difficulty is increased by

increasing the number of colours to be recalled and by asking for recall in reverse order. In Missing digits game, the children are presented with a series of digits on the screen and read them, then the series disappears. Next, either a new series appears or the children have to recall the missing digits. Recall is signalled by the question marks where the missing digits would have been. The position of recall items is not predictable in the series. The level of difficulty increases by asking for the recall of more digits.

In teacher led games, the teacher explicitly teaches the child rehearsal strategies. The teacher explains sub-vocal rehearsal and rehearses alongside the child until the child starts to rehearse spontaneously. The child is also shown that s/he can associate words with fingers during rehearsal to keep track of the order and of the number of items to be recalled. In the Colour and Missing digits games, the teacher teaches the use of visuo-spatial cues. The child is encouraged to take note of where in space the target is and to point to it. A guided practice technique is employed in which both teacher and child would practice together until the child remembers to do this by his/her own.

In computer-based games, children play three games: Animals game, Numbers game and Letters game. All three games have different levels of difficulty. In Animals game, the child needs to count target animals while ignore the distractors which are used to train focused attention. At the end of each round, the child would have to recall the number of animals of each species (such as duck, monkey etc.) that they have previously counted. In Numbers game, the child is shown a series of number-filled grids with one number highlighted in each. After the presentation, the child is given blank grids and asked to type in the numbers that have been highlighted in reverse order. In Letters game, following similar format as Numbers game, the child is asked to recall letters instead.

2.2.4 Arithmetic intervention

In a one-hour session of Arithmetic intervention, 30 minutes will be one-to-one teacher led activities, which focus on arithmetic knowledge (delivered by the first author of this paper) and 30 minutes of number games on computer, which will be played independently by the child. The arithmetic knowledge includes additive composition and inverse relation between addition and subtraction, which aims at promoting children's thinking about relation between numbers and concepts of operation.

In teacher led activities, children play four games aimed to promote additive composition, which is the recognition that any number can be seen as sum of two or more other numbers. They are: Coins, Bags and Boxes, Gremlins, and The 7 and a half games. In the Coins game, the child is presented with pictures of coins of different value and uses the coins to compose a series of amounts. The child improves her/his skills in counting on until s/he reaches the correct total amount. In the Bags and Boxes game, the target amounts are extended to just under 1000 to further develop children's understanding of additive composition. In the Gremlins game, the child is encouraged to think of additive composition by using positive and negative numbers. The child is shown pictures of creatures called Gremlins and spaceship. S/he scores 1 point for each Gremlin which is hit and lose 1 point for each spaceship that is hit. S/he then calculate the scores by using different methods. During 'The 7 and a half game', the child is presented with a stack of cards and is asked to pick three cards randomly, by adding or subtracting the numbers to try to get as close to 7 and $\frac{1}{2}$ as possible without going over.

Children also play another six games in teacher led activities which promote children's

understanding of inverse relation between addition and subtraction. They are: 'Blocks', 'Sequence Problems', 'More/less/the same', 'Just Numbers', 'Calculator Challenge' and 'Code Breaker'. The child is presented with a row of bricks partially hidden so that counting the bricks is not possible. The teacher tells the child how many bricks are in the row, then adds and subtracts (or subtracts and adds) a number of bricks to the row and asks the child how many bricks are in the row now after these transformations. The questions are about changes that the child observes. The games start with small numbers and the level of difficulty increases by given large numbers or describe the changes only in words. The numbers could be small but can be positive or negative. The questions also vary: they may be about the end result or about the starting point, when the changes and the end result are given (For example, Paul won 3 points, lost 4, and ended the game with 5; how many points did he have at the start?)

The next 30 minutes of the session, the child will play computer games designed for the practice of the concepts that have just been learned in the teacher led activities. The child plays the computer games independently and those games include a mixture of additive composition and inverse relation games.

In each intervention session, the teacher would take children out of the class in pairs. For the first half of the session, one child works with the teacher while the other child works independently on the computer games. For the second half of the session, children swap activities.

It is noted that in order to carry out the current study, the intervention programme needs new learning resources to be developed as the EEF contents are covered by Crown copyright. All the teacher led activities and computer games will be re-developed also to adapt to the culture and context of Thailand, but the concepts of learning remain.

2.2.5 Outcome measures

The **primary outcome measure** is children's numeracy skills and will be assessed using standardised GL Assessment British Ability Scales 3rd Edition numeracy skills test. A Progress Test in Maths (PTM), designed to measure curriculum learning in mathematics that includes number skills as well as other domains of mathematics in the curriculum will be used as well; a factor analysis will be conducted to identify a number skills factor, which is expected to show a positive impact of the intervention, but no impact is expected on geometry and data handling.

The **secondary outcome measures** are: working memory, attention and behaviour in class. The subtests that measure the central executive in the Working Memory Test Battery for Children (Pickering & Gathercole, 2001) and an abbreviated version of the SNAP IV rating scales (Swanson et al., 2001) will be used to measure children's working memory after the intervention. Attention and behaviour in class is assessed by teachers both at the pre-test and at the end of Y3, use Attention Rating Scale for Teachers (Swanson et al., 2001).

3. Conclusion

The current study aims to examine the effectiveness of the WM + A intervention on children's maths attainment. Even though promising results are shown in the previous EEF project for improving children's numeracy skills, working memory, attention and behaviour in England, the significance of replication in science must not be under-estimated and it is well worthwhile to investigate whether similar effects could be found in Thailand.

The characteristics of this current project are that the results from the study will contribute both to the theory of children's mathematics attainment and to the practice of mathematics education, as the teaching instruction is based on evidence from the research. The effectiveness of the intervention program is assessed to provide guidelines for transforming research about human cognition into classroom practice and learners' achievement.

4. References

- Alloway, T. P. (2007). *Automated Working: Memory Assessment: Manual*. Pearson. <https://www.pearsonclinical.ca/en/products/product-master/item-83.html>
- Barahmand, U. (2008). Arithmetic disabilities: training in attention and memory enhances arithmetic ability. *Research Journal of Biological Sciences*, 3(11), 1305-1312. <https://medwelljournals.com/abstract/?doi=rjbsci.2008.1305.1312>
- Bradley, L., & Bryant, P. (1983). Categorising sounds and learning to read - a causal connection. *Nature*, 301, 419-421. <https://doi.org/10.1038/301419a0>
- Baddeley, A. (2010). Working memory. *Current Biology*, 20(4), R136- R140. <https://doi.org/10.1016/j.cub.2009.12.014>
- Baddeley, A.D., Allen, R.J., & Hitch, G.J. (2011). Binding in visual working memory: The role of the episodic buffer. *Neuropsychologia*, 49(6), 1393- 1400. <https://doi.org/10.4324/9781315111261-25>
- Fisher, A., Thiessen, E., Godwin, K., Kloos, H., & Dickerson, J. (2013). Assessing selective sustained attention in 3- to 5-year-old children: Evidence from a new paradigm. *Journal of Experimental Child Psychology*, 114(2), 275–294. <https://doi.org/10.1016/j.jecp.2012.07.006>
- Hammond, S. I., Müller, U., Carpendale, J. I. M., Bibok, M. B., & Liebermann-Finestone, D. P. (2012). The effects of parental scaffolding on preschoolers' executive function. *Developmental Psychology*, 48(1), 271–281. <https://doi.org/10.1037/a0025519>
- Holmes, J., Gathercole, S.E. & Dunning, D.L. (2009). Adaptive training leads to sustained enhancement of poor working memory in children. *Developmental science*, 12(4), F9-F15. <https://doi.org/10.1111/j.1467-7687.2009.00848.x>
- Holmes, J., & Gathercole, S.E. (2014). Taking working memory training from the laboratory into schools. *Educational Psychology*, 34(4), 440-450. <https://doi.org/10.1080/01443410.2013.797338>
- Howard-Jones, P. A., & Demetriou, S. (2009). Uncertainty and engagement with learning games. *Instructional Science*, 37(6), 519–536. <https://doi.org/10.1007/s11251-008-9073-6>
- LeFevre, J. A., Berrigan, L., Vendetti, C., Kamawar, D., Bisanz, J., Skwarchuk, S. L., & Smith-Chant, B. L. (2013). The role of executive attention in the acquisition of mathematical skills for children in Grades 2 through 4. *Journal of Experimental Child Psychology*, 114(2), 243–261. <https://doi.org/10.1016/j.jecp.2012.10.005>
- Liew, J., Chen, Q., & Hughes, J. N. (2010). Child effortful control, teacher-student relationships, and achievement in academically at-risk children: Additive and interactive effects. *Early Childhood Research Quarterly*, 25, 51-64. <https://doi.org/10.1016/j.ecresq.2009.07.005>
- Melby-Lervåg, M., & Hulme, C. (2013). Is working memory training effective? A meta-analytic review. *Developmental Psychology*, 49(2), 270-291. <https://doi.org/10.1037/a0028228>
- Nunes, T., Bryant, P., Evans, D., Bell, D., Gardner, S., Gardner, A., & Carraher, J. (2007). The

- Contribution of Logical Reasoning to the Learning of Mathematics in Primary School. *British Journal of Developmental Psychology*, 25(1), 147-166. <https://doi.org/10.1348/026151006x153127>
- Nunes, T., Evans, D., Bell, D., & Campos, T. (2008, March). *Improving children's working memory through guided rehearsal*. [Paper presentation]. American Educational Research Association (AERA) Conference 2008, New York, United States.
- Nunes, T., Barros, R., Evans, D., & Burman, D. (2012). A game-based working memory intervention for deaf children. In Wannemacker, S. D., Vandercruyse S. & Clarebout, G. (Eds.), *Serious games: The challenge* (pp. 31-39). https://doi.org/10.1007/978-3-642-33814-4_4
- Nunes, T., Barros, R., Evans, D., & Burman, D. (2014). Improving deaf children's working memory through training. *International Journal of Speech & Language Pathology and Audiology*, 2(2), 51- 66. <https://doi.org/10.12970/2311-1917.2014.02.02.1>
- Passolunghi, M. C., & Costa, H. M. (2016). Working memory and early numeracy training in preschool children. *Child Neuropsychology*, 22(1), 81- 98. <https://doi.org/10.1080/09297049.2014.971726>
- Pickering, S., & Gathercole, S. (2001). *Working Memory Test Battery for Children (WMTB-C) Manual*. The Psychological Corporation. [https://www.pearsonclinical.co.uk/Psychology/ChildCognitionNeuropsychologyandLanguage/ChildMemory/WorkingMemoryTestBatteryforChildren\(WMTB-C\)/WorkingMemoryTestBatteryforChildren\(WMTB-C\).aspx](https://www.pearsonclinical.co.uk/Psychology/ChildCognitionNeuropsychologyandLanguage/ChildMemory/WorkingMemoryTestBatteryforChildren(WMTB-C)/WorkingMemoryTestBatteryforChildren(WMTB-C).aspx)
- Shipstead, Z., Redick, T. S., & Engle, R.W. (2012). Is working memory training effective?. *Psychological Bulletin*, 138(4), 628-654. <https://doi.org/10.1037/a0027473>
- Swanson, J. M., Kraemer, H. C., Hinshaw, S. P., Arnold, L. E., Conners, C. K., Abikoff, H. B., Clevenger, W., Davies, M., Elliott, G. R., Greenhill, L. L., & Hechtman, L. (2001). Clinical relevance of the primary findings of the MTA: success rates based on severity of ADHD and ODD symptoms at the end of treatment. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(2), 168-179. <https://doi.org/10.1097/00004583-200102000-00011>
- Von Bastian, C. C., & Oberauer, K. (2014). Effects and mechanisms of working memory training: a review. *Psychological Research*, 78(6), 803- 820. <https://doi.org/10.1007/s00426-013-0524-6>
- Wright, H., Dorsett, R., Anders, J., Buzzeo, J., Runge, J., & Sanders, M. (2019). Improving Working Memory Evaluation Report. https://educationendowmentfoundation.org.uk/public/files/Projects/Evaluation_Reports/Improving_Working_Memory_Report_final.pdf

Secondary School Principals' Leadership Behavioral Characteristics that Inspire Teachers' Gratitude in Taiwan

Chung-Tsung Shen^{1*} Xinyao Li²

^{1*}Educational Entrepreneurship and Management, College of Education at National University of Tainan, Taiwan

²Weinan Normal University, China

^{1*}ctdavidshen@gmail.com

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Abstract

This study mainly explored and realized five principals' leadership behavioral characteristics could possibly inspire teachers' gratitude, so as to help principals on contributing efforts to schools affairs. By sampling 35 of 360 secondary school teachers at south of Taiwan, and interviewed those 35 teachers who accepted the invitation of interview. Results summarized their stories and experiences shown that five principals' leadership behavioral characteristics are 1. The principals help teachers by contribute efforts or prices 2. The helps by the principal is valuable to teachers 3. The helps by the principal is based on the goodwill 4. The helps by the principal is beyond teachers' expectations and 5. The principals don't expect return favors for helps. The result approached goals for principals to inspire teachers' gratitude and promoting the school affairs.

Keywords: Leadership Behavioral, Teachers' Gratitude, Goodwill, Behavioral Characteristics, Return Favors

1. Introduction

1.1 Motivation of research

It is believed that school principals' certain leadership behaviors own behavioral characteristics that could always inspire teachers' gratitude. And it has a positive influence to teachers themselves that also generate a sense of motivation, passion and action to return favors with positive behaviors to school principals is often, and principals could use these behavioral characteristics to earn teachers' gratitude.

Besides, this study has received preliminary enlightenment by the idea of stimulating gratitude, generating gratitude and return favors motives. Therefore, the study mainly explores and realize what kind of principals' leadership behavioral characteristics could possibly inspire teachers' gratitude, so to enhance teachers' willingness to return favors not only for school principals but also help for affairs of schools.

1.2 Changes school structure affect the principal's leadership style

At Taiwan, public secondary schools have overall flattened school administrative organization and operations due to the government's promotion of organizational restructuring and school-based management recent years. However, there are some new-established school teachers'

associations, teacher reviewing committees, and the student parents' participation of school education affairs started in 2006. Since then, many schools have reformed, and have developed several of new-style individual organizations with specific and particular characteristics.

Certain long-running reciprocity leader emphasizes that the relationship between leaders and subordinates is mutually beneficial and is based on the exchange of economic, political and psychological values. Therefore, school leaders take strategies such as negotiation or compromise to meet with the needs of their subordinates and promote the leadership in the work of their subordinates. Therefore, it is the bartering leadership.

On teacher side, they usually use varied strategies to increase negotiation capability to fight for their own rights via the exchange of interests, external support with opinions of experts and scholars, all of which show the school power changes.

2. Method

By qualitative method design on this study because to dig out the stories, experiences and opinions of the teachers in secondary schools at south Taiwan, interview is much better than questionnaires' survey methods. Interview focus on teachers being inspired the gratitude by principals' certain leadership behaviors.

The scale was applied to 360 teachers determined by simple random sampling method at south Taiwan, and finally interview were implemented with 35 teachers who accepted the invitation of participated the qualitative interview.

3. Results and Discussion

3.1 The positive behavior of the principal's leadership earns the trust of teachers

The effective communication between teachers and principals could align each other's values, goals and resulted in a benign interaction. For teachers agree that the principal's direction of the school's efforts is meaningful and take proactive actions for the development of the school together with others.

Organizational members can focus on learning, have self-awareness, adjustment, recognize and learn the behavior characteristics displayed by leaders. Even more, to imitate certain specific behaviors. Then, return to the state of self-awareness, adjustment, showing certain leadership behaviors, and eventually could gradually become one of the outstanding leaders in sooner future.

3.2 Positive leadership includes the open mind, tolerance, openness, transparency, altruism, and integrity

Both the issues of school management and principal's leadership behavior have received the attention and study of many scholars. The related issues have being discussed by most educators, too. The concept of principal's leadership behavior is important very much on educational leadership than ever before.

If the principal's leadership behavior a result of a positive psychological process, it is enough to positively influence both self-awareness and self-adjustment. Also, accelerate the principal as a leader to produce positive behaviors, because leaders with highly positive thoughts and emotions are aware of self-worth with high degree self-confidence, and are consistent with

their words expression and behaviors. So that teachers can also recognize the same value of leaders' ability, knowledge, etc.

In other words, a positive principal leadership is a sort of methods or behavioral patterns that the subordinates believe it can lead with an open-minded and self-tolerance, transparency, altruism and integrity.

If a leader adopts a behavioral pattern that is consistent with certain high values and beliefs of the individual, it could encourage members to express different opinions, also, create a cooperative relationship with the leader and earn trust, and win full trust of the led. It is also a positive mental capability constructed by such as optimism, confidence, hope, and flexibility, etc.

However, teachers' gratitude will increase their trust of each other, satisfaction, and commitment to teachers themselves. Besides, it does have a highly positive influence on teachers themselves.

Since that is another new way of thought and approach, therefore, this study believes that the interview method should be able to collect various stories and experiences about the teachers' gratitude to the principals. So to explore the real situation in which different leadership behavior characteristics have the influence for principal's leadership behaviors and inspire teachers' gratitude.

3.3 The behavioral characteristics of the principal's leadership that inspires gratitude

During the interview period of the study, 33 of 35 teachers stated that their school principals did display adequate leadership behaviors characteristics which were summarized such as principals' selfless, honesty, compassion, empathy, humility, and justice based on teachers' current or the past experiences, stories at schools.

Therefore, this research summarized their mentioned five characteristics of principals' leadership behaviors. The interaction between the benefactor (principal) and the beneficiary (teacher) were used to explain the principal's leadership behavior characteristics which can inspire teachers' gratitude with examples are as follows:

1) The principals help teachers by contribute efforts or prices

Gratitude must first pass through the beneficiary's awareness and then judge the beneficiary's behavior. In other words, what if the benefactor pays is easy favors, light efforts or prices, which is a sign for beneficiary to judge and aware the helps' value.

The benefactor must in fact pay time, energy, effort and price. Also, stated that servant style leaders offering leaders enforce serving others and offer special attention to the practice of active service.

What a servant style leader's concern is what the serves actually is the highest needs of others. That is, the beneficiary is willing to contribute efforts or a certain prices, so that the beneficiary realizes and acknowledges that the benefactor actually make efforts or an amount prices.

Therefore, when teachers aware and acknowledge that the principal is actively making efforts or prices to display specific behaviors of altruism, the tendency of teachers' gratitude and return favors will be increased.

Table 1*Behavioral characteristics that inspire teachers' gratitude #1*

#1 Characteristics	Example
Have made effort or price: The principal's behavior did pay some effort or some price.	With the teacher's consent, the principal visits teacher's classroom to learn, discusses and solves problems with the teacher after school. The principal offers his time and spirit, and the teacher learned and realizes that the principal has contributed effort and price.

2) The help provided by the principal is valuable to teachers

The very first of the four basic elements of gratitude in the eyes of the beneficiaries is the favors with special benefits or valuable gifts.

In other words, for any material or spiritual benefits that human beings hope to obtain, the favors must be valuable and really needed.

Therefore, when teachers are aware and acknowledge that the help provided by the principal is needed and valuable, teachers' gratitude will appear which will increase the possibility of teachers' gratitude and return favors willingness.

Table 2*Behavioral characteristics that inspire teachers' gratitude #2*

#2 Characteristics	Example
valuable to teachers: The principal knows what teachers' really needs and valuable to teachers.	A group leader became one of "the excess teachers" because of "downsizing school classes", and he might be forced to move to another school farther away from home. The principal coordinated to obtain the consent of other teachers to exclude the group leader from the list that the principal's help met with his actual needs.

3) The helps given by the principal is based on the goodwill

Gratitude is receiving and recognition of the goodness or kindness from the outside world. It is not just a simply feeling, but also the awareness that the blessings it receives not due or earned by the beneficiaries but come from the well-intentioned actions of others.

It is also a joyful emotion for the benefactor to treat themselves well, because the beneficiary not only receives helps, but also feels the others' kindness much more than helps.

Table 3*Behavioral characteristics that inspire teachers' gratitude #3*

#3 Characteristics	Example
Give help based on goodwill: The help provided by the principal is based on goodwill and no other attempts.	The teacher tried his best to help the economically disadvantaged students in the class as much as possible. The principal actively raised funds after learning about it. In particular, the principal's initiative to help came out of goodwill and did not involve other purposes. The teacher was very grateful to the principal and aware of his kindness.

When the individual recognizes that the favors offered by others are based on the goodwill, he/she always could truly feel positive experiences and generates feelings of gratitude, which in turn arise one's own very internal gratitude motives and following behaviors. If the principals' helps without goodwill, even if the teacher receives helps, it will not produce any

gratitude.

4) The helps provides by the principal is beyond teacher's expectations

When the helps received exceeds the general expectations of people, more gratitude will be generated. If the assistance of others is unexpected, gratitude will have a stronger degree and a broader dimension. Conversely, the more you look forward to the help of others, the less the experience of gratitude.

If the beneficiary can better understand the relevant needs of the beneficiaries, and practice specific altruistic behaviors, so that the beneficiaries are aware of unexpected benefits and attributed to the beneficiary. Under such circumstances beyond their expectations, make the beneficiary is more able to feel that the benefactor is trying his best to help the beneficiary.

Table 4

Behavioral characteristics that inspire teachers' gratitude #4

#4 Characteristics	Example
Exceeding teachers' expectations: The principal helps teachers' further demand and exceed their expectations.	The teacher reported that the office lighting appliances were insufficient, and the principal instructed to deal with it as soon as possible and instructed the general affairs director to handle other problems in the teacher's office, such as poor ventilation, piled debris, and damaged seats.

5) The principals don't expect any return favors for offering helps. If the beneficiary offer helps based on goodwill and does not expect any return favors, the beneficiary will always respond with gratitude.

Gratitude is related to not expecting to be return favors. If the benefactor (principal) offers and receives the favor without expecting any benefit, the beneficiary (teacher) will naturally feel gratitude. Whether or not the benefactor (principal) expects any benefits from the beneficiaries (teacher) is to determine whether their interaction will become gratitude or a key factor in the exchange of benefits.

A smart principal must cultivate altruistic spiritual senses to serve teachers and students. If the relationship between the two parties is biased towards the exchange of interests, it will be only a form of a very simple exchange of interests.

Table 5

Five behavioral characteristics that inspire teachers' gratitude #5

#5 Characteristics	Example
Does not expect any return: The principal is selfless in giving helps and does not expect the teachers to return favors.	The principal realizes that the teacher have aged parents in need of care, and infant children, etc., so he actively review the class schedule and adjust the sessions so that the teacher can take time off when necessary. The principal's motives are selfless and do not ask for anything as return favors.

Selfless motives and a mentality for not asking any rewards can inspire gratitude for the beneficiaries and realize that the principal does not expect rewards.

Finally, the summarized above all characteristics as below:

Table 6

Five behavioral characteristics of the principal's leadership inspire teachers' gratitude

Behavioral Characteristics	Behavior Characteristics
#1	Principals help teachers by contribute efforts / prices.
#2	Helps by the principal is valuable to teachers.
#3	Helps by the principal is based on the goodwill.
#4	Helps by the principal is beyond teachers' expectations.
#5	Principals don't expect return favors for helps.

4. Conclusion

In summary, the study agrees that if the principals can clearly realize the mentioned on above five leadership behavioral characteristics and contribute to help the teachers according to their needs, with good will, valuable and exceeds the teachers' expectation without expect any return favors, etc. So that teachers can be clearly aware that the helps they received is attributed to the principals' real favors.

Therefore, the study believes that it is possible by mentioned five leadership behavioral characteristics to inspire teachers' gratitude, and then develop the motivation and practice of teachers' internal return favors behaviors for principals.

Based on the findings, it can be suggested that school principals should have an opportunity to refer to mentioned five leadership behavior characteristics for approaching goals of both inspire teachers' gratitude and promote the school affairs.

5. References

- Algoe, S. B., Fredrickson, B. L., & Gable, S. L. (2013). The social functions of the emotion of gratitude via expression. *Emotion*, 13(4), 1-5. <https://psycnet.apa.org/doi/10.1037/a0032701>
- Armstrong, D. E. (2012). Connecting personal change and organizational passage in the transition from teacher to vice principal. *Journal of School Leadership*, 22(3), 398-424. <https://doi.org/10.1177%2F105268461202200301>
- Atasoy, R. (2020). The relationship between school principals' leadership styles, school culture and organizational change. *International Journal of Progressive Education*, 16, 256-274. <https://files.eric.ed.gov/fulltext/EJ1273161.pdf>
- Chen, C. C., & Chung, C. J. (2014). The development and application of contemporary distributed leadership in the field of education leadership. *Educational Research and Development*, 10(3), 1-24. <http://dx.doi.org/10.3966%2f181665042014091003001>
- Cropanzano, R., Paddock, L., Rupp, D. E., Bagger, J., & Baldwin, A. (2008). How regulatory focus impacts the process-by-outcome interaction for perceived fairness and emotions. *Organizational Behavior and Human Decision Processes*, 105(1), 36-51. <https://doi.org/10.1016/j.obhdp.2006.06.003>
- Daft, R. L. (2014). *The Leadership Experience* (6th Ed.). South Western College.
- Emmons, R. A. (2007). *Thanks! How The New Science of Gratitude Can Make You Happier*. Houghton-Mifflin.
- Emmons, R. A., & Stern, R. (2013). Gratitude as a psychotherapeutic intervention. *Journal of Clinical Psychology*, 69(8), 846-855. <https://doi.org/10.1002/jclp.22020>
- Folkman, S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American*

- Psychologist*, 55(6), 647-654. <https://psycnet.apa.org/doi/10.1037/0003-066X.55.6.647>
- Froh, J. J., Bono, G., & Emmons, R. (2010). Being grateful is beyond good manners: Gratitude and motivation to contribute to society among early adolescents. *Motivation and Emotion*, 34(2), 144-157. <https://doi.org/10.1007/s11031-010-9163-z>
- Froh, J. J., Emmons, R. A., Card, N. A., Bono, G., & Wilson, J. A. (2011). Gratitude and the reduced costs of materialism in adolescents. *Journal of Happiness Studies*, 12(2), 289-302. <https://doi.org/10.1007/s10902-010-9195-9>
- Huang, D. S., & Shie, L. C. (2013). Discussing the management and development of our countryside's characteristic schools on the educational models of foreign high-quality schools. *Educational Research*, 225, 53-65. <http://ir.dyu.edu.tw/handle/987654321/26593>
- Jonas, M. (2012). Gratitude, resentment, and citizenship education. *Studies in Philosophy & Education*, 31(1), 29-46. <https://doi.org/10.1007/s11217-011-9261-8>
- Lai, C. F. (2012). The connotation and research direction of strategic leadership of primary and secondary school principals. *School Administration*, 79, 1-19. <http://dx.doi.org/10.6423%2fHHC.201205.0001>
- Lai, Y. C., & Wu, B. H. (2009). Conceptual analysis and theoretical application of hope theory. *Study Information*, 26(4), 71-78. <http://lawdata.com.tw/tw/detail.aspx?no=160639>
- Leithart, P. J. (2014). *Gratitude: An Intellectual History*. University Press.
- Liang, F. C. (2013). *Educational Administration: Theory and Practice*. Wu-nan Book.
- Lin, Y. Z., & Lu, J. L. (2015). A discussion on the meaning of "love" in servant leadership. *Taiwan Education Review*, 3(10), 36-40. <https://www.airitilibrary.com/Publication/alDetailedMesh?docid=P20130114001-201410-201410090005-201410090005-36-40>
- Lin, S. (2010). The leadership aesthetics of campus management-servant/service leader. Contained. In Lin, S. L., Huang, G. Z. (Ed.), *The Concept and Research of Service Leadership* (pp. 383-394). Mei Lin Culture.
- Lin, S. L. (2012). The principal's positive leadership model-love, service, laughter. *Mentor*, 538, 14-19. <http://dx.doi.org/10.6437%2fEM.201204.0014>
- Loder, R. E. (2011). Gratitude and the environment: Toward individual and collective ecological virtue. *The Journal Jurisprudence*, 10, 383-435. <https://heinonline.org/HOL/Land ingPage?handle=hein.journals/jnljur10&div=9&id=&page=>
- Luthans, F., & Avolio, B. (2003). Authentic leadership: A positive developmental approach. In K.S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship*, (pp.241-261). San Francisco: Barrett-Koehler. <http://img2.timg.co.il/forums/3/9e0b9ff6-2b3b-4766-8ea0-c55a7cefe068.pdf>
- McCleskey, J. A. (2014). Situational, transformational, and transactional leadership and leadership development. *Journal of Business Studies Quarterly*, 5(4), 117-130. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.651.8175&rep=rep1&type=pdf>
- Post, J. E., Altman B. W. (2017). *Managing The Environmental Change Process*. Routledge.
- Roberts, R. C. (2004). The blessings of gratitude: A conceptual analysis. In R. A. Emmons & M. E. McCullough (eds.). *The Psychology of Gratitude* (pp.58-80). Oxford University Press. <https://psycnet.apa.org/doi/10.1093/acprof:oso/9780195150100.003.0004>
- Roberts, R.C. (2007). *Gratitude and generosity*. Aarhus University.
- Shirom, A., & Shrager, O. (2009). On the directionality of vigor-job satisfaction relationships: A longitudinal study. In Hartel, C. E. J., Zerbe, W. J., Ashkanasy, N.M. (Eds.), *Research on emotions in organizations*. [https://doi.org/10.1108/S1746-9791\(2009\)0000005006](https://doi.org/10.1108/S1746-9791(2009)0000005006)
- Singer, P. (2011). *The Expanding Circle: Ethics, Evolution, And Moral Progress*. Princeton University Press.
- Takasugi, N. (2010). *Argumentative Expressiveness / Logical Expressiveness*. Nihon Keizai Shimb

- un.
- Ting, S. C., & Yeh, L.Y. (2014). Teacher loyalty of elementary schools in Taiwan: The contribution of gratitude and relationship quality. *School Leadership & Management*, 34(1), 85-101. <https://doi.org/10.1080/13632434.2013.813453>
- Tsai, C. S. (2010). A study of the wisdom of the principals of national primary and secondary schools. *Educational Administration Forum*, 2(2), 35-54. <http://ir.nptu.edu.tw/handle/987654321/6610>
- Visser, V. A., van Knippenberg, D., van Kleef, G. A., & Wisse, B. (2013). How leader displays of happiness and sadness influence follower performance: Emotional contagion and creative versus analytical performance. *Leadership Quarterly*, 24(1), 172-188. <https://doi.org/10.1016/j.leaqua.2012.09.003>
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89-126. <https://doi.org/10.1177/0149206307308913>
- Yousef, D. A. (2017). Organizational commitment, job satisfaction and attitudes toward organizational change: a study in the local government. *International Journal of Public Administration*, 40, 77-88. <http://dx.doi.org/10.1080/01900692.2015.1072217>
- Yukl, G. A. (2013). *Leadership in Organization* (8th ed.). Prentice Hall.

Undertaking Online Collocation Dictionary to Enhance Textual Translation Ability: An Experimental Study of Mainland Chinese EFL Learners

Li-Wei Wei^{1*} Chuan-Chi Chang² Chao-Qiao Yang³ Shao-Ge Hsu⁴

^{1*–3}China-ASEAN International College, Dhurakij Pundit University, Thailand

⁴Taipei Municipal Huajiang High School

^{1*}liwei.wei@dpu.ac.th

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Abstract

Collocation competence, if incontestably stated, poses a significant influence on ESL/EFL students' writing performance alongside mutual communication effectively. Even so, very limited attempt was made to clarify the relationship between learners' collocation competence and textual translation ability. The objectives of current paper were to: 1) examine Chinese EFL university learners' collocation knowledge and their textual translation ability before and following the treatment of collocation-based instruction; 2) observe the correlation between Chinese EFL university learners' collocation knowledge and their textual translation ability; and 3) to explore on effects of instruction adopting online English collocation dictionary on Chinese university learners' textual translation ability. This study in terms of research design was quantitatively conducted along with an experimental and control group being compared. The control group (N=38) received a generally-traditional vocabulary instruction while the experimental group (N=37) was conducted with the use of an online collocation dictionary as intervention. Results suggested: 1) a significant improvement was found in collocation knowledge and textual translation ability after the treatment; 2) collocation knowledge and textual translation ability were found significantly and positively correlated. The research outcomes substantially provided evidences of the relationship between collocation competence and textual translation ability. With this in mind, it can benefit EFL teaching by offering writing teachers with practical guidance on how collocation knowledge enables to serve as an optimal solution to EFL learners' problem with textual translation production.

Keywords: Online Collocation Dictionary, Collocation Knowledge, Textual Translation Ability

1. Introduction

1.1 Background of the study

Over the last few decades, globalization as the most-frequently-heard term, has had considerable crucial effects on our daily life from all perspectives. Among all effects, that the increase of English use as a target global language, making the teaching and learning of English an globally-urgent demand appears the most incontrovertible fact to be aware of. Ever since English has utterly transformed into a principal communication tool throughout this globalized world, level of English fluency and proficiency would be perceived as a weighty part to attain ultimately objective of education. This is to say, productive skills (i.e., speaking or writing) would turn into the most crucial foundational in reaching mutual communication and understanding. Being capable to write effectively in a foreign language would lie in writers'

having a “certain amount of L2 background knowledge about the rhetorical organizations, appropriate language use, lexical and syntactical knowledge or specific lexicon with which they want to communicate to their readers” (Godwin-Jones, 2018). Accordingly, an indispensable key factor to the production of effective textual translation work involves learners “having a good command of usage of English words correctly and appropriately for meaningful expression and communication” (Kang & Han, 2015).

By the same token, another prerequisite component concerning foreign language mastery would tightly link to knowing the meaning of the words being used and the understanding of words frequently associated with them— “collocational knowledge” or “collocability”. Collocational ability, “formulaic language”, has for many years occupied a prominent role in the study of language learning (Ghazali, 2015). Despite this, questions have been raised about whether or not EFL learners would demonstrate a native-like collocational knowledge and ability capacitating them to put together potentially-effective written production for mutual effective communication. Additionally, extensive research has shown that lexical instruction is thought of as the other integral component in the teaching of language writing and speaking, considered as “natural production associated with native speakers of the language” (Ellis et al., 2016). According to Men’s (2018) study, “the exhibited difficulties” for L2 writers in explicitly expressing themselves in writing include “understanding the meaning of writing, integrating ideas, and choosing appropriate vocabulary”. EFL learners’ written production could presumably be deemed as “nonnative-like” on grounds of the problems with “lexical poverty, miscollocations”, which are commonly detected in their writing task (Luo, 2016). Considering this issue, an acceptably-apt panacea to pedagogically facilitate students’ appropriately completing textual translation tasks for effective communication can be believed in and sustained by understanding the awareness of accurate collocation usage. The principal objective of the current research, accordingly, aims to explore whether online collocation dictionary enhances Mainland Chinese EFL students’ textual translation ability.

1.2. Objectives of the study

This paper assesses the significance of how collocation instruction (a.k.a Lexical Approach) impacts Mainland Chinese EFL university learners’ textual translation ability. As mentioned previously, conducting collocation instruction to EFL learners would foster and reconstruct their collocational knowledge, which also no or less strengthen their language ability to reach a native-like fluency. With this in mind, the present study serves an attempt to supplement the findings of those previous collocation-related studies, particularly in exploring the effects of the integration of online collocation dictionary on Mainland Chinese EFL learners’ translation writing ability alongside the correlation between collocational knowledge and textual translation ability. Putting all these concerns together, this research has three objectives: 1) to examine Mainland Chinese EFL learners’ collocation knowledge and textual translation ability before and after the treatment; 2) to explore the correlation between Mainland Chinese EFL learners’ collocation knowledge and their textual translation ability.

1.3. Research questions

In light of the preceding research objectives, the present study attempts to answer these specific questions: 1) to what extent do Mainland Chinese EFL learners’ collocational and textual translation abilities exactly improve with the adoption of an online collocation dictionary; 2) Is there a correlation between Mainland Chinese EFL learners’ collocation and their textual translation abilities.

1.4. Significance of the study

This study is absolutely worthy of attention in laying the groundwork for exploring how collocation knowledge enables to minimize the negative impact of first language interference or cross-meaning (language learners attempt to apply the knowledge from their native language to a foreign language they pick up). Online English collocation dictionary substantially brings potential benefits, simplifying Chinese EFL university learners' analysis and understanding of translated text bilingually in the process of translation works. Research pertaining to the correlation between collocation knowledge and textual translation ability in the area of Mainland Chinese EFL university education/learners remains still in its infancy, and as such it is of great interest and weightiness to explore how collocational knowledge could appreciably play as the decisive role as a facilitator to foster and improve Mainland Chinese EFL learners' textual translation. This study predictably holds the promise that online English collocation dictionary adopted as a rudimentary reference for vocabulary acquisition and enhancement of textual translation ability can be put into practice while teaching different academic levels / majors of Chinese EFL learners in the future.

2. Literature Review

2.1. Wakeup call to EFL learner's awareness of collocation knowledge

Numerous studies have demonstrated that EFL/ESL students are deficient in collocational knowledge, and that some language instructors seem to neglect collocation instruction as the facilitative element of FL vocabulary development and language proficiency (Al-Zahrani, 1998; Yumanee & Phoocharoensil, 2013). Lewis (2000) points out that language teachers have to help raise ESL/EFL learners' awareness of collocations and promote to explore the realm of collocation is essential; by doing so, learners are able to make further progress of using language in terms of some part unknown to them as learning "because the stored sequences of words are the bases of learning, knowledge and use" (Nation, 2009). As learners receive collocation instruction at class, they not only absorb the knowledge of collocations but also learn skills to develop collocational knowledge by independence because independent language learners would be risky to take challenge particularly (Woolard, 2000). In addition, Woodlard (2000) suggests some practical methods to help raise learners' awareness of collocations; by way of his classic illustrations, selecting and reviewing of those mis-collocations learners experience can stimulate them in language production. Most importantly, learners' high concentration focused on collocation extends their ability to explore other significant collocations themselves in the process of their language learning inside and outside ESL/EFL settings. Concerning learners' awareness of knowledge in collocation, in recent years there have been many studies on that efficient language acquisition requires collocation knowledge because learning language in chunks, such as set phrases or routines, can efficiently quicken language acquisition (Ellis & Laporte, 2001). On the other hand, ESL/EFL learners' psycholinguistic perspectives tend to lead them to internalize word knowledge they acquire into their mental lexicon as part of long-term memory, and collocations seem one of the promising ways to work this out because "lexical phrases in language reflect the way the mind tends to chunk language in order to make it easier to process" (Schmitt, 2000), and those chunks obtained in learning are "powerful and long-lasting links between words in mind" (Aitchison, 2002). With the evidence accumulated from research above collocations are organized to enable efficient language reception and production. For this reason, an emphasis should be put upon the value of collocation in ESL/EFL instruction.

2.2 Collocation as highlight in ESL/EFL instruction

Many researchers and language teachers note the importance of collocational instruction, with some proposing that more attention should be paid to them due to a lack of equivalents in the first language (Tekingul, 2013; Thongvitit & Thumawongsa, 2017). Language teachers would have to choose and teach collocation with caution in order not to pose extra problems, troubles, and challenges to ESL/EFL students in the classroom. Hill's (2010) recommendation for adopting medium-strength collocations between strong and weak ones should be considered the first priority. This recommendation also indicates that language teachers are the ones responsible for teaching both collocations themselves as well as the words themselves used in these collocations, which would possibly otherwise not be taught outside of collocation lessons. As these language teachers conduct their disposal supplementary activities with collocation-related aid, textbook, materials surrounded during the classroom instruction, this may be a great help with navigating the teaching of those language chunks involved in common collocations (Meechai & Chumworathayee, 2015). Various strategies to help introduce collocations and lexical knowledge to learners are offered by Hill et al. (2000). The use of larger units in ESL/EFL setting can help learners internalize and transfer the lexical items they add to their mental lexicon. Following that, learners should be encouraged to repeatedly redo the same task in order to have their production (output) of collocations in writing or speaking. An increasing number of instructional methods in collocation have become available over the last few decades following suggestions of researchers and language teachers. With this in mind, the issue on the relationship between collocation knowledge and learners' language ability toward native-like fluency remains an important continuum in need of attention.

2.3 Online English collocation dictionary

In the previous section, common collocational expressions in English is taken as the principal information as well as data collected based on accumulated hands-on experience. According to Liao (2016), foreign language users or learners, taking Chinese EFL learners for example, always mistakenly collocated together in a less-nativelike way, which was critically considered as a matter with "Chinglish" or failure in effective mutual communication or misunderstanding. This could possibly be traced back to the issue on the interference of mother language (a.k.a. Language Transfer). For this reason, Liao (2016) strongly suggests EFL learners to adopt all sorts of collocation dictionaries or even the Corpus of Contemporary American English (COCA) to facilitate learners' understanding of accurate word choice or combination of words precisely. It is encouraged that language learners must heavily count on collocation dictionaries in order to become further familiar with the usage of word choice and then build up a self-collocation database by learners themselves. In Lin's (2016) study on collocational approach to teaching Taiwanese college low-achieving learners in an EFL writing classroom, the results suggested that EFL low-achieving learners' awareness of collocations, following the collocation instruction, has been substantially improved while the instruction of word classes facilitates students' collocations learning. Most significantly, collocation dictionaries and online corpora are considered practical and useful sources of instructional materials for collocation instruction. Last but not least, adopting the chunk-for-chunk translation approach was genuinely beneficial to students' learning of collocations and their translation writing skill. For the present study, the Online English Collocation Dictionary (OECD) is one tool that can be of benefit in the teaching of collocations, as well as enable students to be self-teaching, fulfilling both aspects of learner-based education discussed above. Online dictionaries such as this one are practical and useful tools for language learners. It is also a tool used to facilitate and enhance language acquisition. However, the OECD has limited specific information regarding collocation, though the

examples and sentences explaining word usage and expression listed in the dictionary can also be adopted for the identification of collocation by teachers and learners. On the other hand, English collocation dictionaries, such as The BBI Dictionary of English Word Combinations, Oxford English Collocation Dictionary, Longman Collocation Dictionary of Contemporary English can offer direct collocational learning to the student, which can be used in written texts or utterances. As EFL learners receive the new inputs of collocation usage from collocational dictionaries, then they are able to benefit from the learning itself along with having a simple and clear reference resource for future use.

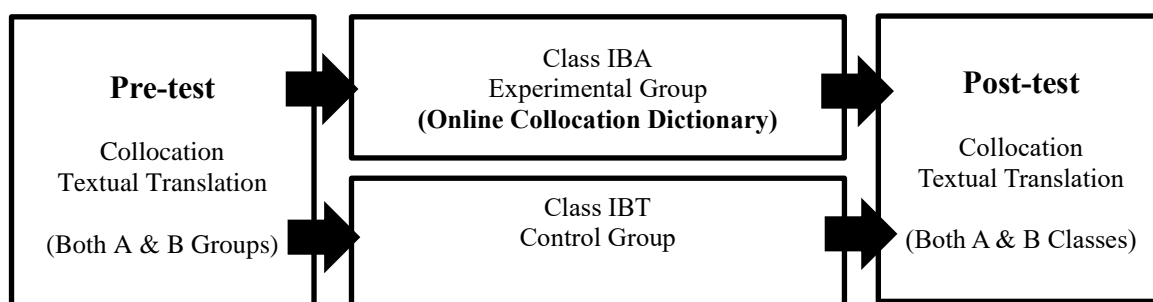
3. Research Method

3.1 Research design

In this study, the researcher conducted an “Experimental Design” consisting of experimental group and control group to collect and analyze quantitative data in three consecutive phases within one study (Creswell et al., 2010). The first phase was a pre-test given to participants for assessing their collocational knowledge and textual translation ability before any intervention was provided. The second phase was to implement an eight-week-long online-collocation-collocation experimental instruction. Finally, a post-test of both collocation and textual translation writing were administered to both groups. A prototypical version of quasi-experimental design is illustrated in Figure 3.1.

Figure 3.1

Prototypical version of experimental design



3.2 Research participants

The target participants for this present research are consist of two Mainland Chinese EFL university-level classes/groups with a total of 75 students (38 and 37, respectively), ranging in age from 18 to 21 years. All participants are native Mandarin-speaking Mainland Chinese, who come from a household where Mandarin is their native language (L1). The groups are divided by class in this study, with Class IBT (N=38; 14 female and 24 male) marked as the control group and Class IBA (N = 37; 12 female, 25 male) as the experimental group.

3.3 Instruments

3.3.1 Pre-test and post-test collocation exercise

The first stage of the study was to assess Chinese EFL university student participants' collocation and textual translation ability. In this stage, a collocation and textual translation pre-test were given to both the control and experimental groups before any intervention, and a follow-up post-test after the intervention. Collocation pre-tests / post-tests respectively were

consist of 20 collocation tests, and the textual translation questions will be a set of 10 Chinese to English textual translation exercises extracted from official university-level English textbook approved by the Taiwan Ministry of Education in Taiwan. Samples of collocation exercises, pre-test and post-test translation exercises are shown below:

英文搭配詞測驗卷

請於下列空格中填入你認為最適當的搭配詞彙，劃線的中文字可提供你翻譯時的提示：

➤ 「動詞+名詞」或「名詞+動詞」

1. 我的父親記憶力很好，容易保留資訊。

My father has a good memory and finds it easy to facts.

2. 這位導演的新片引起許多人的興趣，每個人都在談論這部電影。

This director's new film has a lot of interest. Everybody is talking about it.

3. 將來必須興建更多的托兒所，以符合高品質兒童照護的需求。

More nurseries will have to be built to the need for high-quality child care.

Cited from Liao (2016, p.37)

Chinese to English Translation *Pre-Test* Sample

過去 18 年來，為通過高中或大學入學考試而設立的補習班數量激增逾 6.5 倍之多。這現象顯示教育部 18 年前所推動的教育改革實際上充斥嚴重弊病。18 年前政府邀請眾多學者專家集思廣益，規劃一大型教改計畫，希望能解決國內學生長久來課業壓力所招致的苦痛。

Cited from Liao (2016, p.55)

Chinese to English Translation *Post-Test* Sample

為了通過高中或大學入學考試，過去 18 年來，設立的補習班數量激增逾達到 6.5 倍之多。這種現象表示教育部於 18 年前於教育上所推動的改革實際上充斥著嚴重弊病。於 18 年前台灣政府積極邀請眾多學者專家一起集思廣益而規劃大型教育改革計畫，並且希望能解決國內學生長久以來因為課業壓力所招致的苦痛。

Cited from Liao (2016, p.55)

All the collocation exercises, translation pre-test and post-test are adopted and adapted from Dr. Posen Liao (2016)¹ who has professional training in the domain of translation and collocation. For this reason, all the exercises for assessing high-school student participants' collocation and translation ability in terms of validity are considered highly reliable for the current research.

3.3.2 Collocation instruction—online English collocation dictionary

The second phase of the study was the implementation of collocation instruction (treatment / intervention) for both Class IBA (experimental group) and Class IBT (control group). Class IBA received a direct intervention via adopting an online English collocation website as assistance while no intervention was given for Class IBT. The online collocation dictionary

¹ Dr. Posen Liao is currently full-time professor at National Taiwan Normal University. His professional discipline includes Theories of T&I Teaching, Translation Testing and Assessment, Quantitative Research Methods, and Qualitative Research Methods

adopted for collocation instruction at Class IBA (experimental group) was shown below with the introduction to this online collocation dictionary usage while samples of collocation exercise sheet for V-N, Adj-N, Adv-V types and chunk-for-chunk collocation translation exercise. The site was built by the National Institute of Education for The Foundation, which is expected to provide the “Taiwan Light” of The Ministry of Foreign Affairs. Taiwan Panorama). Each month, with Chinese, English, Japanese, Thai, Vietnamese, Indonesian and other languages, Taiwan’s political, social, cultural and other orientations, it is very appropriate for the participants to learn how to use English to introduce Taiwan-related culture and Taiwanese feelings. Through the operation of this index system, we can easily search any keywords in Chinese or English bilingually to explore the related sentence expressions with collocation usage provided. However, the learner users should be reminded that although this is the text of the Chinese and English, but it is not a directly translated word to word, but the transforming of the text. Learners are able to pick up a large number of examples how to make English in different contexts and in different contexts. Next, the Collocation Panel at the bottom right of the interface is very useful and practical, and learners are able to see the various Chinese words that are paired with the “potential and possible word combination”. The root of Collocation Panel’s claims and the large number of examples it provides can be used to extract the Chinese and English for translation writing practice.

3.3.3 Scoring rubrics for textual translation and collocation assessment

Waddington's (2010) scoring rubric for textual translation assessment is adopted as the rating criteria for the measurement of participants' Chinese-to-English textual translation ability. The rubrics consist of a five-level range of textual translation abilities: Level 5-Successful task completion / 9-10 marks, Level 4-Almost completely successful / 7-8 marks, Level 3-Adequate / 5-6 marks, Level 2-Inadequate / 3-4 marks, and Level 1-Totally Inadequate / 1-2 marks, as

shown in Table 3.2 below. Chinese EFL learners' textual translation writing works were collected and given marks based on the indicators of textual translation rubrics, which would rely on the actual content of EFL learners' textual translation writing tasks. These scores are used to explore Chinese EFL learners' textual translation writing performance on pre-test and post-test textual translation writing as assessment before and after the use of online collocation dictionary. Meanwhile, two English instructors were assigned to mark Chinese EFL learners' textual translation writing tasks. All the textual translation writing tasks were marked and assessed by both two English instructors via adopting the scoring rubrics for marking the tasks to acquire the average scores as the indicators of Chinese EFL learner's textual writing performance.

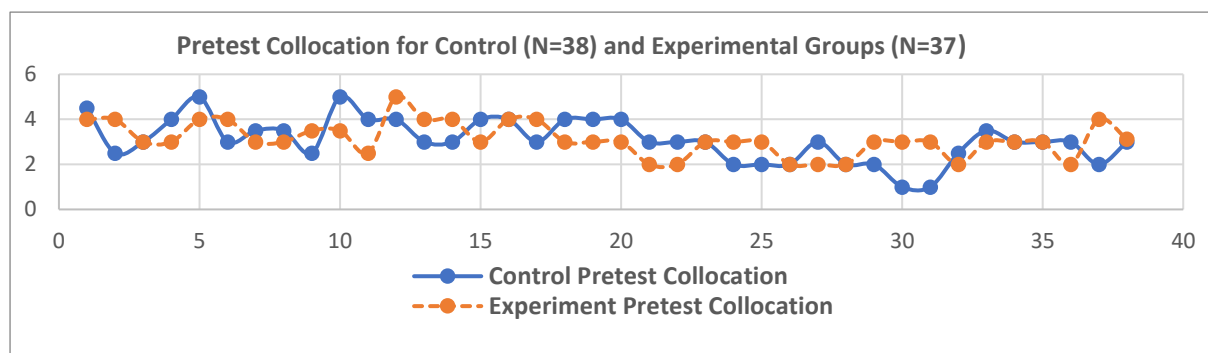
4. Research Results

4.1 To what extent do Mainland Chinese EFL Learners' collocational and textual translation abilities improve with the use of an online English collocation dictionary?

The first research question looked at the improvement in Chinese EFL learners' collocation and textual translation ability for both control and experimental groups. The researchers adopted Waddington's (2010) scoring rubric for textual translation assessment (Level 5-Successful task completion / 9-10 marks, Level 4-Almost completely successful / 7-8 marks, Level 3-Adequate / 5-6 marks, Level 2-Inadequate / 3-4 marks, and Level 1-Totally Inadequate / 1-2 marks) to assess EFL learners' performance of pretest /posttest textual translation abilities while the pretest and posttest collocation exercises were used to evaluate EFL learners' collocation knowledge. According to the Chart 4.1, the results showed that before the experiment the averaged collocation exercise scores for both control and experimental groups stayed close without any doubt. The highest scores were 5 points for both control and experimental groups. Meanwhile, the lowest scores were 1 point for control group and 2 points for experimental group.

Chart 4.1

Pretest collocation exercise scores for control and experimental group



Concerning the posttest averaged collocation exercise scores; the results showed that the highest scores of collocation exercise were 4 points for control group and 6 points for experimental group with the treatment of the collocation instruction. Apparently, the experimental group Chinese EFL learners' collocation knowledge under the use of online collocation dictionary as classroom instructional aid were enhanced and shown a noticeable improvement in comparison to control group as indicated in Chart 4.2.

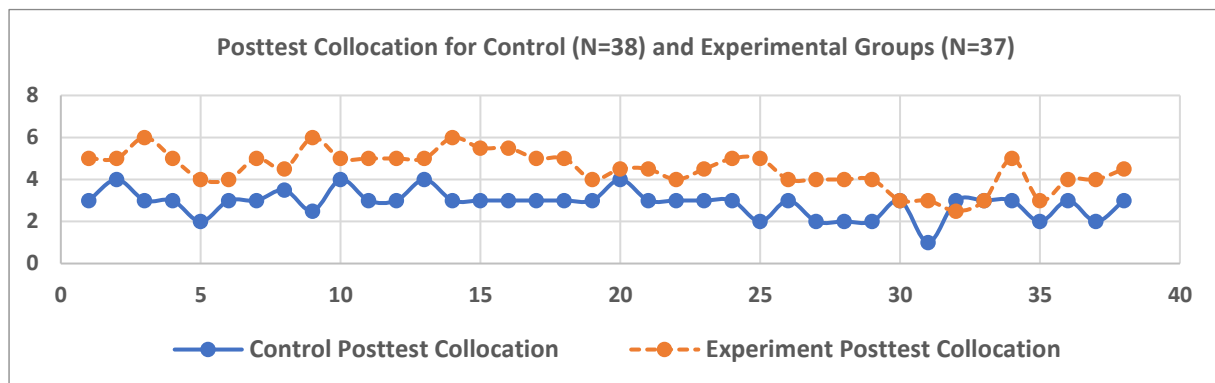
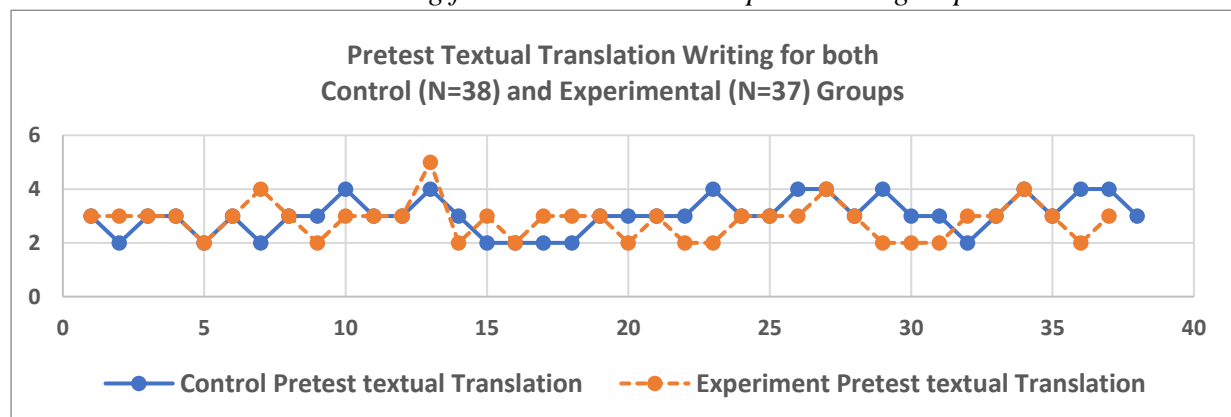
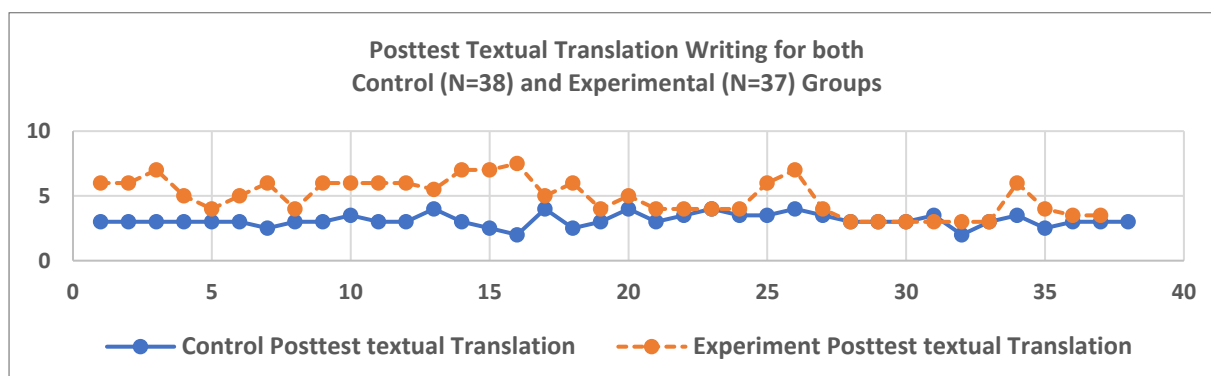
Chart 4.2*Posttest collocation exercise scores for control and experimental group*

Chart 4.3 reports an overview of pre-test results of Chinese EFL learners' textual translation abilities for both groups. The highest scores of pre-test textual translation writing of control-group EFL learners were 4 points and the lowest were 2 points. Contrastingly, the highest pre-test textual translation writing scores of Chinese EFL learners in experimental group were 5 points and the lowest were 2 points as well. From this chart, both control and experimental groups of EFL learners' actual textual translation abilities before the treatment appear not significantly different.

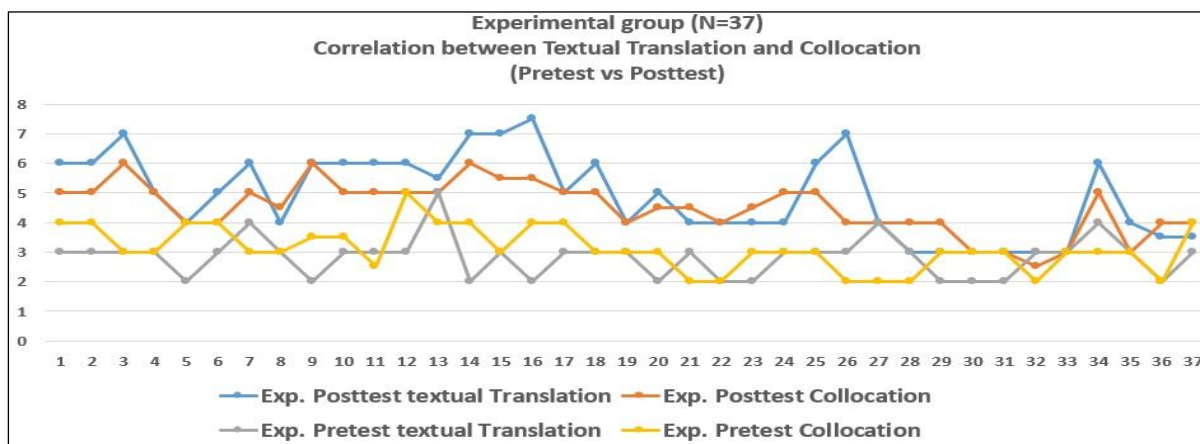
Chart 4.3*Pretest textual translation writing for both control and experimental groups*

On the other hand, it can be seen from the data in Chart 4.4 that experimental-group Chinese EFL learners' posttest textual translation writing scores reported significantly higher than the control group. The line chart below shows some of the breakdown of the posttest textual translation writing performance. The highest scores of posttest textual translation writing were approximately 7.5 points for the experimental group and 4 points for the control group, which means that following the treatment the experimental group learners' textual translation writing performance were significantly improving in comparison to the pre-test textual translation writing scores. These results support one of the directional hypotheses in the present study—Chinese EFL learners' textual translation ability would be significantly improved with the use of online English dictionaries.

Chart 4.4*Posttest textual translation writing for both control and experimental groups*

4.2 Is there a correlation between Mainland Chinese EFL learners' collocation and their textual translation abilities?

The second research question focuses on discovering correlations between Chinese EFL learners' collocation knowledge and their textual translation ability. To test the research hypothesis and answer the current research question, the scores collected from both pretest / posttest of textual translation writings and collocation exercises were used to find out the correlations between textual translation ability and collocation knowledge of experimental-group Chinese EFL learners before and after the treatment of the use of an online collocation dictionary.

Chart 4.5*Comparison of scores for pre / posttest textual translation and collocation*

As we take a closer inspection of the Chart 4.5 above, the scores of textual translation writing and collocations were evidently correlated from several learners' cases. First of all, in No.1 and No.2 learners' cases, their pretest textual translation and pretest collocation scores were both 3 points and 4 points. Following the treatment, learners No.1 and No.2 scores for posttest textual translation and posttest collocation were both improved to 5 points and 6 points. Similar cases with minor improvement in both textual translation and collocation can be found in learner cases No.6, 7, 10, 11, 12, 34, etc. Then, that what is striking about the scores in this chart would be learner cases No. 3 (3-3 points to 6-7 points), No.9 (2-2.5 to 6-6 points), No.14 (2-4 points

to 6-7 points). To sum up, these cases show a strong and positive correlation between textual translation and collocation knowledge. Similar cases with drastic improvement in textual translation and collocation following the use of an online collocation dictionary as experimental treatment can be found in learner cases No.15, 16, 18, 25, 26, etc. Simply stated, Chinese EFL learners with higher scores of collocational knowledges would produce better in textual translation writing performance. Besides, in order to examine the correlation between textual translation writing and collocation knowledge, the Pearson product-moment correlation coefficient through SPSS 22.0 was used and a positive correlation coefficient of 0.8 was found between textual translation writing and collocation knowledge as shown in Table 4.1.

Table 4.1

Correlation coefficient between textual translation and collocation

		Exp_Posttest_Translation	Exp_Posttest_Collocation
Exp_Posttest_Translation	Pearson Correlation		
	Sig. (2-tailed)		
	N		
Exp_Posttest_Collocation	Pearson Correlation	.805**	
	Sig. (2-tailed)	.000	
	N	37	37

** . Correlation is significant at the 0.5 level (2-tailed).

5. Conclusion and Discussion

The aim of this study was to explore the effect of an online collocation dictionary on English textual translation writing ability of Chinese EFL learners. This paper sought to address the following research questions: 1) To what extent do EFL learners' collocational and textual translation abilities improve with the use of an online collocation dictionary; 2) Is there a significant correlation between Chinese EFL learners' collocation and their textual translation abilities. The results showed that the experiment-group Chinese EFL learners' collocation and textual translation abilities were significantly improved with the use of an online collocation dictionary. A second major finding of this study was that a slight positive correlation was found between Chinese EFL learners' collocation and their textual translation abilities. The results from this study support the notion that online collocation use serves to effectively assist Chinese EFL learners' vocabulary acquisition based on collocationally-correct expression adopted for written communication. With collocation dictionary use for textual translation in writing class, Chinese EFL learners were able to more effectively acquire a broader knowledge of word choice instead of learning or cramming vocabulary in isolated cases. For this reason, students should be encouraged to use a collocation dictionary during any practice writing tasks in the classroom. Students not only learn how to use language in a more fluent manner but also how to avoid making textual translation errors in a "Chinglish" style. From this research, the experiment confirmed that collocation has a positive correlational effect on translation writing. For this reason, one of the most significant findings to emerge from this study is that classroom English instructors are suggested to intensively develop language learners' awareness of collocation through all sorts of collocation-related textbooks, dictionaries or mobile technological Apps. That is to say, that adopting collocation instruction would enable students gain more chances to acquire broader knowledge of word choice instead of learning or cramming them in isolated cases. For this reason, students should be encouraged to have a collocation dictionary with them

when carrying out any writing tasks in the classroom for practice only. Chinese EFL learners' would bump into the issues or problems with Chinese-English textual translation writing ability due to the effect of mother language transferring to a foreign language. In this case, Chinese EFL learners never make any further progress in doing translation writing practice. However, Chinese EFL learners in order to foster their textual translation writing ability to reach a more advanced level of fluency and accuracy in writing are required to compile and organize their own bank of collocation or word chunks for repeating and practicing them for further translation writing drills.

6. References

- Aitchison, J. (2002). *Words in The Mind*. Blackwell.
- Al-Zahrani, M. S. (1998). *Knowledge of English lexical collocations among male Saudi college students majoring in English at a Saudi university*. [Doctoral dissertation, Indiana University of Pennsylvania], Pennsylvania. https://www.ssoar.info/ssoar/bitstream/handle/document/56765/ssoar-ilshs-2015-61-see_et_al-The_knowledge_of_lexical_collocation.pdf?sequence=1
- Creswell, J. W., Plano Clark, V., Gutmann, M., & Hanson, W. (2010). Advanced mixed methods research designs. In A. Tashakkori, & C. Teddlie (Eds.), *Handbook on Mixed Methods in The Behavioral and Social Sciences* (pp.209-40). Sage.
- Ellis, N.C., & Laporte, N. (1997) 'Contexts of acquisition: effects of formal instruction and naturalistic exposure on second language acquisition. *A Review of The Research*. *SSLA* 24: 223–236. <https://doi.org/10.1017/S027226310505014X>
- Ellis, N. C., Ute Römer., & O'Donnell, M.B. (2016). *Usage-Based Approaches to Language Acquisition and Processing: Cognitive and Corpus Investigations of Construction Grammar*. Wiley-Blackwell
- Ghazali, F.A. (2015). Reinforcing students' collocational competence in EFL classrooms. *MJAL*, 7(3), 1-18.
- Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, 22(1), 1-15. https://scholarspace.manoa.hawaii.edu/bitstream/10125/44574/1/22_01_godwin-jones.pdf
- Hill, J. (2010). Revising priorities: from grammatical failure to collocational success. In Lewis, M. (Ed.). *Teaching Collocation*, 47-69. Oxford Press
- Hill, J., Lewis, M., & Lewis, M. (2000). Classroom strategies, activities and exercises. In M. Lewis (Ed.), *Teaching Collocation: Further Developments in The Lexical Approach* (pp. 88-117). Language Teaching Publications.
- Kang, E., & Han, Z. (2015). The efficacy of written corrective feedback in improving L2 written accuracy: A meta-analysis. *The Modern Language Journal*, 99(1), 1-18. <https://onlinelibrary.wiley.com/doi/full/10.1111/modl.12189>
- Lewis, M. (2000). *Teaching Collocation: Further Development in The Lexical Approach*. Language Teaching Publications.
- Liao, B. S. (2016). *A Study of the Relationship between College Students' Translation Learning Styles and Their Translation Competence*. FIT 6th Asian Translator's Forum, Macao.
- Lin, Y. C. (2016). *A Collocational Approach to Teaching Taiwanese College Low-Achieving Learners in an EFL Writing Classroom*. [Doctoral Dissertation, Tankang University]. <https://www.tandfonline.com/doi/full/10.1080/2331186X.2016.1184826>
- Luo, Q.Q. (2016). *The Effects of Data-Driven Learning Activities on EFL Learners' Writing Development*. Luo SpringerPlus.

- Meechai, D., & Chumworathayee, T. (2015). Verb-Noun collocational competence of Thai university EFL students: a comparative study of a regular program and an English program. *Language Education and Acquisition Research Network (LEARN) Journal*, 8(2), 145-160. <https://so04.tci-thaijo.org/index.php/LEARN/article/view/102678>
- Men, H. (2018). *Vocabulary Increase and Collocation Learning: A Corpus-Based Cross-Sectional Study of Chinese Learners of English*. Springer.
- Nation, I. S. P. (2009). *Teaching ESL / EFL Reading and Writing*. Routledge.
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge University Press.
- Tekingul, B. (2013). Collocation teaching effect on reading comprehension in advanced EFL setting. *Procedia-Social and Behavioral Sciences*, 70, 1078-1089. https://www.researchgate.net/publication/264746607_Collocation_Teaching_Effect_on_Reading_Comprehension_in_Advanced_EFL_Setting
- Thongvitit, S., & Thumawongsa, N. (2017). A corpus-based study of English collocations found in the abstracts of research articles written by Thai EFL writers. *International Journal of Social Science and Humanity*, 7(12), 751-755. <http://www.ijssh.org/vol7/920-HS009.pdf>
- Waddington, C. (2010). Different methods of evaluating student translations: The question of validity. *Meta: journal des traducteurs / Meta: Translators' Journal*, 46(2), 311-325. <https://www.semanticscholar.org/paper/Different-Methods-of-Evaluating-Student-The-of-Waddington/864fc0445a9766ebec85074a0514d38bcfba7569>
- Woolard, G. (2000). Collocation-encouraging learner independence. In M. Lewis (ed.), *Teaching Collocation: Further Developments in The Lexical Approach* (pp. 28-46). Language Teaching Publications.
- Yumanee, C., & Phoocharoensil, S. (2013). Analysis of collocational errors of Thai EFL students. *Language Education and Acquisition Research Network. Journal*, 1(1), 90-100. <https://so04.tci-thaijo.org/index.php/LEARN/article/view/102723>

Effectiveness of Perspective Development Courses on University Students' Attitude Change

Fei Zhao^{1*} ManHua Li² LingFen Mo³

^{1*3}China-ASEAN International College, Dhurakij Pundit University, Thailand

*friedrichzhao@gmail.com

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Abstract

Whether the attitude of the Chinese Generation Z (Gen Z) can be changed through university education, especially the teaching activities of the perspective development course attracted in the past twenty years more attention in the society after the emerge of 'post-80s' and 'post-90s' phenomenon in China. Among the discussions, only a few articles use academic analysis tools to make serious research on this issue from the perspective of social psychology and pedagogy. Most of them are often concentrated only under the framework of "Ideological and Political Education". Therefore, this paper takes the sophomore Chinese overseas students in Thailand as the research object, using marriage attitude as the carrier to measure whether they have changed their attitudes and concepts before and after a perspective development course. The study used "before- and after- test" to record and measure the students' attitudes. Through the use of social psychology attitude change theories - specifically persuasion theory, concentration trend analysis, frequency analysis, non-parametric double correlation sample difference test, cross contingency table analysis to observe whether there is statistical support for or against the hypothesis of significant data.

Keywords: Effectiveness of Lecture, Perspective Development Course, Marriage Attitude Change, Chinese Oversea Students

1. Introduction and Background

China's Gen Z teenagers are widely believed to be born and grow up in the digital media era of rapid economic take-off and information explosion after China acceded to the WTO. They have extremely rich material and information that their fathers never had. The 21st century has already entered the third decade. They have to take social responsibility independently by themselves. What kind of social cognition do they have? Will their previous ideas and attitudes change, after accepting the collision of other overseas cultures and thoughts? If so, what changes will happen?

This study will focus on the undergraduate international project of a private University in Thailand, a country along the Belt and Road. This study uses the theories of attitude change in social psychology, takes a perspective development course Eastern and Western Views and Values under the former of General Education in the university, and adopts the pre- and post-test methods in the educational experimental research methodology. In this study, lecture activity (input) is taken as the independent variable, and students' attitude change (Output) is taken as the dependent variable. Non-parametric statistical methods were used to measure

whether students' attitudes towards marriage had changed before and after the course and what and how many changes had taken place?

This theory-testing and pre- and post-test analysis may enrich the case diversity of attitude and opinion studies in the field of educational practice, and elaborate discussions on effective methodologies for such issues. Meanwhile, it is further hoped to inspire our colleagues to ask the questions in a reverse thinking way: Do we need to constantly improve and update our teaching content, course design and teaching methods in order to motivate students to change their attitudes and opinions more effectively following the goals of Learning Outcome design?

2. Literature Review

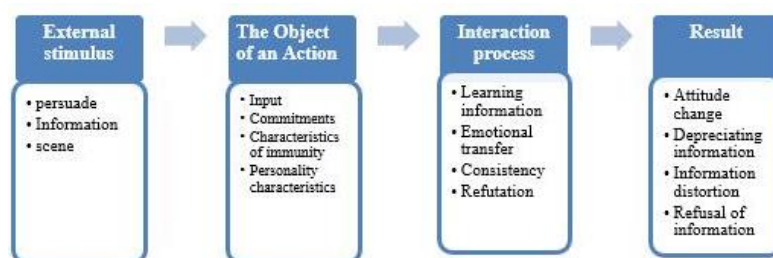
As early as the early stage of social psychology, Thomas has pointed out that social psychology is a science that studies social attitudes. In the early Stage of Attitude Change Research about four explanations and theoretical explorations developed: Kelman's Three-Stage Theory, Festinger's Cognitive Dissonance Theory, Heider and Newcomb's Cognitive Balance Theory, Lewin's Participatory Change theory. Dorwin, Hovland and Wilbur Lang Schramm have made in-depth practice and research on persuading people to change their attitudes. In 1959, American psychologist Hovland et al., regarded attitude change as a process of information exchange, and on this basis, he proposed a Standard Attitude Change Model.

To measure attitude changes also needs appropriate tools and methodology of social science. Wundt founded the world's first psychology laboratory in Leipzig in 1879. Meumann and Wilhelm August Lay, co-editors of German psychologists for many years, co-edited *Experimental pedagogy* and formed a school of experimental education in Germany. After that Alfred Binet and Théodore Simon introduced intelligence tests into the study in France. Thorndike and others applied the experimental method to curriculum design, teaching method reform and class teaching. Robert et al., who took two groups of college students as subjects in 1973, one as a control group and the other as an experimental group, carried out an experimental study called free memory and published a study, which was seen as the origin of contemporary psychological research methods. Since then, this controlled experimental method has also been widely used in the field of educational experimental research.

3. Methods

3.1 Theory and variables

This study takes Hovland's persuasion theory, as shown in below, as the theoretical basis. According to the theory, persuader, the way how to present the issue, the Audience as individuals.

Figure 1*Simplified standard attitude change model after Havland*

and the Influence of groups are all possible influencing factors of attitude change. The study regards lecturers as persuaders in the survey, teaching methods as the ways how to present the issue, students as individuals, teaching contents as issue-relevant information, etc. The comprehensive system, which is composed of all the course indicators is considered as the hypothetical independent variable of this study. The dependent variable of this study is students' attitudes and opinions about the corresponding social problems - marriage attitude after participating the course. However, to be able to answer the research questions, this variable must be compared with another independent variable - marriage attitude pre-test before the course began.

The perspective development course Eastern and Western Views and Values belongs to the General Education curriculum in the undergraduate education syllabus of international college. The course accounted for 3 normal academic credits. According to the curriculum plan, undergraduate students will take this course in the first semester of the second academic year. Altogether 316 Students from five natural classes from the 2 semester of 2019 to the 1 semester of 2020 were surveyed.

According to the research standard of the educational experiment, the irrelevant variables in the experiment need to be controlled so that they do not have an undesirable impact on the experiment. In this study, the age, gender, class number, academic performance, teacher level, questionnaire, test time and test method of middle school students are regarded as independent variables. It is undeniable that in the quasi-experimental environment, teachers cannot control certain variables in teaching practice. For example, in this study, the number of classes, gender ratio, test scores, students' professional departments and other conditions are unable to 'control'. In addition to these conditions, in the course of the experiment, the experimenter can only ensure that the above-mentioned uncontrollable independent variables are 'natural random' but are normal without exception and disorder.

3.2 Single group pre- post-test design

The study selected a single group of pre- and post-test design without setting control groups as follows: T1 represents the pre-test results, T2 represents the post-test results; X represents experimental control and processing.

Figure 2*Concept of single group pre- and post-test design*

Hypothesis 1: After participating in the course ‘Eastern and Western Views and Values’, students’ attitudes towards marriage and willingness to assume marital responsibility are not more positive.

Hypothesis 2: After participating in the course ‘Eastern and Western Views and Values’, students’ attitudes towards marriage and willingness to assume marital responsibility are more positive.

3.2 Implement of the experiment and questionnaire

The questionnaire was made in electronic form on ‘Questionnaire star’ and distributed to students in the form of QR-Code twice, once in the first and once in the last section of the course. Altogether 316 students participated in this test; after data processing, excluding 13 students who only participated in the pre-test or post-test and 6 students who do not come from China. Finally, 297 valid data are obtained.

Followed personal information part in the questionnaire, in the ‘Attitude and opinion survey’ section, this study tried to put forward a general issue from 10 chapters of the whole course, hoping that students can express their attitudes and opinions directly and generally. The questionnaire below did not list five equidistant of Likert scale, but directly give 5 different intensity of options with one statement respectively for students to choose. As for marriage issues, attitudes and options are shown below. Thus, five typical marriage attitudes are presented exhaustively, and the five options are consistent as far as possible with the principle of equidistant.

Table 1*Question and answer options about marriage attitude*

KG145: “My” view of marriage is ____: [scale question]
【1】 Stay single / People don’t need to get married for a lifetime
【2】 I don’t believe in marriage / The responsibilities are too heavy
【3】 Follow fate/I haven’t thought about it seriously / Like most people
【4】 Willing to believe in marriage / Willing to take responsibility
【5】 Get married early / Marriage is one of the most important things in one’s life

Because the categorical variables obtained in this study can’t do parameter analysis like continuous variables, so the data can’t and don’t need to do general reliability analysis. However, this study evaluates the content validity of the questionnaire (Face validity) by combining expert logic analysis and statistical analysis.

3.3 Statistical analysis and methods

As mentioned above, the data results of this study do not conform to the normal distribution of general parameters. Therefore, this study first uses the mean, descriptive frequency analysis, and column distribution chart to show the intuitive distribution of data in the pre-test and post-test.

Table 2

Analysis purpose and methods selection

Purpose of analysis	Statistical analysis method
Data distribution	Mean, frequency analysis, columnar distribution
Differences between the data from Pre- and Post-Test	Wilcoxon Signed-Rank Test
Relation between Pre- and Post-Test	Cross- tabulation

The Wilcoxon Signed-Ranks Test (W-Test) is the nonparametric test equivalent to the dependent t-test. As the W-Test does not assume normality in the data, it can be used when this assumption has been violated and the use of the dependent t-test is inappropriate. Concerning this study, the two groups of observed values of students' attitudes towards marriage in the pre- and post-test will be arranged in the order from small to large and numbered in the order, which is called rank. Change values can be defined as positive or negative according to the direction of attitude change. In this way, the movement of students' attitudes in the five options can be observed. Then the data will be tested whether the change conforms to the significant characteristics under statistics. The critical value of W-Test is W ($p < 0.05$).

The Cross Tabulation (contingency table) is a cross-classification frequency distribution table listed when observations are classified by two or more attributes and then compares the distribution of each group to find the relationship between variables. Specifically, the pre-test frequency of students' attitudes towards marriage before the course and the post-test frequency after the course can be respectively presented in the same interactive classification table in the form of rows and columns. Through the observation of the distribution of the frequency of each option to find out whether and what kind of relationship between the pre-test and post-test.

Formulae 1

W-Values of W-Test

$$W = \sum_{i=1}^{N_r} [\text{sgn}(x_{2,i} - x_{1,i}) \cdot R_i]$$

W = test statistic; N_r = sample size, excluding pairs where $X_1 = X_2$; Sgn = sign function;
 $X_{1,i}, X_{2,i}$ = corresponding ranked pairs from two distributions; R_i = rank i

4. Findings

4.1 Observable distribution differences

After descriptive statistical analysis of the data of 297 students ($n = 297$), it can be seen below that between the minimum option value 1 to the maximum option value 5, the arithmetic mean in the pre-test (Marriage 1) is 3.30. The arithmetic mean in the post-test (Marriage 2) is 3.41. According to the observation of the mean, the concentration trend value of students' attitude towards marriage in the post-test is 3.41, which is 0.11 higher than 3.30 in the pre-test. According to the attitude scale design, the larger the value is, the more positive the attitude towards marriage is and the stronger the willingness to marry is.

Table 3

Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Marriage 1	297	1	5	3.30	.867
Marriage 2	297	1	5	3.41	.944
Valid N (listwise)	297				

As shown below, in the pre-test (Marriage1), it was observed that the frequency of Option 4 'Willing to believe in marriage / Willing to take responsibility' reached 124, representing 41.8 percent of the total effective subjects, constituting the first frequency option. Meanwhile, the frequency of Option 3 'Follow fate / I haven't thought about it serious / Like most people' reached 113, accounting for 38 % of the total, becoming the second largest option. These two options accounted comprehensively for 79.8 %.

Table 4

Frequency and percentage of pre-test (Marriage 1)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Option 1	10	3.4	3.4	3.4
	Option 2	38	12.8	12.8	16.2
	Option 3	113	38.0	38.0	54.2
	Option 4	124	41.8	41.8	96.0
	Option 5	12	4.0	4.0	100.0
	Total	297	100.0	100.0	

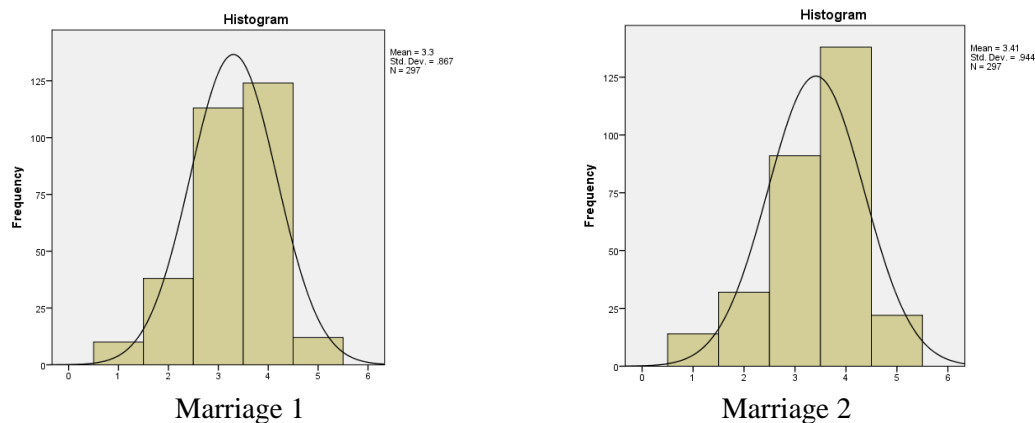
As shown in the figure below, Option 4 and Option 3 are still the two largest options in the post-study test (Marriage2). However, the gap between them is widened. Option 4 'Willing to believe in marriage / Willing to take responsibility' - represents the options of positive attitudes towards marriage, and the measured frequency has increased from 124 previously to 138. The proportion increased from 41.8 % to 46.5 %. Option 3 'Follow fate / I haven't thought about it seriously / Like most people' - an option with a relatively neutral attitude towards marriage, decreased from 113 to 91 in the pre-test, accounting for 38 % to 30.6 %.

Table 5
Frequency and percentage of post-test (Marriage 2)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Option 1	14	4.7	4.7	4.7
	Option 2	32	10.8	10.8	15.5
	Option 3	91	30.6	30.6	46.1
	Option 4	138	46.5	46.5	92.6
	Option 5	22	7.4	7.4	100.0
	Total	297	100.0	100.0	

The data trends and characteristics can also be intuitively reflected in the following distribution diagram. It can be seen from the histogram of marriage 1 that Option 4, which represents the relatively positive attitude towards marriage, is slightly ahead of Option 3, which represents the neutral attitude. These two options together form two options with the highest frequency.

Figure 3
Frequency and distribution of pre- and post-test



It can be observed from the post-test (Marriage 2) histogram that Option 4 increases significantly and Option 3 decreases significantly. The frequency gap between the two was 11 in the pre-test and 47 in the post-test, accounting for 15.9 percent. Another noteworthy change is that Option 5, which has an extremely positive attitude towards marriage in the post-test, increases by 10 compared with the pre-test frequency, accounting for 3.4 %. This change is greater than the increase in Option 1 of extreme negative attitudes to marriage.

4.2 Positive significant Wilcoxon value

According to the mechanism of the W-Test, hypotheses should set up for the W-Test concern the population median of the difference scores. H0: The median difference is zero versus; H1: The median difference is positive ($p < 0.05$). The test statistic for the W-Test is W, defined as the smaller of W+ (sum of the positive ranks) and W- (sum of the negative ranks). If the null hypothesis is true, we expect to see similar numbers of lower and higher ranks that are both positive and negative (i.e., W+ and W- would be similar).

The statistics for the test are in the following table, which is made by SPSS 24. The two-sided test W value for the Asymptotic 2-tailed test is .017, which is smaller than the significant

evidence value. Normally the statistically significant evidence is at $p = 0.05$, to show that the median difference is positive (i.e., that repetitive behavior improves).

Table 6

Wilcoxon ranks

		N	Mean Rank	Sum of Ranks
Marriage 2 – Marriage 1	Negative Ranks	35 ^a	58.34	2042.00
	Positive Ranks	69 ^b	49.54	3418.00
	Ties	193 ^c		
	Total	297		

a. Marriage2 < Marriage1

b. Marriage2 > Marriage1

c. Marriage2 = Marriage1

If the research hypothesis is true, we expect to see more higher and positive ranks. In this study, more students changed their attitudes after the course activities (lecture, discussion and activities) as compared to before, i.e., W^+ much larger than W^- .

Like W-Test table shows, in this study, under the “Marriage2 – Marriage1” logic, $W^+ = 69$ and $W^- = 35$, 193 cases of students stay unchanged. As next must be determined is whether the observed test statistic W supports the null or research hypothesis. we determine a critical value of W such that if the observed value of W is less than or equal to the critical value, we reject H_0 in favor of H_1 , and if the observed value of W exceeds the critical value, we do not reject H_0 .

Table 7

W-Test and W-Value

	Marriage 2 – Marriage 1
Z	-2.387
Asymp. Sig. (2-tailed)	.017

The critical value of W can be found in the table above. In this study, there is statistically significant evidence at $p = .017$, which is ≤ 0.05 , to show that the median difference is positive. i.e., there are significant marriage attitude changes of the tested students after the course activities to determine.

Usually, SPSS uses the smaller “Sum of Rang” as the test (2042.00 in the rank table above). In this case, $Z = -2.3871$, $p = .017$ ($p < 0.05$), so it can be seen that “Marriage2 and Marriage1 scores are different”. However, if it is significant, the size is judged based on the “number” of changed cases. According to this study, $69 > 35$, that is, the note of Table b is established, which means “Marriage2 > Marriage1” is established. From another angle, the result of W-Test is based on “negative ranks” and the “Negative ranks” in Ranks table is note a: “Marriage2 < Marriage1”. Because Z is a negative value, so it should be “reject this hypothesis”. That is to say, a significantly negative Z value is rejected “negative ranks”. Thus, note b: “Marriage2 > Marriage1” is established.

4.3 More positive than negative attitude changes verified

When the options in the pre-test are arranged vertically, and the options in the post-test are arranged horizontally, the frequency of the tested students' options is filled in the corresponding table, then a cross-tabulation table can be obtained, as shown in the following table. After setting the data format, it can be observed that the diagonal row bolded number of the cross table represents the frequency of selecting the same option in the pre-test and post-test. For example, Option 1 is selected in the pretest, and Option 1 is also selected eight times in the post-test. In this way, the frequency of the same option - the frequencies of option 2, 3, 4 and 5 in both tests are 20, 63, 97 and 5.

Table 8

Cross tabulation of pre-test (Marriage 1) post-test (Marriage 2)*

		Marriage 2					Total
		Option 1	Option 2	Option 3	Option 4	Option 5	
Marriage 1	Option 1	8	1	1	0	0	10
	Option 2	1	20	11	5	1	38
	Option 3	4	9	63	34	3	113
	Option 4	0	2	12	97	13	124
	Option 5	1	0	4	2	5	12
Total		14	32	91	138	22	297

The cross table can be seen as two parts separated by the diagonal formed by the above-mentioned same option. The area upper right the diagonal - Normal black numbers present the frequency of relative negative attitudes towards marriage in the pre-test and relative positive attitudes in the post-test. For example, in the pre-test, 34 students in the third row of Option 3 choose Option 4 with a relatively more positive attitude in the fourth column of the post-test. Similarly, in the pre-test, 13 students in the fourth row of Option 4 choose Option 5 with the most positive attitude towards marriage in the post-test. If all the numbers in this region are summed up, the sum of students with a relatively negative attitude towards marriage in the pre-test and a more positive attitude in the post-test can be obtained, which is 69. That is, 69 students changed their attitudes towards marriage more positively in the post-test than in the pre-test.

In the lower-left area of the diagonal, the shallow gray number shows the frequency of choosing the relatively positive attitude to marriage in the pre-test and the relative negative attitude in the post-test. For example, in the pre-test, 12 students in the third row of Option 4 choose Option 3 with a relatively more negative attitude in the third column of the post-test. Similarly, in the pre-test, 9 students in the third row of Option 3 choose Option 2 with a more negative attitude towards marriage in the second column of the post-test. If all the numbers in this region are summed up, the sum of students with a relatively positive attitude towards marriage in the pre-test and a more negative attitude towards marriage in the post-test can be obtained, which is 35. That is, 35 students were more negative about marriage at the post-test than at the pre-test.

If a comparison is made between the lower-left (negative attitude change) and the upper-right (positive attitude change) areas of the cross-table, it is not difficult to conclude that in the group of students with attitudes change, the frequency of positive attitude change toward marriage after the participation of the course is more significantly higher than the number of negative

attitude changes, or in other words, it is almost twice the number of negative attitude changes ($69/35 \approx 1.97$).

5. Conclusion

Through central tendency analysis, it can be confirmed that the mean of students' attitudes towards marriage in the pre-test and post-test are 3.30 and 3.41, respectively, that is, 0.11 statistical differences can be observed. In frequency analysis and histogram description analysis, it is very to observe the intuitive distribution changes and trends of the above-mentioned differences in the pre-test and post-test of the five options. After the non-parametric double-correlation test on the non-continuous variable of attitude, it can be more accurately measured that the difference of students' attitudes towards marriage before and after the course can be statistically confirmed as significant by W value ($p = .017, < 0.05$). Finally, the magnitude and frequency of this statistical change in marital attitudes are more specifically and accurately explained through the corresponding analysis in the cross-tabulation. At this point, this study can explicitly negate Hypothesis 1 proposed in the research design and verify hypothesis 2. After participating in the course 'Eastern and Western Views and Values', students' attitudes towards marriage and willingness to assume marital responsibility are more positive.

It is worth adding that the significance of the conclusion of this study is to confirm and illustrate that educational practice can indeed influence and play a role in changing students' attitudes and opinions in university courses, at least in Perspective Development Courses. However, the case of this study is limited to marriage attitude, and the results of such attitude change strongly depend on the independent variables, namely, lecturers' teaching materials, case selection, teaching methods, teaching time, and thinking depth. Therefore, the conclusions of this study cannot be excessively deducted and covered in other areas without conditionalities. Moreover, whether students' attitudes and opinions on other social issues such as cognition of human nature, individualism, collectivism, aesthetics, pre-marital sex, homosexuality, etc. will also change through educational practice, or how and to what extent they will change, require specific exploration and answers from other studies.

6. References

- Bao, Y., Zhu, F., Hu, Y., & Cui, N. (2016). The research of interpersonal conflict and solution strategies. *Psychology*, 7(4), 541-545. <https://doi.org/10.4236/psych.2016.74055>
- Brehm, J. & Cohen, A. (1962). *Explorations in Cognitive Dissonance*. Wiley. <https://doi.org/10.1037/11622-000>
- Campling, N. C., Pitts, D. G., Knight, P. V., & Aspinell, R (2017). A qualitative analysis of the effectiveness of telehealthcare devices (i) are they meeting the needs of end-users? *BMC Health Services Research*, 17(1). 455. <https://doi.org/10.1186/s12913-017-2270-8>
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford University Press.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 58(2), 203-210. <https://doi.org/10.1037/h0041593>
- Glander, T. R. (1990). *Education and the mass media: The origins of mass communications research in the United States, 1939-1955* [Doctoral dissertation, University of Illinois at Urbana-Champaign]. IDEALS. <http://hdl.handle.net/2142/19051>
- Heider, F. (1958). *The Psychology of Interpersonal Relations*. John Wiley & Sons. <http://dx.doi.org/10.1037/10628-000>
- Hepworth, J. T., & West, S. G. (1988). Lynchings and the economy: A time-series reanalysis

- of Hovland and Sears (1940). *Journal of Personality and Social Psychology*, 55(2), 239–247. <https://doi.org/10.1037/0022-3514.55.2.239>
- Hovland, C. I., & Sears, R. R. (1940). Minor studies of aggression: VI. Correlation of lynchings with economic indices. *The Journal of Psychology: Interdisciplinary and Applied*, 9(2), 301-310. <https://doi.org/10.1080/00223980.1940.9917696>
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication And Persuasion: Psychological Studies of Opinion Change*. Yale University Press.
- Humphreys, M. S., & Schwartz, R. M. (1972). The statistical evidence for negative transfer in part-whole free recall. *Behavior Research Methods & Instrumentation*, 4(6), 287-291. <https://doi.org/10.3758/bf03207306>
- Kelman, H. C. (1958). Compliance, Identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution*, 2 (1), 51-60. <https://doi.org/10.1177/002200275800200106>
- Lewin, K., & Dorwin, C. (1951). *Field Theory in Social Science*. Harper. <https://psycnet.apa.org/record/1951-06769-000>
- Marrow, A. J. (1977). *The Practical Theorist: The Life and Work Of Kurt Lewin*. Teachers College Press. https://nanopdf.com/download/the-practical-theorist_pdf
- Meumann, E., & Lay, W. A. (2017). *The Great Soviet Encyclopedia* (3rd ed.). The Gale Group.
- Newcomb, T. M. (1953). An approach to the study of communicative acts. *Psychological Review*, 60(6), 393-404. <https://doi.org/10.1037/h0063098>
- Ritzer, G. (2011). *Sociological Theory*. McGraw-Hill.
- Sears, R. (1961). Carl Iver Hovland: 1912-1961. *American Journal of Psychology*, 74 (4), 638. <https://www.jstor.org/stable/i261858>
- Siegler, R. S. (1992). The other Alfred Binet. *Developmental Psychology*, 28 (2), 179-190. <https://doi.org/10.1037/0012-1649.28.2.179>
- Thomas, W. I. (1928). The behavior pattern and the situation. *Publications of the American Sociological Society*, 22, 1-13. https://brocku.ca/MeadProject/Thomas/Thomas_1927.html
- Thorndike, E. (1999). *Education Psychology: Briefer Course*. Routledge.
- Wickland, R., & Brehm, J. (1976). *Perspectives On Cognitive Dissonance*. Halsted Press. <https://doi.org/10.4324/9780203767672>
- Wundt, W. (1862) Beiträge zur Theorie der Sinneswahrnehmung. Leipzig: C. F. Winter. (The introduction, titled *On the methods of psychology*, is translated in: Classics in psychology ed. T. Shipley. Philosophical Library 1961.)

Research on the Design and Marketing of Online Learning Group Platform

Tsu-yeh Fan* Pin-Xun Li Jiong-Hao Huang Yu-Pei Hung Pei-Hsin Lai
Department of Commerce Technology and Management,
Chihlee University of Technology, Taiwan
*joef@mail.chihlee.edu.tw

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Abstract

In recent years, due to the popularization of digital technology devices, the cost and threshold of remote teaching have been reduced. However, although the cost of hardware construction has been reduced, the providers and recipients of digital content still cannot have a platform to match each other for specialized digital learning. Based the above phenomenon, this research attempts to create an online co-learning platform, "Learning Anytime", to provide a convenient and instant discussion platform for college students, and to create a high-quality practical teaching process. This platform uses practical courses as the teaching theme. It is expected to increase the learning experience of students, allow students to have a longer time for practical learning, and conduct synchronous mutual learning and interaction with students as the main body. "Learning Anytime" hopes to create a co-learning environment where teachers and students learn together, to increase students' willingness to learn, and to improve students' learning achievements.

Keywords: Adult Learning, Online Teaching Platform, Educational Technology, Co-Learning, Social Interaction

在线共学平台设计与营销之研究

樊祖焯* 李品勋 黄炯豪 洪羽霈 赖佩心
致理科技大学商务科技管理系
*joef@mail.chihlee.edu.tw

摘要

近年来因为数字科技装置的普及,使得实施远距教学的成本与门槛降低。但是虽然硬件的建置费用降低了,然而针对专属性的数字学习,数字内容的提供者与接收者仍苦无有一个平台能进行媒合。有鉴于上述现象,本研究尝试打造一个以大学教育为主的在线共学平台-「学无止尽」,提供一个大学生方便且实时的讨论平台,并且在平台上打造优质的实作教学流程进行搭配。本平台以实作课程作为教学主题,期望能够增加学生的学习经验,让学生有较长的时间进行实作学习,并以学生为主体进行同步式的共学互动。「学无止尽」希望能塑造一个以「教师与学生共同学习」的共学环境,提高学生的学习意愿,进而提高学生的学习成就。

关键词: 成人学习、在线教学平台、教育科技、共学、社群互动

1. 绪论

近年来因特网的蓬勃发展促使民众在许多生活层面上相当地便利，而因特网在教育上的运用形式也日趋多元。许多教育学者运用网络的特性来引发学生学习动机与兴趣。网络学习最重要的因素是它将个人和教学资源相互联系，而网络学习环境是一种新兴的学习趋势，可激发各种新的学习可能性。因特网的发展大大改善了远距教学的形式，也带来一个相互合作的学习新契机，并提供不限时间、跨越地理限制的学习机制及充份沟通互动的学习环境，藉由多媒体的呈现以及视讯传输的工具使用，提供同步与异步式的教学，让学习者有一个多重接受知识的机会。网络平等的特性、隐私性的对话环境及学习模式，在现今已成为辅助学习的一大利器，并使学习活动能采多样化进行。

有鉴于上述现象，本研究开发了一个在线共学平台，希望大学生与上班族皆可以透过在线平台的合作学习与群组互动来提高学习成效，同时本研究也拟定出有效的营销策略，让更多的人能上本平台进行学习，进而提升自身的知识。因此，本研究有以下三项研究目的：

- (一)、用简单的应用程序 (App) 接口让用户达到他们的需求，并且可以轻松方便的使用。
- (二)、排除外在环境的局限，帮助那些因为上班时间、年长者或没有管道学习的大学生与上班族都能够更便利的学习。
- (三)、让自主学习的民众有个良好且便利的学习管道，提供比传统教育更迅速方便的选择。

2. 文献探讨

本研究主要是以大学生在线学习与共学为主轴，希望藉由社群的方式让更多人能够有一个学习的地方，并且找到自己想学习的课程，达到自主在线学习及服务创新之目的。本研究以此平台的关键成功因素作为研究之重点，因此本研究首先将进行下列关键词的研究与探讨，包含「数字学习」、「在线教学平台」、「教育科技」、「共学」及「社群互动」。

2.1 数位学习

「数字学习」一词随着不同科技工具的发展有不同的诠释，例如：在线学习、网络学习、远距学习等（杨正宏，2008）。数字学习的发展已逾 40 年，初期主要应用在软件、在线学习及在线训练（黄国祯、苏俊铭、陈年兴，2012）。数字学习的前身为远距教学，主要是提供一个学习管道给无法上学却有学习需求的社会人士（刘仲矩、林宛儒，2015）。

数字学习是一种新的学习方式，有一系列的国际标准规范，在台湾亦在政府的政策下推行（曾丝宜等，2008）。在国家大方向的政策方面，台湾必须持续发展计算机及网络的建设以及在线数字学习基础、实施认证并且取消毕业学分限制，使数字学习在传统校园中被大幅度接受（郑明祥，2006）。陈伟泓（2020）认为在后疫情时代，「数字学习」因为疫情将由辅助教学的角色，转身成为疫情中主要的教学模式。

导入数字学习是组织推动变革的前奏、也是导入知识管理的雏型。一旦员工可以借助网络引进信息，学习专业知识，以及寻求帮助时，每个人产生的知识便能直接放在网络上。员工在网络上创新、学习，大家互相激荡，借助网络的运用，归纳出解决企业问题的理论，这种过程就是「知识创造」。

2.2 在线教学平台

远距教学是结合信息与通信技术，藉由现代科技突破空间限制而实施的教学，提供给学习者一个不需与老师当面学习的互动学习途径（杜瑞泽等，2013）。教学的目标是希望能让学生积极参与学习活动，来达成所设定的学习成效，然而政府多年来推动数字学习，也发现教学平台的建置并不等于学生学习成效提升，数字学习相对于传统课堂授课而言，教师对班级及学生的掌控相对的减低（顾大维，2005）。远距教学对于全球想要学习各国语言的用户而言，确实带来便利、多元、实时、互动等优势，但相对而言，也让从事在线教学的语文教师们，在技术、教学与沟通上需要迎接更多的挑战（林翠云，2013）。王梅玲与张艾琦（2019）对数字在职专班硕士生进行研究，发现当数字在职专班生自评的学习成效也会提高，与「评量课程平台与教材」的关联度最高。

远距教学虽可不受时空限制，但课后活动方面仍有许多窒碍，例如：作业缴交、成绩查询、师生及同侪间的互动等，因此如何适时提供远距教学教师的训练以及学生适当的教学与学习支持，是远距教学成功与否的重要因素(李忠谋、邱琼芳，1999)。以远距教学进行师资培训，教师无须到处奔波，只要坐在计算机前就能参与在线师资训练，并透过课程分享，教师们得以扩大见识。远距教学提供了多元化的学习管道，使得教育地区扩大，也可以达到学术交流、资源共享的目的(林振兴，2016)。远距可有效发展学生的学习以及考试表现，以及对学习内容较深层次的讨论，但一定要注意计算机技术层面的阻碍。教师有时经验不够，又无前例可循，所以在课程内容与实施方式上都面临了未知的困境与挑战(邱恩琦、潘璦琬，2009)。

网络学习带来了教学的新方向，因此需各教学单位开始设置网络学习平台，以满足与使用者在学习上的多重选择与多元学习，对于一直以来实行面授课程的老师而言，必定是一大挑战与困境。

2.3 教育科技

教育科技在质量的提升上一直背负着人们许多的期望，但经过数年的投入与研究，教育科技能不能在教育现场造成多方面的影响，还不确定(徐式宽，2018)。学习的信心通常需要较长时间的成功经验累积。班级中学习成就高的学生，会比学习成就低的学生，具有较高的学习动机与自我调节学习能力(魏丽敏、黄德祥，2001)。目前世界各国无不将数位学习视为培育人才，提升国家竞争力，以形塑国家竞争优势之重要关键。未来我们在面对开放竞争且充满机会的自由竞争市场时，也必须及早备妥面对挑战的因应之道(徐敏珠、杨建民，2006)。

教育科技是需要有基础知识。在自主学习时，学生必须要主动地、有目的地对于某个领域的数据进行搜寻，因此要先具备该领域的知识、包含概念与关键词等(苏媛，2001)。台湾带领儿童从知识内容与学习能力的着手，培养学生可以透过小组合作，结合学科将探讨问题的信息素养融入到课程之架构(林菁，2018)。科技资源要融入学习，本身就是一个非常复杂的流程，而且这个过程不能被简化。教育科技要能够融入在校园内，必须要克服许多问题，包括软硬件要能够安定稳定(林治强，2002)。

信息与网络科技不仅与教育不可分离，影响所及不仅会使教学方法多元化，教师与学生之互动方式也异于传统，对学习也产生了新的思维。无疑会对教学方式、教材形式与学习行为等产生革命性的改变。

2.4 共学

网络学习是一个具有前瞻性、开放性的概念，是一种建立在知识与信息基础上的学习观(刘明洲等，2007)。因建构主义的影响，传统教学的观念，已经由老师为主的授课与知识灌输方式，转为以学习者为中心的教学趋势(陈明溥等，2002)。林雯玉(2019)认为建立「学习共同体」是教育趋势，学生应从传统授课中的被动者释放为主动者，营造「共同学习、分享探索、交流与思考」的「协同学习」气氛。为了达到学习的效益，学习活动也特别注重师生、同侪与学习环境间的互动关系。信息科技已成为教学与学习上一个非常好的辅助工具(欧阳闇等，2007)。因此「科技运用」与「互动参与」是网络教学成功的两大关键(陈麒等，2019)。

因此，借着现代科技的辅助学习，创造出多重整合性学习形态，此种学习形态可以提供使用者有效地增加学生学习的机会，提高老师与学生之间互动(赖膺守等，2008)。另一方面，小学学童缺乏学习领域的基本知识，难免会影响知识的质量(王千幸，2003)。未来，学习的主权将从教师转移到学生，成为学生主动参与学习的教育思维(庄淇铭，2010)。戴弘政与苏秀妹(2019)认为随着在线学习平台盛行，在网络上实施同侪共学的活动具有许多的优点，最明显的一个好处就是不但保有原来面对面沟通的功能之外，还能让学生不受时空的限制，随时收受同侪回馈的意见，并可保留纪录供日后参考。

本研究认为，学生学习行为影响很多，除个人因素外，老师的教学、课程的构思、学习活动与学习的各项环境都可能会对学生的学习行为产生非常巨大的影响。在线学习不只可以让学生学到知识，老师同时也可增进其教学能力，因此在线学习实际上是形塑一个共学的环境。

2.5 社群互动

近年来，由于信息科技的蓬勃发展，缩短了时空的差距，提供了更多知识分享的机会，这些虚拟群组的成员分散在不同区域，藉由因特网，透过因特网学习的方式达到学习的目的，（游佳萍、郭峰渊，2005）。网络学习已成为未来学习的新方向，但由于国内网络大学的发展还不盛行，无可否认地必然暗藏许多问题必须解决（林甘敏、陈年兴，2002）。因此老师在上课时，除了维持学习者对于议题的讨论技巧外，必须要进一步的鼓励学生发展在使用概念联结与举例说明的技巧（游佳萍等，2015）。

而在互动的方面；因为网络的特性容易导致人际互动的不足，也有研究提出网络上的学习跟一般的教室上课最大的差别在其互动性不足（陈年兴、林甘敏，2001）。全球信息网的出现更丰富了教学媒体的风貌，并且扩大了媒体应用的多样性与可行性（岳修平，1999）。而在互动方式上有研究指出，若是同步沟通不足，会造成学生感到失望并且不想参与互动，反之，学生会觉得有需要使用同步沟通（李青蓉，2000）。成人学习大部分发生在日常生活当中，而且已迈向终身学习的趋势中。何青蓉（2021）认为社群媒体的特性是在课程与教学设计上可参考的指标性原则，而行动上网已经成为普遍的学习方式。

本研究认为群组透过在线讨论，透过电子媒体进行实时教学与学习已经超越传统教与学的空间，可利用互动学习的经常使用，打造一个知识殿堂。

综合上述文献内容，本研究提出下列结论：学习前若缺少了好的学习方法，学习中将会产生许多不必要的麻烦以及困难，而业者也看准现在网络平台的蓬勃发展，因此透过各大电子商务的方式来经营出全新的商业模式，这将是未来新一代的经济商机。本研究便是看到了这个商机，因此希冀设计一个在线共学平台。

3. 研究方法

3.1 研究方法介绍

本研究从文献探讨的结果发现，台湾目前学习环境并不完善，所以大多数人都愿意利用在线平台来学习。本研究因此研发了「学无止境」在线共学平台来协助想学习但不知该如何下手的人，本平台操作简单，不论男女老少都可轻松上手。配合 5G 时代即将来临，藉由互联网的发展，提供最好的服务质量。不过为了要进一步了解本研究所发展之平台在市场上是否真的需求或商机。因此本研究在研究方法上将采取评估研究法 (Evaluation Research)。评估研究为一种透过达成评鉴与改善服务方案的研究方法，该方法主要目的为探讨一个方案的过程、结果甚至是效益分析。本研究之主要目的在于希望透过商业模型的创新与设计发展出合适的平台以满足市场供需，因此可以视为发展方案的一种。

本研究将以此概念先透过次级数据法，根据目标市场位置，经由调查消费者使用频率，来推估出市场大小及营收预估。再使用次级数据分析找寻相关学理依据与进行产业情报分析，接下来透过上述观点，进一步发展出系统概念与营运流程。之后依上述资料进行统计后，再发展出具体的 7P 营销战术，并提出结论与建议以利后续的研究者进行研究，详细的研究流程介绍将透过以下内容进行说明。

3.2 研究步骤

(1)、次级资料分析—文献探讨

透过次级资料分析搜寻过去相关研究，且从其中之资料整理学理依据，来探讨平台是否具有商机，并进一步分析具体的产品与系统概念。

(2)、系统产品介绍

为了提供消费者更好的服务，因此本研究先透过文献探讨之结果发展出产品系统架构图，以利后续的程序撰写。而在开发工具上则是透过 App Inventor 软件来撰写（邓文渊，2016），以提供使用者最佳的服务。而在功能模块的流程设计上，透过 App 平台的方式在线整合供需双方的创新营运模式进而达到需求者、供给者以及本平台三赢的目标。

(3)、次级资料分析—市场环境分析与竞争分析

本研究透过次级数据找寻与产业相关的情报，进一步利用 PEST、五力分析、SWOT 分析、竞争者情报分析、STP 分析等分析工具进行整理以了解现今市场环境及产业趋势。

(4)、营销策略

在进行市场环境分析后，本研究将进一步拟订出 7P 营销策略，针对使用者进行短期之营销策略规划以提升平台知名度与整体流量。具体策略内容包括：产品策略、价格策略、通路策略、推广策略、人员训练策略、有形展示策略及服务流程等七项策略。

(5)、财务规划

本研究为了确保未来营运上的财务状况健全，因此在营销 7P 战术拟定后做进一步的财务规划，具体内容包括：营收预估、资本形成以及预估未来三年损益表等内容。

(6)、结论

在上述研究流程后，本研究于最后提出结论。具体内容包括：本研究之结论、学术与实务意涵、研究限制及给予未来研究者之建议。并希望透过上述内容给予未来投入平台经济的工作者或是相关行业之业者更多建议。

4. 系统产品介绍

4.1 系统概述

本平台命名为「学无止尽」，主要意涵是希望使用者透过本平台可以没有时地限制地学习。「学无止尽」主要锁定 18-30 岁的学生以及因工作关系无法学习的大学生及上班族，打造一个远距在线教学平台，以满足供需双方的需求。本系统之接口设计浅显易懂且能符合所有年龄层适用，不论在何时何地都能实时地在在线学习，并可使用手机、平板和计算机等载具开启这个在线教学平台以便进行实时在线教学来学习。本系统分为学生端以及老师端，并具有后台管理系统。本研究结果发现，如果远距教学技术能广泛的运用在学习者的生活上，能使更多的人体验到不一样的学习感受，这将是一大新兴市场。

4.2 系统架构

图 1 是「学无止尽」的系统架构图，由架构图可知客户端及伺服器端。



图 1 系统架构图

4.3 画面详细说明

4.3.1 系统流程

据系统流程图（如图 2）可知，本系统分别有学生端以及老师端，学生端的使用者登入后即可进入到首页画面，可以搜寻想要找的课程或书籍，并选择要进行上课还是进行练习。老师端即可上传教材以及练习题目，使双方都可以轻松的使用本产品。

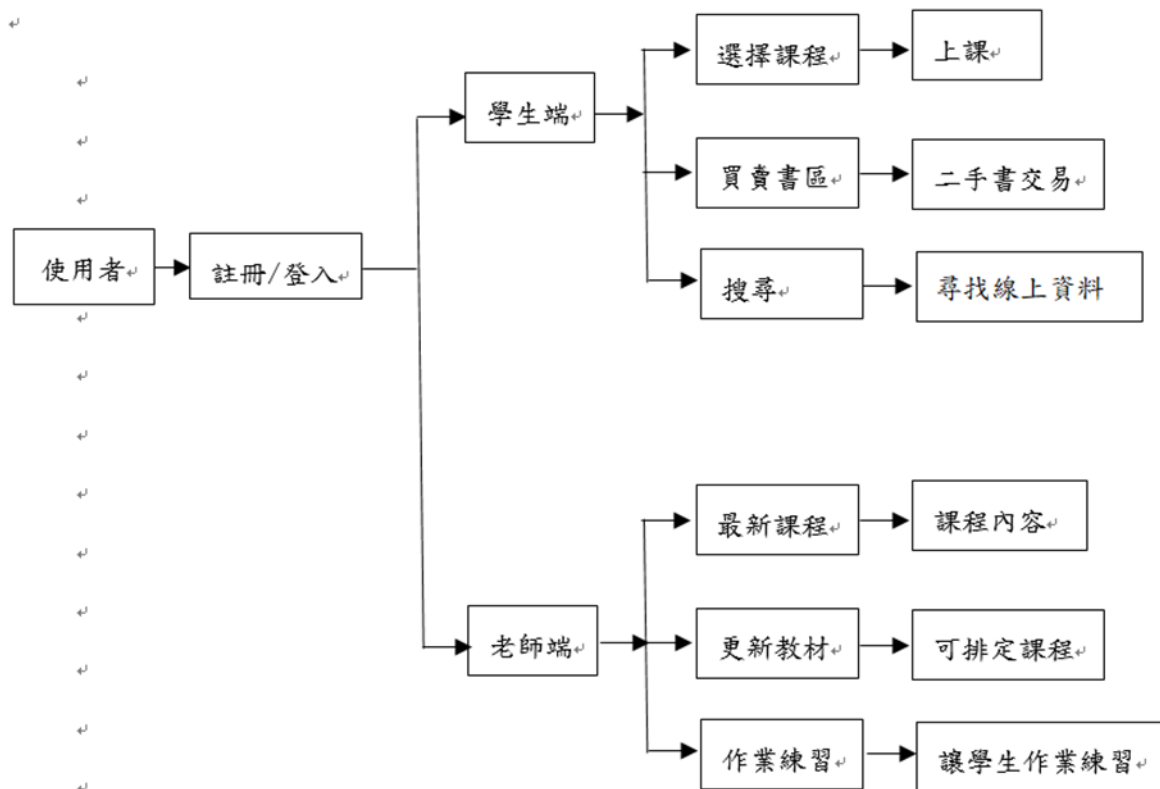
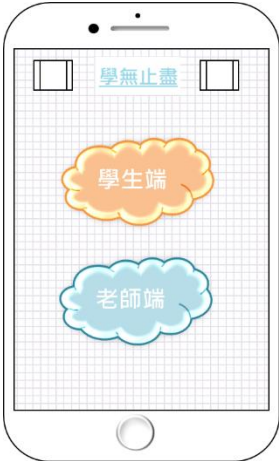


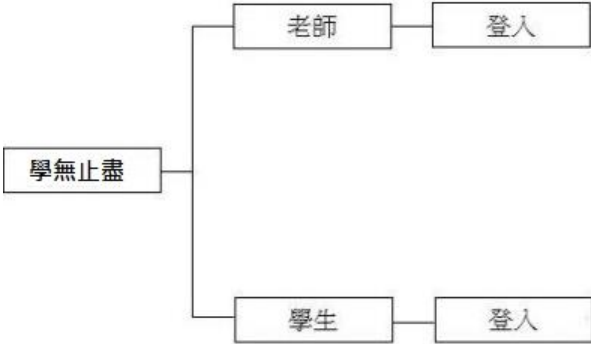


图 2 系统流程图

4.3.2 功能模块介绍

「学无止尽」平台需要登入。以下为登入接口以及登入流程图。根据使用者角色选择老师或学生选择登入，详如表 1。

表 1 系统登入接口操作流程

1.第一次进入系统	2.注册会员	3.登入画面
在登入之前分成学生端及老师端	点选会员注册后之画面。	选择会员登入后之画面。
		
4.进入首页	5.登入介面流程图	
登入或注册完成后之首页画面		

资料来源：本研究自行制作

「学无止境」平台第一功能为【学生端】。学生可在此在线搜索想要学习的课程，购买二手书，还能不用退出 App 直接在线搜寻。详如表 2


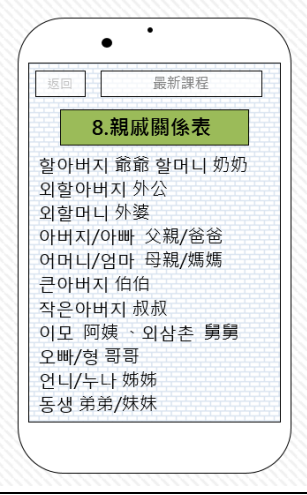
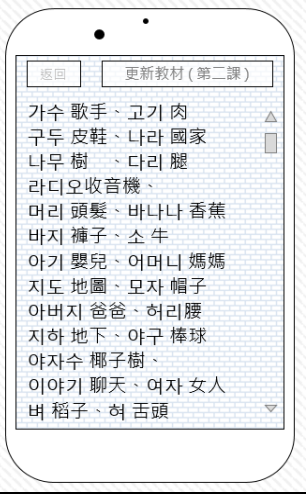
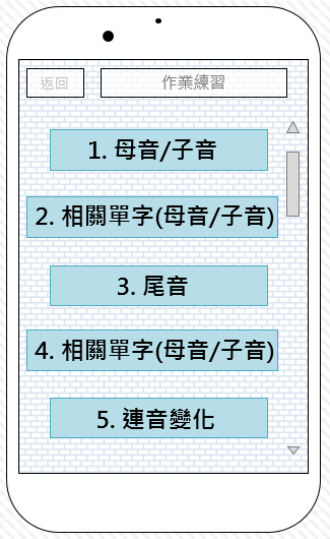

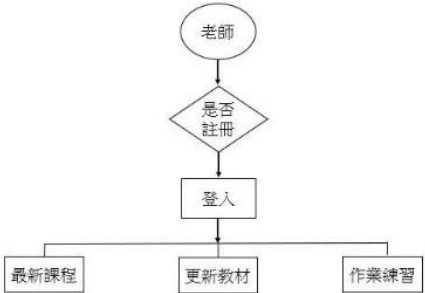
表 2 学生端登入后接口操作流程

1. 学生端主画面	2. 选择课程	3. 课程画面
登入学生端后之首页画面。	点选想学习之课程即可在线教学。	进入课程内之教程画面。
		
4. 买卖书区	5. 搜寻	6. 学生端运作流程图
进入买卖书区后之画面。	点选想学习之课程即可在线教学。	
		

数据源：本研究自行制作。

「学无止境」平台第二功能为【老师端】。老师可在此上传最新课程或排定未来课程，以及出作业给学生练习。详如表 3

表 3 老师端登入后接口操作流程

1.老师端主画面	2.最新课程	3.更新教材
登入老师端后之首页画面。	此为教师上传课程后之画面。	教师可在这里排定未来要教学的课程。
		
4.买卖书区	5.搜寻	6.老师端运作流程图
教师可在此出作业让学生练习。	学生写作业练习之画面。	
		

数据源：本研究自行制作。

5. 市场环境分析与竞争分析

5.1 市场特性与规模

本研究采用 PEST 分析、Porter 五力分析、SWOT 分析来分析市场环境分析与竞争分析，再用 STP 分析法，区隔出「学无止尽」的独特市场区隔，并藉由 STP 分析提出其商品定位的价值主张，以便能够做为未来拟定营销策略之参考。

(1) 大环境趋势情报分析

就外在产业环境而言，由 Aguilar (1967) 提出的 PEST 分析，以政治、经济、社会及科技四大面向分析。就分析数据看来，现有的产业外在环境极有利于「学无止境」的发展。有关政治法律、经济消费、社会人口与科技技术的分析如表 4。

表 4 大环境趋势情报分析

政治/法律趋势情报	经济/消费趋势情报
1. 在线教学平台与教师签订劳动合同，如教师违反法律，平台须负起责任。 2. 教师须持有执照，并且须有一定水平，避免触犯刑法第 339 条诈欺罪。 3. 网站业者于网络上提供各种书籍供人下载，如未事先取得该书籍著作权人之同意，则会触法。	1. 多数的消费者会优先选择免付费的交互式社群平台、软件做使用，符合经济需求。 2. 许多成年人重视教学质量，用 App 购买的课程通常较具有保障性，所以很多人都愿意花钱购买课程来学习。 3. 现代人需要考许多证照，但苦于没地方学习，本平台即可解决这个问题。
社会/人口趋势情报	科技/技术趋势情报
1. 台湾对小孩的教育十分重视，从小就开始培养。 2. 家长在小孩还小的时候就开始训练其学习的能力。 3. 调查指出，想学习的成年人比率高达 45%。	1. 现在是 5G 时代，台湾的网络已经可以实现在线的互动，各种在线产业兴起。 2. 运用大数据整合、分析目标客群习惯搜寻信息，推荐相关的内容。 3. 5G 即将来临，消费者可以享受更高的音质和画质来学习。

(2) 产业情报分析

Porter (1990) 提出五力分析，本研究将本系统与市面上的教学产业竞争对手进行分析如图 3。本平台为成长期，而在当今产业内影响因素的分析中，由其五种竞争作用力的分析中可知，由于本平台主要以 App 接口来经营。且因 App 操作简易，其他业者容易以相同模式进行模仿，故潜在竞争者的威胁偏向中等。也因远距教学的完整学习平台较少，因此市场进入障碍高，所以现有竞争者的竞争力相对来说是低的。因为所需的成本基本为人工，故讲师对于课程售价的决定权较低，因此供货商的议价能力为低。目前市场上的实体课程多且性质相同，所以替代品威胁相对来说是高的。此外消费者无法自主决定和商讨价格，所以消费者议价能力相对来说是低的。未来随着营业规模的扩大，「学无止境」因有更大知名度的关系，所以潜在竞争者以及替代品的问题可随之改善。

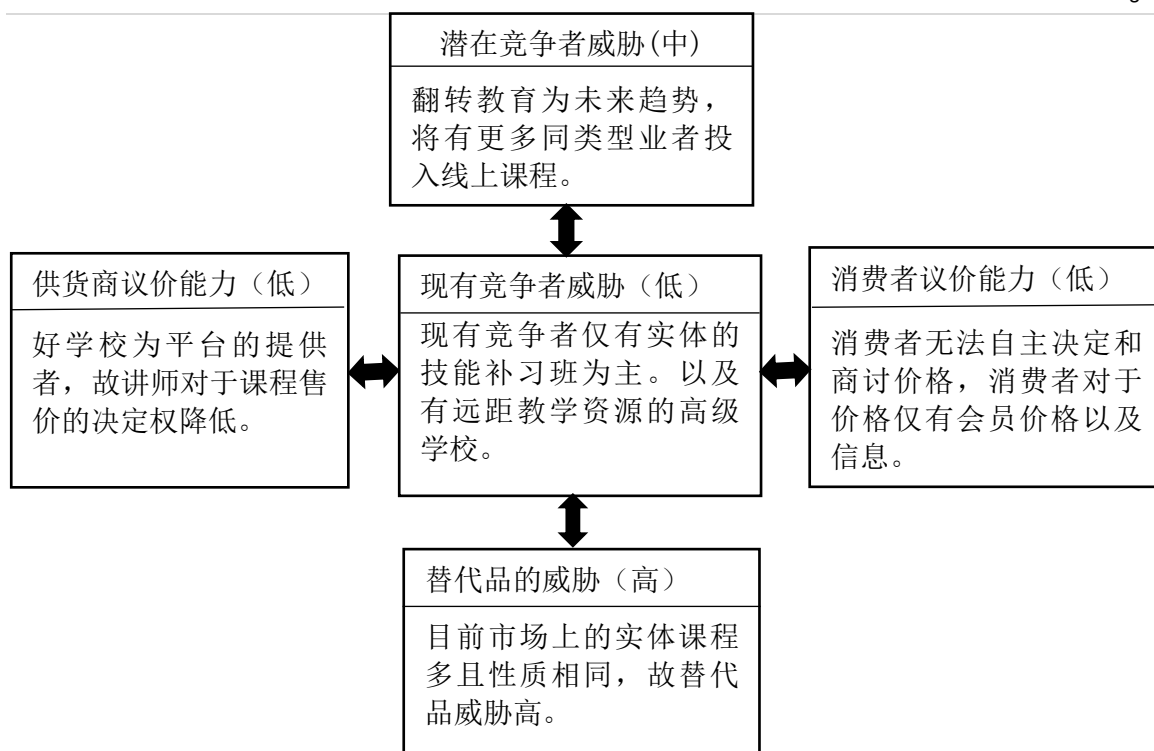


图 3 五力分析图

(3) 竞争者情报分析

Porter (1990) 提出竞争者分析，以便厂商针对竞争者的策略提出本身的营销策略。本研究将本系统与市面上的教学业者做竞争对手分析如表 5，本系统的确较现在其他的教学业者占较多竞争优势。

表 5 竞争者分析表

	补习班	家教	「学无止境」
教学方式	多对一	一对一	多对一/一对一
时间性	固定开课时间	时间自行协调	不限制时间
开课课程	各科系固定科目	自行找家教	各种课程不限制
方便度	低	中	高
付费	有	有	有

(4) SWOT 分析

Wehrich (1982) 提出 SWOT 矩阵策略配对法分析，透过此竞争态势分析模式，可以评价企业内部的优势 (Strengths) 和劣势 (Weaknesses) 与外部竞争市场上的机会 (Opportunities) 和威胁 (Threats)。「学无止境」将善用机会与优势、化解机会及避免劣势，针对其所面临的内、外在环境加以检视，并辨识出影响竞争力的主要因素。SWOT 分析详如表 6 所示：

表 6 SWOT 分析

短期目标(第一年): 善用股东与社会资源, 达到单月收支平衡, 维持净现金流入。 中期目标(第三年): 维持与别的在线教学平台相较优良的质量, 让更多人下载此产品。 长期目标(第五年): 引入更多优质教师, 突破经营的门坎, 成为品牌第一的在线学习平台。		O机会	T威胁
		1. 数字技术提供更多元、更多样、更多量的信息, 提升学习的效率。 2. 让学习者在数字环境下学习, 可刺激情境式学习成效。	1. 现在市面上有许多的数字学习平台, 都主打不同的功能与特色。 2. 许多人还是习惯面对面的授课, 不愿意尝试在线教学。
S 优势	1. 可以全年无休的学习, 并无空间限制。 2. 素材的整合给予学习者虚拟现实的学习环境。 3. 让学习者在虚拟环境中进行学习。	(SxO) 发展策略	(SxT) 去除策略
		1. 以学习者为中心, 强调学习者安排、主动求学的学习模式。 2. 提升特殊专长学生或特殊教育学生的学习发展机会。	1. 让学习者了解并建立数字伦理的概念。 2. 师生间的互动学习, 若没有好好利用平台, 会使平台功能衰退, 丧失原本设计的功能性。
W 劣势	1. 学习者需要较高专注。 2. 可能因为使用网络而造成学习者分心。 3. 没有类似图书馆的学习氛围。	(WxO) 补足策略	(WxT) 放弃策略
		1. 纪录仅供学习脉络, 无法纪录行为。 2. 老师能带领学生使用, 知道问题就可立即解决。	1. 偏乡人力资源不足的困境, 规模不够, 导致维护成本高。 2. 与电信业者结盟, 让全台客户利用本平台学习。

5.2 STP 定位

(1) 市场区隔

Kotler and Keller (2015) 提出 STP 分析, 现今市场上教学产业的机构和平台非常多, 而本服务可解决那些对因自身关系而无法学习的顾客, 可用此平台在线学习, 系统会有专属人员为您服务。用最低的价钱得到最良好服务。

(2) 目标市场

本研究将广大市场以区隔变量分类之后, 接下来就要评估区隔后的每一个市场; 哪一个市场将会是「学无止境」最合适的目标市场, 如表7所示。「学无止境」针对喜欢学习与教学的大众提供一个有机会学习和教学的机会, 让他们可以有更好的学习; 「学无止境」平台提供学习各种课程, 也可以在线教学所有课程, 让消费者享有更好质量的学习平台。

表 7 目标市场

市场区隔变量	项目	分析
人口统计变数	年龄	18-30 岁
	收入	男生、女生
	职业	大学生、上班族
地理变数	区域分布	全台湾
	生活型态	喜欢利用智能型手机来并且爱学习的人
心理变量	动机	想吸收更多知识、喜爱教课
	使用时机	无时无刻想学习
行为变量	追寻利益	想要更好的学习环境也想找到更好的家教

(3) 商品定位

「学无止境」提供给各种年龄层想学习的人，透过这个平台可以学习各种知识，让人「活到老学到老」，透过平台上的老师评价也可知道哪位老师的评价好，就可以预约此教师上课也可以在平台分享学习进度。本研究将商品定位为下列四点：

- 1、在线教学平台让使用者可以利用空闲的时间快乐学习。
- 2、当人们不想出门上课就可以拿出平板、手机和计算机进行在线学习。
- 3、市场上几乎都是上单门课程，而本平台可以多元学习更多知识。
- 4、可吸引各个年龄层，也可让同一年龄层的消费者一起快乐学习。

6. 营销策略拟定

依据上述研究中对内外部环境分析以及以 STP 找到目标客群后，本研究依据郑启川等（2013）的研究提出如何进行 7P 营销策略，本研究对消费者行为、内/外在的环境及竞争对手做了调查分析后，拟订出 7P 营销策略，针对使用者进行短期之营销策略规划，并分为 7P 拟定营销策略如下：

6.1 产品策略

为了让使用者在使用「学无止境」时能够享受更完整的学习服务、更清楚自己需要学习的部分，以及有更完整的需求服务，本研究拟定下列四项之具体产品策略：

- (1)、管理账户：使用者登入后如有不定时的优惠方案，会以简讯通知账户。
- (2)、学习测验：可提供使用者了解其自身之优势能力以及劣势，有助于使用者了解自己需要加强科目。
- (3)、二手书籍：学生在本平台可买到比网络上更低廉价格的书。
- (4)、历届试题：学生可以在平台练习各科目会考、学测、指考等历届试题。

6.2 价格策略

「学无止境」的营业收入来源主要分为两个部分，分别为专属会员收入与广告商收入，现分述如下：

(1)、会员面

「学无止境」将使用者分为一般会员及专属会员，而本研究将针对专属会员进行价格策略。专属会员将采取年费制度，一经缴费开通后，即可体验更完整的功能，如：学习测验、历届试题……等服务，也可移除在使用此 App 时出现的任何广告。目前专属会员采月、季、年费的方式收费，分别为\$10/月、\$25/季及\$80/年。

(2)、厂商面

「学无止境」将提供各大企业进行广告刊登，经后台工作人员审核确认此项广告无触及法律，即可在网站上进行刊登。本平台依据企业需求及使用者点阅与流量多寡订定分级收费标准。因为本平台初期知名度不高，所以收费比照主流媒体平台的六成。

6.3 通路策略

由于科技日益发达，且本研究的产品为 App 平台，为了方便使用者下载，并迅速抢占市场，故将采取零阶通路，目前主要的通路策略有以下五种：

- (1)、手机商店下载 App (App Store /Google Play)。
- (2)、各大入口网站关键词搜寻链接。
- (3)、知名社群网站媒体设定相关链接。
- (4)、学校相关科系 QR Code 扫描宣传分享。
- (5)、合作广告企业机构。

6.4 推广策略

「学无止境」因正值导入期，所以在营销初期首要工作就是要提高知名度，将利用各网站媒体及广告链接置入性营销的手法，并适当提供使用者体验，在短时间内提高知名度、满意度，提高使用率，并阻止竞争者加入市场。本研究将使用平台整合因特网中分散的信息，让用户分享信息、意见交流。故将利用以下三点策略来推广：

- (1)、透过学校网页推广，让学生观看浏览。
- (2)、校内大型活动参与，于活动之余推广该平台。
- (3)、入班宣传，邀请使用者一同了解该平台之效益并增加学生下载意愿。

6.5 人员训练策略

本研究将客服人员区分为咨询人员与营销人员，观察市场顾客趋势针对客户需求提出产品功能不完善之处以配合系统开发作业；为顾客在使用产品时遇到的技术层面问题做解答，相关系统与产品兼容性问题将回报至测试人员协助改善问题。人员训练将聚焦于以下四种人员进行训练：

- (1)系统人员：定期软件维护，掌握系统后台，以及持续更新系统。
- (2)营销人员：针对客户的需求，提供有效益的产品介绍。
- (3)测试人员：系统功能测试，回报系统缺失与问题。
- (4)咨询人员：熟悉本产品的功能与理解客户问题点并解答。

6.6 有形展示策略

有形展示是指消费者在购买和享用服务之前，会根据那些感知到所提供的信息而对服务产品做出判断。故「学无止境」在经营初期，将透过使用者的口碑营销，并结合现有资源、锁定目标客群，利用因特网推广的方式，推动此平台之整合、带动平台之发展，整合生涯规划系统让用户能够更清楚自己的生涯规划，并拟订以下三点策略：

- (1)、专业服务流程以及实际操作。
- (2)、与学校合作推行活动。
- (3)、参加公益活动，以提高曝光度。

6.7 服务流程策略

现今在线学习平台非常盛行，许多消费者将更能接受在家自主学习，因此「学无止境」以近年来的消费者需求提供三项服务策略：

- (1)、使用者可透过操作 App 简单便利地学习。
- (2)、使用者在学习途中还可以跟教师讨论自己不懂的问题，达到双向互动。
- (3)、能在本平台找查询到丰富的资源，让使用者了解自己的优势与劣势。

7. 结论与建议

随着时代的演进，科技不断的创新改善了民众生活。「学无止境」是一项结合众多生活应

用的学习平台, 提供良好服务, 以提高客户的满意度与忠诚度, 进而提升获利, 因此, 本系统的市场占有率及顾客的重复使用意愿, 是系统永续经营的目标。「学无止境」期望让使用软件的民众在取得信息后, 对于社会能有更积极的参与、生活更加有规划, 以达到「学无止境」的目标, 抓住用户的心, 再藉由使用者需求, 使得产业界对本创业企划案产生需求, 符合现代创新服务之趋势, 对经营者及使用者形成双赢局面, 本平台也会利用社群的力量推展出去, 就目前产业现况分析, 此时正是投入之最佳时机。

本研究针对平台中所面对之相关问题进行了相对应的解决方案, 就由以下解决方案来对平台进行改善及优化, 希望可以提供更加及优质的服务, 方案如下:

- 一、藉由平台中的聊天社群及讨论区的功能, 「学无止境」可完全使用在线的功能将用户不懂的问题跟在线用户讨论, 与其他相同使用者进行想法交流。
- 二、「学无止境」制作一个不同科目主题分类的社群, 让各个使用者可以依照不同的分类标签快速及有效的找到自己感兴趣的课程来进行学习及讨论。
- 三、因应青少年及青壮年使用智能型手机逐年上升趋势而产生, 「学无止境」配合自我呈现技术结合服务创新, 让用户可以对于自己课程进度瞭若指掌。

8. 参考文献

- 陈年兴、林甘敏 (2010)。网络学习之学习行为与学习成效分析。《信息管理学报》, 8(2), 121-133。 <https://doi.org/10.6382/JIM.200201.0121>
- 陈明溥、庄良宝、林育圣 (2002)。建构式网络学习活动成效之探讨。《数字学习科技期刊》, 4(2), 23-37。 <http://lawdata.com.tw/tw/detail.aspx?no=41352>
- 陈伟泓 (2020)。后疫情时代, 如何有效学习?。《点教育》, 2(2), 1-3。 <https://www.airitilibrary.com/Publication/alDetailedMesh?docid=P20200409001-202012-202101180014-202101180014-1-3>
- 陈麒、高台茜 (2019)。翻转教学应用于偏乡网络课辅小学高年级数学之成效。《当代教育研究季刊》, 27(2)期, 1-37。 [https://doi.org/10.6151/CERQ.201906_27\(2\).0001](https://doi.org/10.6151/CERQ.201906_27(2).0001)
- 戴弘政、苏秀妹 (2019)。探究过程导向式教学法应用于在线学习平台对大专护理学生学习英语写作成效与满意度之研究。《长庚人文社会学报》, 12(1), 1-54。 <https://doi.org/10.30114/CGJHSS>
- 邓文渊 (2016)。《手机应用程序设计超简单—App Inventor 2 数据库专题特训班 (第二版)》。碁峰信息。
- 杜瑞泽、邱淑萍、庄立文、朱维政 (2013)。远距教学之在线学习成效影响因子之研究。《文化创意产业研究学报》, 3(4), 157-166。 [https://doi.org/10.6639/JCCIR.201312_3\(4\).0004](https://doi.org/10.6639/JCCIR.201312_3(4).0004)
- 欧阳闇、尹玫君、张珏菁 (2007)。从理论到实作—谈职前教师信息科技融入教学的课程设计及其实效。《课程与教学季刊》, 10(1), 97-110。 <https://doi.org/10.6384/CIQ.200701.0097>
- 顾大维 (2005)。从数字教学平台使用的迷思, 看教学设计在数字学习应扮演的角色。《教育研究月刊》, 131, 118-126。 <http://ericdata.com/tw/detail.aspx?no=47380>
- 何青蓉 (2021)。社群媒体在成人教学上的应用初探。《科技博物》, 25(1), 5-25。 <https://doi.org/10.6432/TMR>
- 黄国祯、苏俊铭、陈年兴 (2012)。《数位学习导论与实务》。博硕文化。
- 教育部 (2001)。《专科以上学校实施远距教学作业规范》。全国法规数据库。
- 赖膺守、张原豪、刘明宗、游宝达 (2008)。支持知识建立之网络学习环境设计及其实施成效。《课程与教学季刊》, 11(1), 1-19。 <https://doi.org/10.6384/CIQ.200801.0001>

- 李忠谋、邱琼芳 (1999)。远距教学环境：支持系统的发展与评估。《科学教育学报》，79(1)，49-69。 <https://doi.org/10.6173/CJSE.1999.0701.05>
- 李青蓉 (2000)。建立成人网络学习之学习模式。八九学年教育部异步网络课程建置中心研究计划成果发表会，国立台湾大学。
- 林甘敏、陈年兴 (2002)。网络大学学习问题探讨。《信息管理研究》，2(4)，65-85。 [https://doi.org/10.6188/JEB.2002.4\(2\).03](https://doi.org/10.6188/JEB.2002.4(2).03)
- 林治强 (2002)。以最佳情境落实信息融入教学。《师友月刊》，423，21-24。 <https://doi.org/10.6437/EM.200209.0021>
- 林振兴 (2016)。华语师资培育与远距教学。《华文世界》，117，122-123。 <https://www.airitilibrary.com/Publication/alDetailedMesh?DocID=10170855-201606-201610050029-201610050029-122-123>
- 林菁 (2018)。小学探究式信息素养融入课程之研究：理论与实践。《教育数据与图书馆学》，55(2)，103-137。 [https://doi.org/10.6120/JoEMLS.201807_55\(2\).0004.RS.CM](https://doi.org/10.6120/JoEMLS.201807_55(2).0004.RS.CM)
- 林雯玉 (2019)。共学，共好。《师友双月刊》，616，39-42。 [https://doi.org/10.6437/TEB.201910_\(616\).0007](https://doi.org/10.6437/TEB.201910_(616).0007)
- 林翠云(2013)。华语远距教学实务与模块化教材设计。《中原华语文学报》，11，1-33。 <https://doi.org/10.30107/CYJTCSL>
- 刘仲矩、林宛儒 (2015)。企业员工数字学习文化认知类型之研究。《数位学习科技期刊》，7(3)，83-104。
- 刘明洲、蔡蕙芳、陈立辉(2007)。网络学习历程中的解题思考活动研究。《因特网技术学报》，8 (2)，179-183。 <https://jit.ndhu.edu.tw/article/view/359>
- 岳修平 (1999)。网路教学于学校教育之应用。《课程与教学》，2(4)，61-76+148。 <https://doi.org/10.6384/CIQ.199910.0061>
- 邱恩琦、潘璦琬 (2009)。应用远距学习于问题导向教学模式之文献回顾。《医学教育》，13(3)，141-153。 [https://doi.org/10.6145/jme.200909_13\(3\).0001](https://doi.org/10.6145/jme.200909_13(3).0001)
- 苏媛 (2001)。网络环境中的资讯行为一理论与模式的讨论。《国家图书馆期刊》，90(2)，163-180。
- 王梅玲、张艾琦 (2019)。数字学习硕士在职专班研究生在线学习、图书馆使用与学生自评学习成效之研究。《图书馆学与信息科学》，45(1)，36-64。 <https://jllis.glis.ntnu.edu.tw/ojs/index.php/jllis/article/view/749>
- 王千幸 (2003)。以「网络同侪教学」建构「网络学习社群」之行动研究。《师大学报：科学教育类》，48(1)，119-142。 [https://doi.org/10.6300/JNTNU.2003.48\(1\).06](https://doi.org/10.6300/JNTNU.2003.48(1).06)
- 魏丽敏、黄德祥 (2001)。国中与高中学生家庭环境、学习投入状况与自我调节学习及成就之研究。《中华辅导学报》，10，63-118。 <https://doi.org/10.7082/CARGC.200109.0063>
- 徐式宽 (2018)。教育科技与教育实践间的差距及省思。《清华教育学报》，35(2)，71-103。 [https://doi.org/10.6869/THJER.201812_35\(2\).0003](https://doi.org/10.6869/THJER.201812_35(2).0003)
- 徐敏珠、杨建民(2006)。国高等教育之數位学习发展策略分析。《教育学报》，26，191-214。 <https://doi.org/10.6450/ER.200606.0191>
- 杨正宏 (2008)。台湾高等教育数字学习现况与展望。《数字学习科技期刊》，1(1)，1-12。 http://210.240.194.115/ntcudct_courses/multimediasign/resources/7_web/10415/NIT104110_%E4%BD%95%E5%AE%9C%E6%B4%A5/01_%E6%95%B8%E4%BD%8D%E8%AB%96%E6%96%87/%E4%B8%AD%E6%96%87/week04_%E5%8F%B0%E7%81%A3%E9%AB%98%E7%AD%89%E6%95%99%E8%82%B2%E6%95%B8%E4%BD

- %8D%E5%AD%B8%E7%BF%92%E7%8F%BE%E6%B3%81%E8%88%87%E5%B1%95%E6%9C%9B.pdf
- 游佳萍、张玲星、黄冠男(2015)。以概念图方法探讨网络群组学习者的知识建构。《*中华民国信息管理学报*》，22(1)，31-54。 <http://jim.johogo.com/pdf/2201/JIM-2201-02-fullpaper.pdf>
- 游佳萍、郭峰渊（2005）虚拟工作组发展过程之研究。《*信息管理学报*》，12(2)，81-101。
<https://doi.org/10.6382/JIM.200504.0081>
- 曾丝宜、林育玫、庄忆晴、吴茹蕙、李翔栋（2008）。数字学习系统设计原则之研究——以故宫e学园为例。《*图文传播艺术学报*》，5（1），211-224。 <https://doi.org/10.29886/NTUADGCA.200805.0022>
- 郑明祥 (2006)。《*澳洲高等教育数字学习对我国的启示*》。[硕士论文，暨南国际大学]。华艺。 <https://www.airitilibrary.com/Publication/alDetailedMesh1?DocID=U0020-2806200706340100>
- 郑启川、赵满铃、洪敏莉 (2015)。《*赢在企划专业的起跑点：TBSA 商务企划能力进阶检定学习手册*》。前程文化。
- 庄淇铭 (2010)。网络学习的优势及盲点。《*师友月刊*》，512，16-21。 <https://doi.org/10.6437/EM.201002.0016>
- Aguilar, F. (1967). *Scanning the Business Environment*. Macmillan.
- Kotler, P., & Keller, K. L. (2015). *Marketing Management*. Prentice Hall.
- Porter, M. E. (1980). *Competitive Advantage: Creating and Sustaining Superior Performance: with a New Introduction*. Free Press.
- Wehrich, H. (1982). The SWOT matrix-A tool for situational analysis. *Journal of Long Range Planning*, 15(2), 54-66. [https://doi.org/10.1016/0024-6301\(82\)90120-0](https://doi.org/10.1016/0024-6301(82)90120-0)

Current Situation of Chinese Teaching in Oversea Chinese's Private School in Chiangrai

Aun Khamkeaw
Pornpikul Pittaya School Yunhua Vocational College
Loujiankun0068@gmail.com

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Abstract

In order to better understand the Chiang Rai Chinese School, this article studies the development of the Chiang Rai Chinese School. Through the questionnaire survey and sample analysis of 15 Chinese schools in Chiang Rai, I learned about the basic situation of Chinese schools, teachers and students, and the difficulties faced by Chinese schools and the difficulties of running schools. The collected data is analyzed by Docker statistical data analysis. Introduce the current situation of Chinese schools at all levels, existing problems and specific suggestions, and provide Chinese school leaders and relevant government departments with references for the management and understanding of Chinese schools.

Keywords: Chiang Rai, Chinese Minor School, Chinese Education, Chinese School Students

清莱华文民校华文教育现状研究

姜建坤*
美赛鹏博冠学校 泰国云华职业学院汉语教育硕士研究生专业
Loujiankun0068@gmail.com

摘要

为了更加了解清莱中文学校，本文对清莱中文学校的发展进行了研究。通过对清莱 15 所中文学校的问卷调查和样本分析，本人了解了中文学校的师生及其所面临困境的基本情况。收集到的数据以 Docker 统计进行分析。最后介绍各级华文学校现状、存在问题和具体建议，以便作为华文学校领导和相关政府部门提供参考。

关键词：清莱府、华文学校、华文教育、华文教育学生

1. 清莱府华文民校概况

清莱府位于泰国北部，平均海拔高度约 580 公尺。湄公河沿清莱府东北边陲与老挝形成长约 976.3 公里的共同边界，西北与缅甸接壤。占地面积为 11,678 平方公里，总人口截至 2017 年为 1,287,615 万，其中少数民族占 12.5%。辖下共有 18 县，华文民校分布于 1 市、9 县。清莱华文教育起步于 20 世纪 40 年代初，经历了 76 年的曲折、坎坷、艰辛的发展历程，本文以问卷调查、实地考察、文献获取数据，采用 Docker 对比分析绘制华校发展趋势图。详情见图 1。

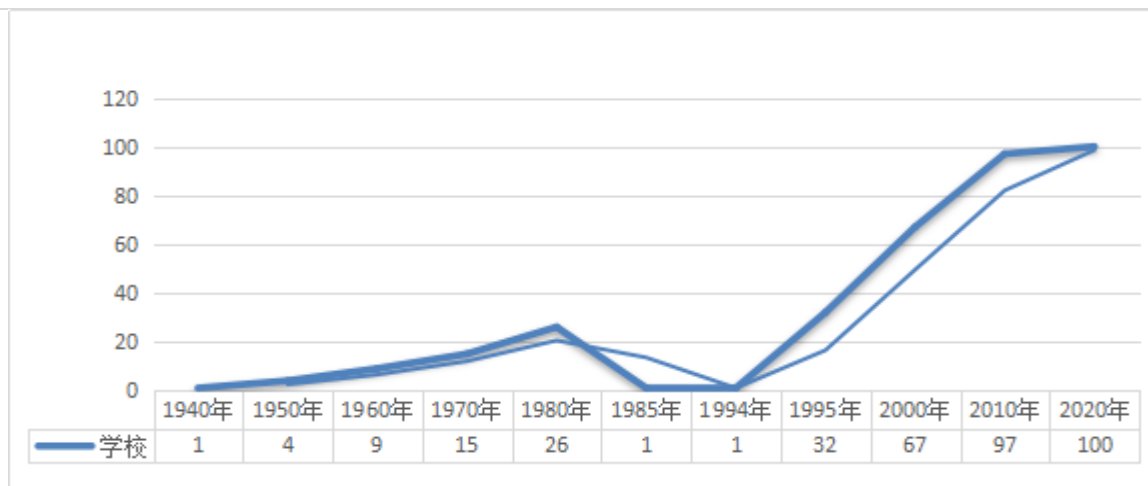


图 1 清莱府华文民校发展沿革趋势图

数据来源：本文 2019 年问卷调查

从图 1 分析可将清莱府华文民校发展历程分为以下五个阶段：

第一阶段 1940-1960 年起步阶段：1943 年攀县华人善堂创办清莱府第一所挽板公立中华学校，1954 年由中国大陆撤退至泰缅边境国民党 3 军、5 军、93 师（孤军），在满堂村创办了清莱府难民村第一所华校“难童小学”，1957 年美穗县茶坊镇开办光复华文小学发展至 9 所华校。

第二阶段 1970-1980 年逐步上升阶段：主要新创学校美发弄县辉鹏村 1971 年开办中华中学、满星叠 1977 年开办大同中学、渊根县帕党村 1976 年创办的培英中学至 1980 年华校已达 26 所。

第三阶段 1983-1988 年、短暂挫折阶段：曹复《方兴未艾的泰国华文教育》中提到：“从 1982 年开始，朱拉隆功大学与北京大学等高等院校建立了旨在提高中文和泰文教学水平的校际交流关系。在高等院校和中等专业学校里，中文开始受重视。但在另一方面，泰国官方对华侨办的民校所采取的限制政策并未明显改变。民校教师必须经过重新考试合格方可执教；华文民校不准使用简化汉字；课本必须使用泰国教育部规定的课本；泰国教育部不为华文民校提供补助经费等。”杨世英《建华中学五十年来的变迁》泰北各难民村华校於民国七十四年（1985 年）忽奉泰国政府命令，一律关闭。仅剩唯一的一所“难童小学”。

第四阶段 1995-2000 年逐步复兴阶段：1998 年泰国教育部第一次将汉语列入高等学校入学考试外语选考科目，至此汉语正式进入国民教育体系；1999 年泰国颁发了《国民教育法案》把汉语教学写入教育大纲。由于政府出台系列相关政策，有力的促进了华文教育发展，出现了华校发展的第一个高潮，华校总数已达 67 所。

第五阶段 2001-2020 年繁荣鼎盛阶段：2005 年泰国教育部制定了汉语教学发展计划，其中目标之一就是争取用 3 到 5 年的时间在全国国立中小学普及汉语课程；2007 年制定《促进汉语教学，增强国家竞争力的战略规划》；2008 年 9 月正式启动“泰国汉语教师本土化策略系列政策”的出台华文教育犹如雨后春笋般的兴起，清莱府华文民校迅速发展至 100 所。详情见图 2；



图 2 2020 年清莱府 100 所华文民校位置分布图

数据来源: 维基百科清莱府行政区画图 2017 数据来源于本文 2019 问卷调查、文献

图 2、本文参照原泰北华文教育推广协会绘制的华村校位置图标注的 60 余所华校基础上添加新创办华文民校 30 余所，绘制成 2020 年新版清莱府华文民校位置分布图。图中的数据代表相对应的学校，具体学校数据标注于地图的左右两侧、学校顺序由左起，并以县划分学校。

2. 华文民校华文教育现状

本文调研对象 15 所华文民校分别是清莱市育才小学、美穗县慈音小学、培中中学、光复高中、美湛县华美小学、治平中学、美赛县鹏博冠学校、光明华侨学校、建华高中、美发弄县建群中学、兴华中学、回笼中学、大同中学、清孔县复华高中、渊根县帕党培英中学。各校位置分布见图 3:



图 3 15 所华文民校位置分布图

数据来源：维基百科清莱府行政区划地图 2017 数据来源于本文 2019 年问卷调查

图 3 图内标注数据是各校的地理位置、地图左边标注是相对应华文民校中文名称，黑色标注小学（幼儿至小学）、红色标注中学（幼儿至初中）、黄色标注高中（幼儿至高中）。

2.1 15 所华文民校基本情况

15 所华文民校基本情况统计表，见表 1：

表 1 15 所华文民校基本情况统计表

序号	学校名称	建校时间	性质	规模	人数	注册/未注册
1	育才小学	1993	村办	小学	106	未注
2	慈音小学	2008	教会	小学	193	注册
3	民养培中中学	1964	村办	中学	426	未注
4	光复高中	1961	社团	完中	1,237	注册
5	华美小学	2010	教会	小学	130	未注
6	治平中学	1977	村办	中学	318	未注
7	鹏博冠学校	2011	社团	完中	350	注册
8	光明华侨学校	2008	社团	完中	947	注册
9	建华高中	2002	社团	高中	345	注册
10	建群中学	1986	村办	中学	416	未注
11	兴华中学	1971	村办	中学	651	未注
12	回笼中学	1984	教会	完中	650	未注
13	大同中学	1977	村办	完中	1,136	未注
14	复华高中	1961	村办	完中	418	未注
15	培英中学	1976	村办	中学	347	未注

数据来源：本文 2019 年问卷调查

表 1 可以看出华文民校分别由华人社团、村自治会、教会创办，此次调研的华校 60 年代 7 所、80 年代 3 所、2000 年后 5 所，其中小学 3 所；中学 5 所；高中 7 所，在校生总人数 7,670 人，合法注册学校 33.3%、未注册学校 66.7%，办学层次逐渐完善初具规模，高中发展尤为突出，华校发展与在校生呈逐年上升的趋势。

2.2 清莱华文民校华文教育体系

由于其特定的地理环境、华裔族群特殊的历史文化渊源形成了清莱府别具一格的华文教育体系。我们大致可以分为三个体系，在此做一个简要介绍：

一是、繁体华文教育体系，1953 年间自缅甸进入泰缅边境聚集于清莱府美发弄、美赛、美湛、美穗、泰老边境清孔、渊根县原国民党孤军随军眷属华裔族群创办台湾地区资助的华校；

二是、简体华文教育体系、70-90 年代后期由缅甸、老泰边境散迁进入清莱府的华裔族群（简称新华人华侨）创办中国侨办资助的华校；三是、繁简混用体系、50 年代后期由缅甸散迁进入清莱府的云南后裔（汉族、傣尼族、苗族、拉祜族、佤族等）少数民族华裔族群创办宗教团体支持的华校。

2.3 华文民校生源情况

依据问卷调查获取的数据采用 Docker 统计分析对 15 所华校进行详细分析。详情见图 4：

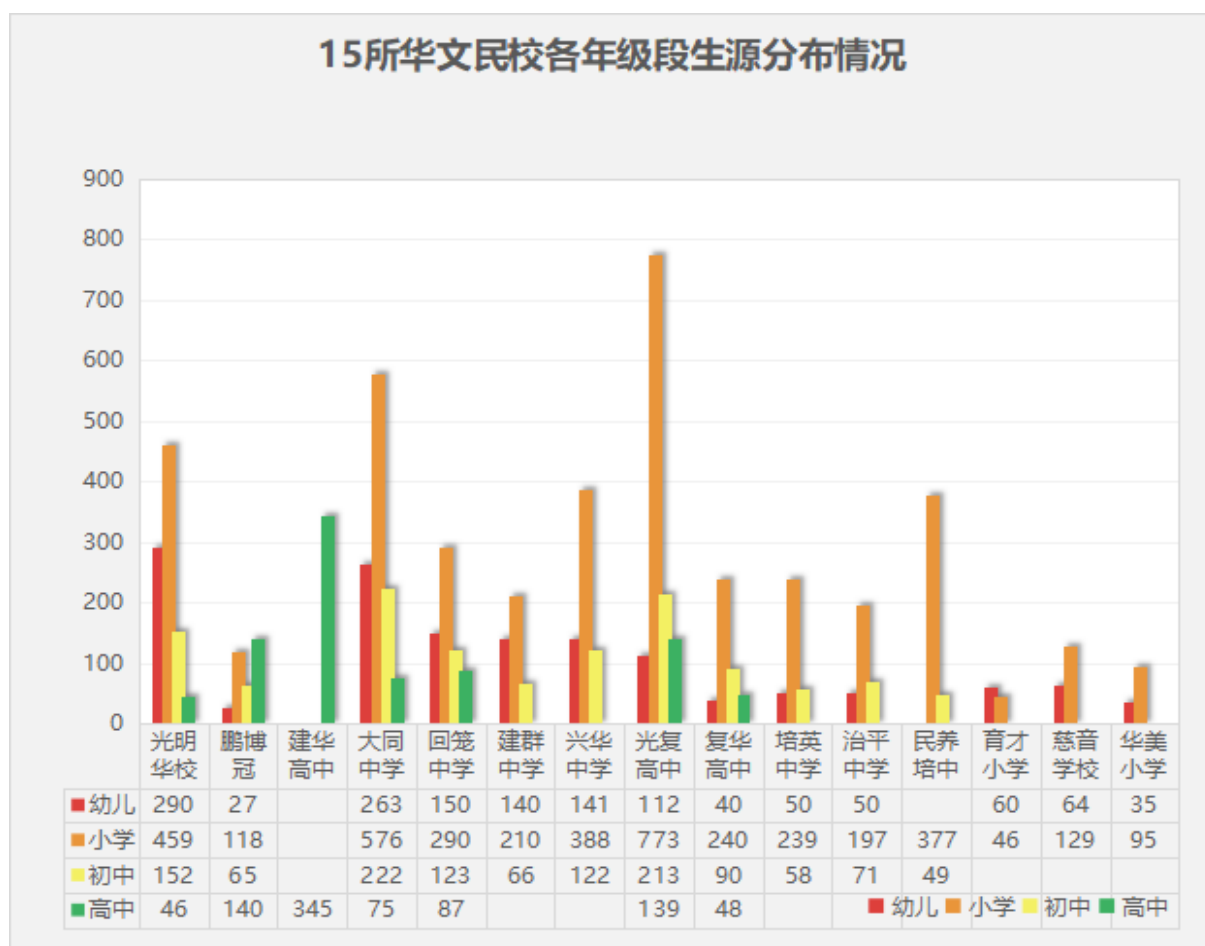


图 4 2019 年 15 所华文民校各校年级段生源分布情况

数据来源：本文 2019 问卷调查

图 4 可见，15 所华校在校生总人数：7,670 人，主要集中于幼儿和小学年度段，初中段呈现下降趋势，高中段的教育大多是 2000 年后开办的，呈现逐年上升的趋势。从生源分布地区看：幼儿在在校生主要集中于城区学校、小学在校生集中于山区学校、高中在校生 60.34% 集中

于美赛城区，且大部分在简体华文教育体系的华校。可见，美赛县高中学校已成为各市县华文民校在校生首选的学校。

2.4 15 所华文民校华裔、非华裔在校生分布情况

近年来华文民校在校生中明显非华裔学生学习中文的人数在快速的增长，尤其是在个别地区学校中非华裔学生已超过华裔学生。在这里依据调研收集的相关数据以图表的形式分析呈现出 15 所华文民校各校华裔、非华裔在校生分布情况。详情见图 5：

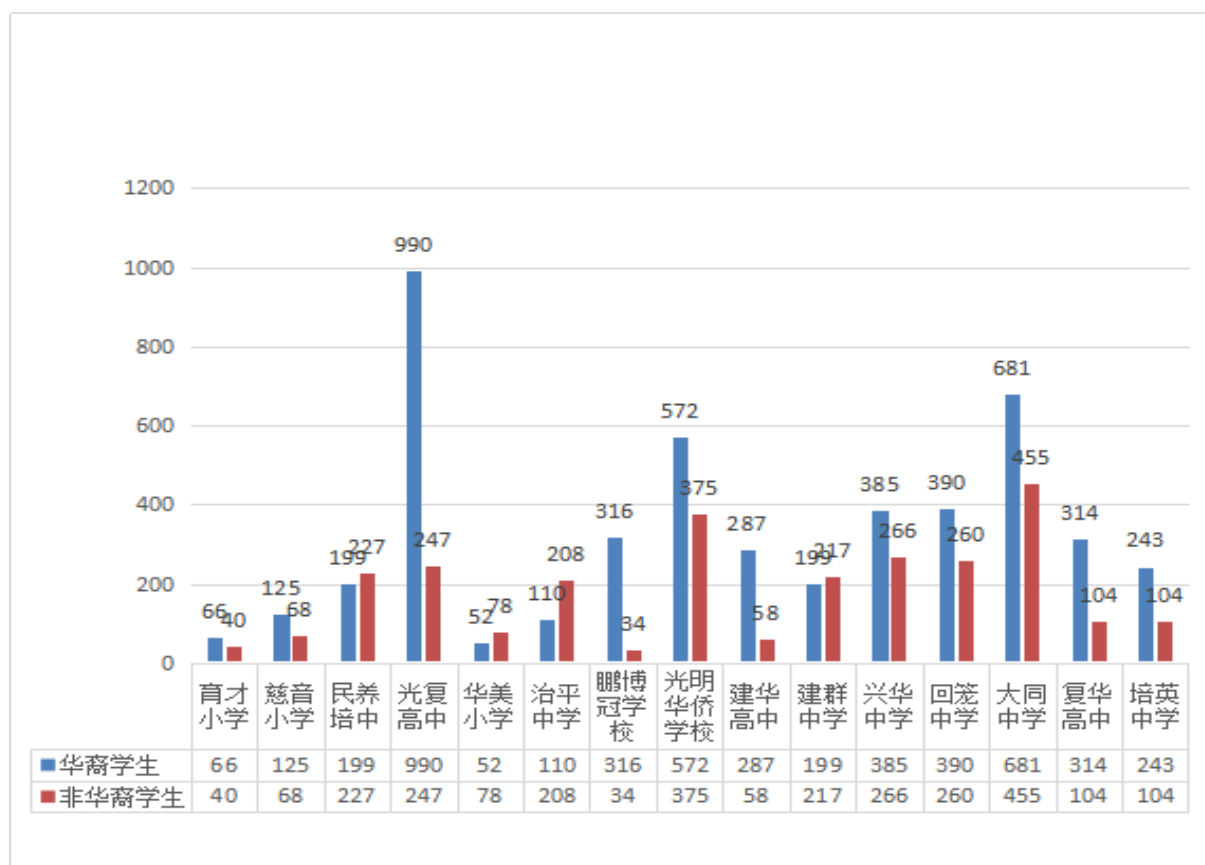


图 5 2019 年 15 所华文民校各校华裔、非华裔学生分布图

数据来源：本文 2019 年问卷调查

图 5 中 15 所华文民校 7,670 名在校生中华裔学生占 64.3%、非华裔学生占 35.7%，可以明显看到生源对象发生的变化，其中民养培中非华裔学生占 53.3%，华美小学非华裔学生占 60%，治平中学非华裔学生占 65.4%，建群中学占 52.2%。可见，在 15 所华文民校中就有 4 所华校非华裔学生过半数以上，这个数字与创办华文民校初期的生源结构相比发生了巨大的变化。中国驻泰国经商参处（2016）《外国游客人数增长迅猛》一文中提到“近年来中国游客人数持续增长，2015 年总人数已跃升至 793.48 万人次，与 2010 年 112.78 万人次相比，5 年间增长率为 603.56%；与 2014 年相比，增幅亦高达 71.6%。”正是由于近些年来大量的中国游客不断的涌入泰国旅游观光，推动了旅游业的迅速发展、高收入的旅游产业一时间中文导游成了香饽饽，

整个旅游市场紧缺的华语人才，让人们认识到了学习中文的重要性、中文的经济价值上升了，尤其是地处山区贫困的家庭更是把学好中文视为脱贫致富的一条重要的途径。

2.5 教师结构

华文教师在华文民校的汉语教学中发挥着关键的作用，一个学校或者说一个地区华文教育汉语水平的优劣，在很大的程度上取决于汉语教师队伍的素质高低，因此华文民校的发展教师队伍的建设始终处在一个重要的地位，这里呈现的是 15 所华文民校各校教师结构分析表。详情见表 2:

表 2 15 所华文民校各校汉语教师结构情况

序号	学校名称	各 华 文 民 校 教 师 结 构									合计
		中国 侨办	汉 办	志 愿	实 习	台湾 侨委	志 工	缅甸 教师	本土 教师	其 他	
1	育才小学						1		4		5
2	慈音学校								7	3	10
3	民养培中	2							13		15
4	光复高中						10		29	3	42
5	华美小学								5		5
6	治平中学								14		14
7	鹏博冠学校	10	1		4			2	8		25
8	光明华侨学校	10	8					4	23	1	46
9	建华高中					5	3		7	2	17
10	建群中学	2							11		13
11	兴华中学						5		14		19
12	回笼中学						9		10		19
13	大同中学						6	5	27	2	40
14	复华高中						2		11	3	16
15	培英中学						3		10	3	16
合计		24	9		4	5	39	11	193	17	302

数据来源：本文 2019 年问卷调查

从表 2 可见，华文民校各校教师结构差异性很大，尤其是边远山区华校凸显出教师严重不足，具备一定数量的汉语专业教师是确保华校华文教育汉语教学效果及教学质量的重要因素，但是从表 2 中发现一定数量的汉语专业教师的配备大部分华校几乎不可能做到，仅有少数城区华校能享受这样的待遇。下面依据表 2 中的调研数据本文再做一个饼图分析。详情见图 6:

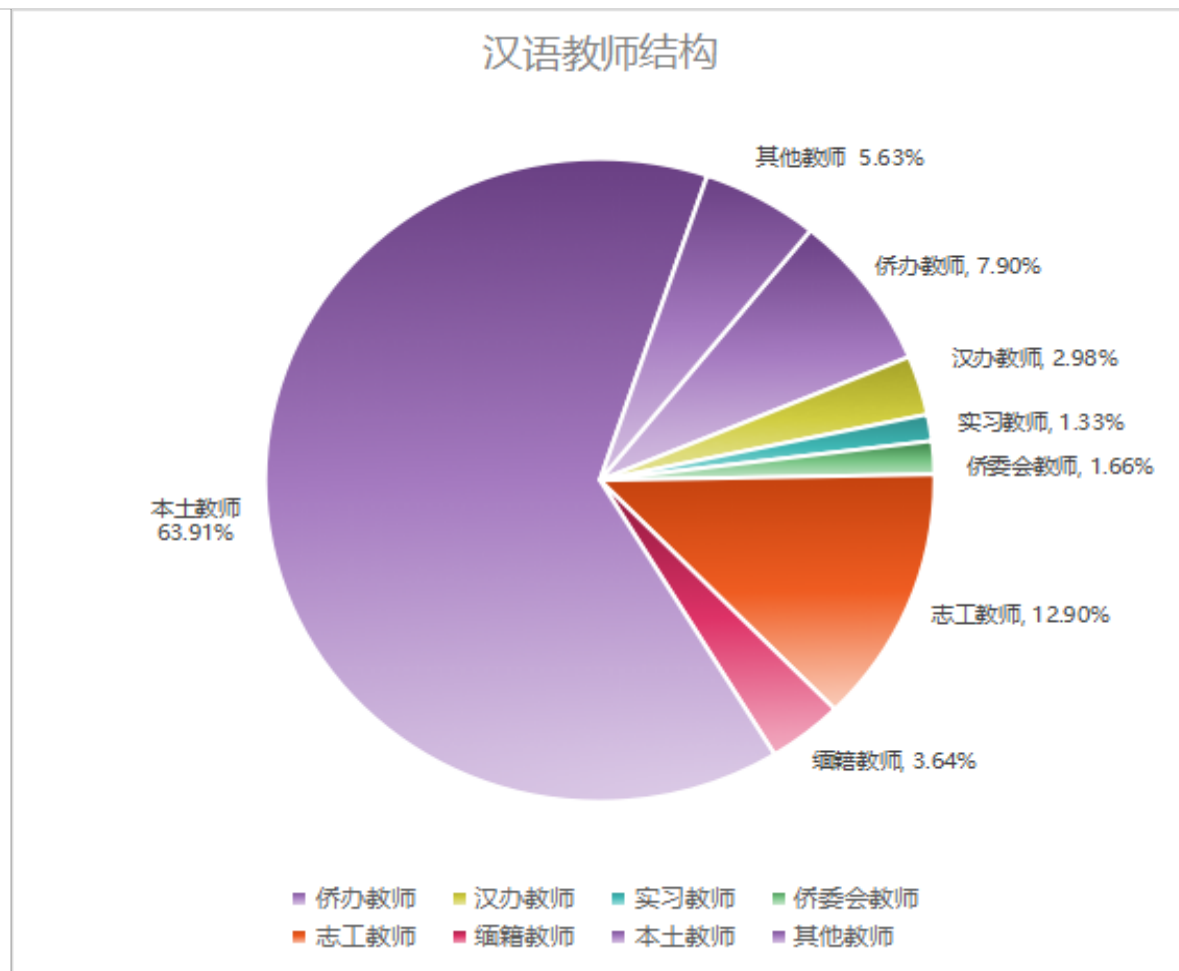


图 6 15 所华文民校 302 名教师中各类教师百分比图
资料来源：本文 2019 年问卷调查

图 6 分析中可以看出：15 所华文民校 302 名华文教师中，本土教师占 64%、外籍教师占 36%，外籍教师的占比量大，那么教师的流动性也就随之增大，这里反映出了一种现象就是华文民校长期形成一种依赖外籍教师的观念，也就造成了华文民校教师队伍不稳定的一个重要因素。

2.6 汉语教材使用情况

作为一所学校要想达到一个成功的教学，除了需要提供一个良好的学习平台，专业的教师和勤奋学习的学生之外，另一个重要的因素就是我们是否有一套实用而丰富的教材。一本教材就如同是一部剧本，如果剧本不好，哪怕再优秀的导演，精湛的演技，也无法呈现精彩的影片。笔者对清莱府华文民校华文教育三个体系的教材使用现状做一个简要介绍。（一）简体华文教育体系教材、中国侨办的汉语系列教材；（二）繁体华文教育体系教材、台湾地区侨委会华文系列教材；（三）繁简混用体系教材没有固定教材采用繁简两体系教材。

2.7 课程与课时设置

课程与课时设置请见表 3：

表 3 15 所华文民校各校周课时设置

序号	学校名称	课时数/周				合计课时	平均课时
		幼儿	小学	初中	高中		
1	育才小学	17	17			34	17
2	慈音学校	24	24			48	24
3	民养培中		22	22		44	22
4	光复中学	17	17	20	20	74	18.5
5	华美小学	15	15			30	15
6	治平中学	17	22	22		61	20.3
7	鹏博冠学校	15	20	20	20	75	18.75
8	光明华侨学校	15	15	19	19	68	17
9	建华高中				23	23	23
10	建群中学	22	22	22		66	22
11	兴华中学	22	22	22		66	22
12	回笼中学	20	20	22	22	84	21
13	大同中学	22	22	22	22	88	22
14	复华高中	17	17	22	22	78	19.5
15	培英中学	17	22	22		61	20.3
合计		238	277	235	148	902	302.9

数据来源：本文 2019 年问卷调查

华文民校三个华文教育体系的幼儿、小学、课程设置基本没有太大差别，教会体系的课程与课时设置大都是参照台湾地区繁体体系华校，稍有不同的是近些年来受北京简体体系的影响在汉语课程中增加了拼音课时量，另外考虑到学生毕业后国外留学有选择理科专业的学生，故而有部分华校增加了少量的数学、英语课程。

3. 华文民校存在的问题

3.1 师资匮乏

几乎所有的华文民校都不同程度地存在着师资不足的问题，随着汉语实用价值的上升教学对象的逐渐扩大化，华文教育不仅仅只是面向华裔族群，将会有越来越多的非华裔子女纷纷选择进入华校接受华文教育，师资的匮乏将会显得更为突出。长期以来华文民校对外籍教师的依赖性大，没有注重本土教师的培养，故而造成师资队伍的不稳定。再者是由于长期以来华文民校教师大多属于兼职，待遇普片偏低、因而教师流动性大，这也是造成教师队伍不稳定的重要因素之一。

3.2 教材规范化

华文民校的教材使用情况基本上还是处在一个各华文教育体系各自为阵的一种状况、五花八门，教材使用没有一个规范的标准，高中段教材显得尤为突出，缺少一套实用的本土华文教材，由于教材的编撰工作滞后严重的影响了汉语的教学效果以及教学质量的提高。

3.3 办学资金的匮乏

办学资金的紧缺是所有华文民校的主要困难，从目前的现状看华文民校的办学资金来源大都是已学养学，或是社团和慈善机构及个人捐款资助办学，由于长期资金的不足，制约着华文

民校的发展。

3.4 教学与行政管理滞后

随着华文教育的迅速发展，华文民校的行政与教学管理的规范化已迫在眉睫，现状是很大一部分华文民校都是由村长或是社团负责人兼校长，基本上属于外行管教育，这些因素始终制约着华文民校的发展。

3.5 华文民校身份的合法化

华文民校均属自筹资金办学，却不断的为泰国国家创造着巨大的社会与经济效益。然而清莱府的现状 100 所华文民校中获得政府注册的华文民校约占 15%，不能注册、就没有资格申请或接收各类志愿者及华文教师，也无法接受国内外民间社团和慈善机构的捐赠款。故而也就制约着华文民校华文教育的发展乃至生存空间。这个问题在所有国内外学者中至今为止没有任何学者注重或是探讨研究，本文认为主要原因学者们对泰国乃至清莱府华文民校华文教育的研究大多浮于表面，很多问题也就深入不到更深层次上去探讨分析。

4. 华文民校未来发展的建议

4.1 本土教师的培养

可以采取两条腿走路的办法，一是推荐优秀的应届高中毕业生或是华文民校在职的年轻教师作为培养对象争取中国侨办和汉办的华文教师全额奖学金指标，保送到中国大学留学，毕业后回华校服务。二是，建议泰国高校可根据华文民校专业教师短缺的问题增设立：华文幼儿师范或是学前教育专业、华文教育专业，并给与一定的倾斜政策，面向华人村、华文民校定向招收培养汉语专业教师人才。

4.2 编撰一套实用泰国的本土华文教材

建议可由高校牵头，邀请中国侨办、汉办高校的曾今外派教师、台湾地区侨委会外派教师以及泰国国内的全日制大中小学及华文民校部分具有丰富华文教育经验的教师参与编撰工作，编写系列如：高校、全日制政府学校、华文民校实用的泰国本土华文教材。

4.3 建立一个综合的民间华文教育资源共享平台

保持华文民校、校与校之间的联系，同时加强与泰文全日制学校以及各类高等院校华文教育间的联系，互通有无、交流教学经验。从而达到共享华文教育资源。

4.4 对区域性的华文民校办学的战略方针

有一个长远的规划合理的布局、逐步减少办学的重复性，真正做到充分利用好社会办学资源。比如说：不提倡村村办校、同时在办学的规模方面应该有一个科学的规划，在临近的村寨可以采取共同筹资合办一所小学，在相对集中的片区可已以中心村寨集中资金办一所中学，避免了村村办中学造成师资力量不足影响到办学的教学质量，办学资金的浪费等诸多问题。

4.5 逐步改进华文民校办学合法化

华文民校实属一类语言补习学校，建议政府相关部门可适当放宽华校注册条件，让更多的华校办学合法化，同时有利于华校争取民间社会团体、慈善机构的更多资源支持，也有利于教育部门统筹规划民间社会力量办学资源，引导华文民校逐步走上教育规范管理的轨道，充分发挥民间办学力量为国家培养更多的初中级汉语实用型人才。

5. 参考文献

- 曹 复（1999）。方兴未艾的泰国华文教育。《对外大传播》，12，36-38。 <http://www.cqvip.com/qk/82259a/1999012/1004409611.html>
- 段家寿（2002）。《清莱地区华村校位置图》。泰北文教推广协会绘制原版地图。
- 黄耀东（2010）。东南亚华文教育现状和出路。《东南亚纵横》，10(1)，73-77。
<https://core.ac.uk/download/pdf/41450604.pdf>

- 黄通镒（2010）。泰北清莱华校教师联谊会。清莱华文学校教师联谊会会刊，10（1），121-131
- 李心贤（2004）。建华中学 50 周年校庆。满堂建华中学校庆特刊，04（1），71-72。
- 刘小华（2009）。让大爱牵起希望的小手。清莱华文学校教师联谊会专刊，09（1），31-83。
- 王宇轩（2008）。泰国中小学华文教育的现状、问题及对策。暨南大学华文学院学报，4，9-16。
<https://doi.org/10.3969/j.issn.1674-8174.2008.04.002>
- 杨世英（2004）。建华中学 50 周年校庆。满堂建华中学校庆特刊，41-45。
- 中国驻泰国经商参处（2016）。外国游客人数增长迅猛。
<http://th.mofcom.gov.cn/article/jmxw/201604/20160401308731.shtml>

The Influence of College Students' Playfulness on Innovation Behavior in Shandong Province: The Mediating Variable of Positive Emotion

Lin Cheng* Yuan-Cheng Chang

China-ASEAN International College of Dhurakij Pundit University, Thailand

*97274258@qq.com

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Abstract

The purpose of this study is to explore the influence of different background variables on innovation behavior of college students in Shandong Province. Based on the theory of positive psychology, this paper explores the relationship between the three variables and the mediating effect of positive emotions. A questionnaire survey is conducted among 435 college students from three universities in Shandong Province by convenient sampling. The results show that: 1. Shandong college students' playfulness has a positive and significant impact on innovation behavior. 2. Shandong college students' playfulness has a significant positive effect on positive emotion. 3. The positive emotion of college students in Shandong Province has a significant positive impact on innovation behavior. 4. The positive emotion of college students in Shandong Province partially mediates the relationship between playfulness and innovation behavior.

Keywords: Playfulness, Innovative Behavior, Positive Emotions, College Students

山东省大学生玩兴对创新行为的影响研究： 以正向情绪为中介变量

程琳* 张原诚

博仁大学中国—东盟国际学院

*97274258@qq.com

摘要

本研究目的是探讨不同背景变量的山东省大学生玩兴、正向情绪对创新行为的影响。以正向心理学为理论基础，探讨三个变量的关系、正向情绪的中介效果，采用便利抽样的方式对山东省三所大学 435 名大学生进行问卷调查。研究结果显示：1. 山东省大学生玩兴对创新行为有正向显著影响。2. 山东省大学生玩兴对正向情绪有正向显著影响。3. 山东省大学生正向情绪对创新行为有正向显著影响。4. 山东省大学生正向情绪在玩兴与创新行为之间产生部分中介作用。

关键词：玩兴；创新行为；正向情绪；大学生

1. 绪论

1.1 研究背景

邓爱敏（2010）认为，在新时代的背景下，社会呼唤创新型人才来解决新问题，而创造力和创新力已成为各国发展的重要动力。王升科（2012）认为推动大学生的创新行为是科学发展观和和谐社会的必要要求，也是目前高等教育要解决的首要任务。大学生作为国家创新型人才的代表，直接影响到国家未来的创新发展，所以提高整个国家的创新水平应从大学生的教育抓起，高等院校应注重大学生创新行为的培养（张宝芳，2019）。

1.2 研究动机

Choi (2004) 认为创造力作为相关的新颖或原创想法的产生，创新行为是创造力潜能的行为表现。创造力是创新行为的基础，而创新行为则是创造力具体产出的过程 (Coade, 1997)。Papousek (1979) 曾说玩兴是一种特殊能力，也是培养创造力的基础，并发现玩兴的过程中可能有创造力的产生，可能促使新奇点子与行为的产生。玩兴行为可以促进内在动机的活动，内在动机强的人对自己有兴趣的活动有较高的自我决定和投入，并且玩兴是强烈内在动机的表现，因而玩兴有利于激发创新行为（吕年禾，2017）。张树连（2011）认为“玩”是天生的，大学生可以自由支配进行休闲与娱乐。Glynn and Webster (1992) 认为无论在工作中或是学习中，玩兴是一种能使人乐在其中的态度，并且对于创新有正向的影响。张倩与郑涌（2003）认为快乐、乐观都是正向情绪，是个人主观感受，所以玩兴让人感到快乐，能帮助个体拥有正向情绪。正向情绪也是正向心理学中一个重要的要素，正向情绪可以让思考更宽广、弹性、灵活，增强我们的创新行为（姜丽萍，2014）。Isen et al. (1987) 在正向情绪对创新行为的影响的实证研究中发现，正向情绪可以拓展人们的思维和行动技能，会表现出不同的思维方式，正向情绪的状态可以进而改变活动过程中的行为与态度。玩兴在学习中所展现的主动自发性、想象力和情绪的表达力、乐在其中、好玩有趣等可以促进个体的创造力表现，并且可以给个体带来正向情绪（王伯觐，2013）。并且张亚军与尚古琦（2019）相关研究结果显示：正向情绪在幽默与创造力之间起中介作用，幽默对创造力存在显著的正向影响，幽默对正向情绪存在显著的正向影响，正向情绪对创造力仍然存在显著的正向影响。

1.4 研究目的

目前已有对创新行为的相关研究，有关于学生的研究相对来说较少，想进一步研究为大家提供参考。大学生是一个特殊的群体，边玩边学已经成为大学生的普遍现象。所以本研究想围绕大学生的创新行为来探讨。根据本研究内容，本研究具体研究目的如下：

- A. 探讨山东省大学生玩兴对创新行为的影响。
- B. 探讨山东省大学生玩兴对正向情绪的影响。
- C. 探讨山东省大学生正向情绪对创新行为的影响。
- D. 探讨山东省大学生正向情绪在玩兴与创新行为中产生的中介效果。

2. 文献综述与研究假设

2.1 玩兴

Webster (1989) 首先所提出玩兴 (Playfulness) 一词，它的目的是解释当个体从事休闲参与和集中时，他同时感到自我满足和享受，并感到放松享受和情绪变化特征。Bateson (2014) 认为

玩兴是指稳定的人格特质，对活动本身的投入度和愉悦感受。陈馨茹 (2020) 认为玩兴是指一种具有想象力，非严肃的方式从事具有某种特征的活动。余嫔等 (2003) 认为各行业人士对玩的观点会有所不同，国内文化与国外文化会有不同，表现出的玩兴特征也会有所不同，为了更适用于国内成人，所以编制成人玩兴量表，本研究选取其中 6 个维度，包括乐在其中、乐于创造与解决问题、放松身心与自在表现、幽默自在与自得其乐、童心未泯与好玩有趣、自我坚持与积极完成。

2.2 创新行为

Amabile (1993) 首次提出创新行为的概念，指出创新行为就是指个体主动在工作过程中提出新想法、新观点或问题的新解决方法。李想 (2020) 认为创新行为是有关创新想法的产生、发展和实施的过程。Bagheri and Akbari (2018) 认为创新行为是指，能够产生新想法并能运用到组织。创新行为是一个过程，刺激个人快乐和创造机遇的挑战，大学生也会受到创新行为带来的乐趣和挑战的启发，因此更容易表达创造力 (Amabile, 1993)。姜丽萍 (2018) 以普通高校大学生为研究对象，编制了大学生创新行为量表，通过实证分析证实，本研究以大学生创新行为包括的思维方式、生活实践、学习学业和学术探索作为维度。

2.3 正向情绪

Cappellen et al. (2020) 认为正向情绪是指在情绪评估历程中，经验到正向或是愉悦的情感。陈书梅 (2015) 认为正向情绪是环境的影响对个体产生满足、愉快等感受。郑娟 (2019) 认为正向情绪是个体接收外在刺激而产生情感性反应后产生的一种情绪状态。当个体拥有正向情绪时，有助于提升个人幸福感，正向情绪会感染他人积极情绪，让人们朝正向思考 (苏燕卿, 2016)。侯亭好 (2012) 所编制的大学生正向情绪量表，其中愉悦与心流两个构面，此量表针对的是大学生，为了使量表适用于所有大学生，传统的测评工具只能测量学生是否存在心理问题，此量表有助于未来大学学生辅导中心用来测量大学生正向情绪状况，所以以愉悦与心流作为本研究的维度。

2.4 玩兴、创新行为、正向情绪的关系相关研究

Glynn and Webster (1992) 认为，玩兴兴趣高的人会使周围的环境充满欢乐，而玩兴兴趣低的人会对创新行为产生直接或间接的影响。吕年禾 (2017) 认为学生对创造新的事物时产生兴趣，接收快在各种新事物的想法，在创作中学生会用轻松幽默的态度去制作、在过程中会感到轻松愉悦、快乐的投入制作中，并勇于尝试新事物启发新店子和激发创意，若当学生遇到问题时，会以创新变通的想法重新解决问题，有助于增加学生的创新能力。基于此本研究提出研究假设 H1：山东省大学生玩兴对创新行为有正向影响。

玩兴具有相伴正向情绪的体验，有利于增强个体认知灵活和创新性思维，研究结果发现，玩兴对创新行为有正向影响 (杨洁等, 2020)。张倩与郑涌 (2003) 认为快乐、乐观都是正向情绪，也是个人主观的正面心理的感受，所以玩兴让人感到快乐、自在，能帮助个体拥有正向的情绪。玩兴的“放松自在”品质，体现了个体的情绪特征，情绪是个体对环境进行评估的指标，而玩兴的人可以将环境变得更加刺激、有趣和吸引力，所以玩兴对情绪产生正向影响 (Morris, 1989)。基于此本研究提出研究假设 H2：山东省大学生玩兴对正向情绪有正向影响。

Isen (1999) 认为，正向情绪能够增强个体的认知复杂性，当个体经历积极的情绪体验时，能发现事物之间更多的相似性和差异性，因而更有可能发现问题并整合各种多样化的资源，从

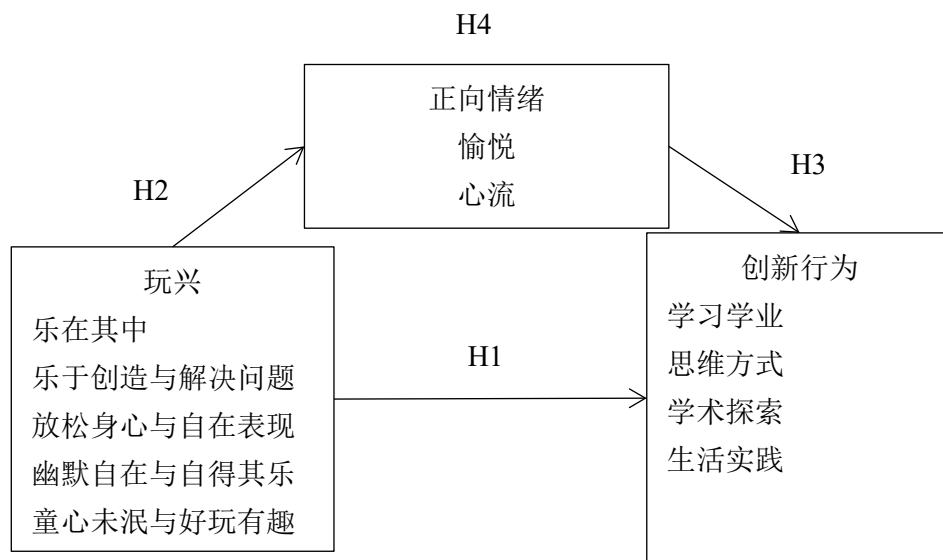
而表现出更多的创新行为。正向情绪与创新行为的相关研究表示,各变量相关分析发现,研究也表示正向情绪与研究生创新行为具有显著正相关,正向情绪对创新行为有正向影响(胡宝玲,2017)。正向情绪与个体创新行为的关系性质及强度,获得了具有意义的发现,积极情绪对创新行为有显著正向影响(周文莉等,2017)。基于此本研究提出研究假设 H3:山东省大学生正向情绪对创新行为有正向影响。

张亚军与尚古琦(2019)研究结果显示,正向情绪在幽默与创造力之间起中介作用,幽默对创造力存在显著的正向影响,幽默对正向情绪存在显著的正向影响,正向情绪对创造力仍然存在显著的正向影响。并以 Seligman and Csikszentmihalyi (2000) 提出的正向心理学,注重个体的愉悦、内在动机、正向情绪等特质(沈硕彬,2008)。正向心理学是一种科学研究的优势,人类的美德和心理健康运用心理学的理论和技术去探索潜在的积极因素,帮助人们抵抗挫折等,积极思考和改变他们的能力和态度,也是一项关于人类力量、美德和心理健康的科学研究,可以帮助人们追求健康美好的生活(郭淑珍,2010)。基于此本研究提出研究假设 H4:大学生正向情绪在玩兴与创新行为之间产生中介作用。

3. 研究方法与设计

3.1 研究框架

本研究探讨山东省大学生玩兴、创新行为与正向情绪之间的关系,以 Seligman and Csikszentmihalyi (2000) 提出的正向心理学为理论基础,本研究认为玩兴、创新行为与正向情绪三个变量之间有中介效果,所以本研究提出研究框架,研究框架详见图一。



图一 研究框架图

3.2 研究对象与抽样

山东省作为全国第二大人口省,是经济、资源和教育大省,山东省着力发展高校大学生创新的时间走在全国其他省份的前列(魏旭,2017)。王升科(2012)认为推动大学生的创新行为是科学发展管和谐社会的必要要求,也是目前高等教育要解决的首要任务。根据本研究的内容,将选取中国山东省某三所综合类大学的学生为研究对象,并且此三所都入选过创新项目,

入选人才培养计划和实践项目，参加过有关于创新大赛（高校招生网，2020）。本研究将采用便利抽样，抽取山东省三所院校大一至大四的大学生进行问卷调查，每个年级发放 2 个班级，平均每个班级 20 人。正式问卷共回收 480 份问卷，共计 435 份有效问卷，有效回收率为 90.6%。

3.3 研究工具

3.3.1 成人玩兴量表

本研究采用余斌等（2003）建构的成人玩兴量表共 29 个题项，其中有 6 个维度，包括乐在其中、乐于创造与解决问题、放松身心与自在表现、幽默自在与自得其乐、童心未泯与好玩有趣、自我坚持与积极完成。问卷采用 Likert Scale 5 点计分，以非常不同意为 1、不同意为 2 分、普通为 3 分、同意为 4 分至非常同意为 5 分进行测量。

3.3.2 大学生创新行为量表

本研究采用姜丽萍（2018）所编制的普通高等学校大学生创新行为测量量表是 4 个维度的概念，包括思维方式、学术探索、生活实践和学习学业。该共 24 个题项。采用 Likert Scale 5 点量表形式，按照完全不符合为 1 分、不符合为 2 分、无法确定 3 分、符合为 4、完全符合为 5 分的形式。

3.3.3 大学生正向情绪量表

本研究采用侯享好（2012）编制的大学生正向情绪量表，该量表包两个构面，其共计 15 个题项。该量表计分方式采用的是 Likert Scale 5 点计分的方式，根据非常符合为 1 分、符合为 2 分、符合与不符合各一半为 3 分、不符合 4 分、非常不符合为 5 分来测量。

4. 研究结果与分析

4.1 描述性统计

本研究样本主要对山东省三所大学的大学生进行问卷调查，共回收 480 份，有效问卷共 435 份，有效回收率为 90.6%。其中男生为 231 人，占总人数的 53.1%；女生为 204 人，占总人数的 46.9%。大一为 111 人，占总人数的 25.5%；大二为 112 人，占总人数的 25.7%；大三为 103 人，占总人数的 23.7%；大四为 109，占总人数的 25.1%。

4.2 山东省大学生玩兴、创新行为与正向情绪之相关分析

根据相关分析结果显示：山东省大学生玩兴与创新行为达显著正相关，说明山东省大学生玩兴水平越高，创新行为就越高；山东省大学生正向情绪与创新行为达显著正相关，说明山东省大学生玩兴水平越高正向情绪就越高；山东省大学生正向情绪与创新行为，达显著正相关，说明山东省大学生正向情绪水平越高创新行为就越高。如表一所示。

表一 玩兴、创新行为与正向情绪相关矩阵

变项	玩兴	创新行为	正向情绪
玩兴	1		
创新行为	.643***	1	
正向情绪	.766***	.626***	1

注：* $p < .05$ ；** $p < .01$ ；*** $p < .001$

4.3 回归分析

在表二的模型 1 中, 玩兴对正向情绪的 β 值为.767, $p<.001$ 达显著, 由此可知玩兴对正向情绪呈正向显著影响。此结果与以下结果一致: 玩兴具有相伴正向情绪感的体验, 有利于增强个体认知灵活和创新性思维, 研究结果显示玩兴对正向情绪有正向影响 (杨洁等, 2019)。所以本研究假设 H2 成立。模型 2 中, 玩兴对创新行为的 β 值为.649, $p<.001$ 达显著, 由此可知玩兴对创新行为呈正向显著影响。此结果与以下结果一致: Glynn and Webster (1992) 研究结果发现玩兴与创新行为有显著正向影响。所以本研究假设 H1 成立。模型 3 中, 正向情绪对创新行为的 β 值为.627, $p<.001$ 达显著, 由此可知正向情绪对创新行为呈正向显著影响。此结果与以下结果一致: 正向情绪与个体创新行为的关系性质及强度, 获得了具有意义的发现, 正向情绪对创新行为有显著正向影响 (周文莉等, 2017)。所以本研究假设 H3 成立。

模型 4 中, 同时加入玩兴与正向情绪对创新行为, 玩兴对创新行为 β 值为.404, $p<.001$ 达显著; 正向情绪对创新行为 β 值为.319, $p<.001$ 达显著, 在加入中介变量的正向情绪, 与步骤二玩兴对创新行为相比较, β 值从.650 下降为.404, 回归系数下降但仍然达显著水平。由此可知正向情绪在玩兴对创新行为影响中仍然具有部分中介的效果。此结果与以下结果一致: 张亚军与尚古琦 (2019) 研究结果显示, 正向情绪在幽默与创造力之间起中介作用, 幽默对创造力存在显著的正向影响, 幽默对正向情绪存在显著的正向影响, 正向情绪对创造力仍然存在显著的正向影响并起到中介效果。所以本研究假设 H4 成立。详见如表二所示。

表二 正向情绪中介效果阶层回归分析

变项	正向情绪	创新行为	创新行为	创新行为
为	模型 1	模型 2	模型 3	模型 4
女	-.008	-.115**	-.104**	-.113**
大二	-.010	-.006	-.009	-.003
大三	.009	-.002	.017	.000
大四	-.011	-.038	-.026	-.035
玩兴	.767***	.649***	-	.404***
正向情绪	-	-	.627***	.319***
R^2	.587	.429	.404	.471
Adj R^2	.583	.422	.397	.464
F	122.132***	64.412***	58.176***	63.492***
VIF	1.015	1.015	1.008	2.423

注 1: * $p<.05$; ** $p<.01$; *** $p<.001$

注 2: 性别: 男生为参照组; 年级: 大一为参照组

5. 结果与讨论

5.1 山东省大学生玩兴对创新行为的影响

本研究结果显示, 山东省大学生玩兴对创新行为呈正向显著影响, 说明本研究山东省大学生玩兴越强, 则创新行为程度越高。吕年禾 (2017) 认为, 在学生的玩兴动机对创造力的影响方面, 学生玩兴动机对变通力和独创力具有正向影响。学生对创造新的事物时产生兴趣, 在创作过程中、学生会用轻松幽默的态度去制作、在过程中会感到轻松愉悦地投入制作中, 并勇于尝试新事物激发创意, 若学生遇到问题时, 会以创新变通的想法解决问题, 并比他人更自我坚

持地解决问题和自我突破，有助于增加学生创新能力。

5.2 山东省大学生玩兴对正向情绪的影响

本研究结果显示：山东省大学生玩兴对正向情绪呈正向显著影响，说明本研究山东省大学生玩兴越强，则正向情绪程度越高。玩兴具有相伴正向情绪感的体验，有利于增强个体认知灵活和创新性思维（杨洁等，2019）。玩兴的“放松自在”品质，体现了个体的情绪特征，情绪是个体对环境氛围进行评估的指标，个体会依据情绪调整身体警觉状态，而具有玩兴的人可以将环境变得更加刺激、有趣和吸引力，所以玩兴对情绪产生正向影响（Morris, 1989）。

5.3 山东省大学生正向情绪对创新行为的影响

根据研究结果显示：山东省大学生正向情绪对创新行为呈正向显著影响，说明本研究山东省大学生正向情绪越强，则创新行为程度越高。正向情绪与个体创新行为的关系性质及强度，获得了具有意义的发现，正向情绪对创新行为有显著正向影响（周文莉等，2017）。正向情绪能够增强个体的认知或动机过程，从而提高创新行为（Hirt et al., 1997）。Isen (1999) 认为，正向情绪能够增强个体的认知复杂性，当个体经历积极的情绪体验时，会在发散的事物之间找到更多的联结，能发现事物之间更多相似性和差异性，因而更有可能发现问题并整合各种多样化的资源，从而表现更多的创新行为。

5.4 正向情绪的中介作用

本研究结果显示：山东省大学生正向情绪在玩兴对创新行为影响中具有部分中介的效果。正向情绪可以增加创造力、弹性思维等，也可以帮助我们建立生理、心理和社会等方面有用的资源，反映身心健康的指标，正向情绪也是正向心理学中一个重要的要素（李政贤，2012）。正向情绪是动机的来源，并会诱发个人行动，提供行动的动机，也可以让思考更宽广、灵活，增强创新行为（姜丽萍，2014）。也由此可知，个体内心想从事某件事时，正向情绪能促进进行为动机，对创新行为产生影响，而且正向情绪是满足愉悦的表现，与玩兴动机所带给个体的愉悦自在感受相同，所以正向情绪能引发玩兴的动机，对玩兴产生正向影响，帮助个体快乐和乐观的心态并积极投入的完成目标（吕年禾，2017）。因此，正向情绪对玩兴与创新行为具有正向影响并且具有部分中介效果。

5.5 未来建议

A. 提高大学生玩兴，助于创造性思维

游戏是一种特别的活动，从传统的意义上来说，对人的行为方式有些许约束，关于“玩”相关的词一般带有贬意。游戏是人类心灵开放到极点的行为之一，游戏心态使人的想象力得到发展，好奇心得到满足，在游戏的过程中人们自然地使用隐喻、模拟，大胆的展开想象，这些都是极有利于产生创造力。本研究结果显示：山东省大学生玩兴对创新行为显著相关，并且有正向影响。所以研究的结论更偏重与一种放松的心理状态、以对待事物、环境等处于一种发自内心的喜欢。

B. 发展正向情绪观点

胡宝玲（2017）认为，当遇到困境、生活上的挫折时，需要透过正向情绪的正能量来帮助自己走出困境。而这份正能量的来源是以正向思考的心态去面对生活里各种的不愉悦、不满意、挫折、压力（苏燕卿，2016）。本研究结果发现山东省大学生正向情绪对创新行为有正向影响，并在玩兴与创新行为之间产生中作用。说明大学生正向情绪越高，创新行为就越高，所以需要各院校多开展有关于正向情绪的教学或选修课，老师在教学的过程当中能够灵活运用各种教学

活动, 将正向情绪融入到课程计划中, 培养大学生的正向情绪发展。玩兴更偏重于一种放松和积极的心态、以及对学习或者事物像玩一样地发自内心的喜欢。而正向情绪也属于积极心态, 可以从容地面对困境, 容纳自己与他人, 这些积极状态与情绪恰恰是创造性解题所需要的。所以建议教师应采取正向情绪, 在班级管理的过程中让学生以增加玩兴与正向情绪加强自身行为, 保持一个正向乐观的态度让学生更加积极投入学习中去, 培养学生的创新, 引导大学生人格健康发展与创新行为。

5.6 研究局限性与未来研究建议

本研究通过抽样的方式, 选择了山东省综合类三所大学的在校大学生作为本研究的调查对象。其研究结果是否可推论到其他地区的大学生, 模型是否具有更广泛的应用范围, 还需要用不同的样本进行检验, 这些都有赖于未来研究继续加探讨。在未来有条件的情况下, 取样要扩大范围这使数据更加有质量保证, 从而使研究更加客观真实。

本研究采用横断调查数据来验证玩兴与创新行为之间的关系。相对于纵向研究而言, 横断调查作用机制的说服力较弱, 难以反映出在较长的时间跨度玩兴、正向情绪影响创新行为的动态过程。因此, 在未来的研究中, 可以考虑采用纵向设计的研究方法, 更深入地分析玩兴、创新行为与正向情绪之间的关系, 构建三者之间的动态过程模型并进行实证检验, 以提高结论的说服力。

6. 参考文献

- 陈书梅 (2015)。大学图书馆组织创新行为调查研究。《教育资料与图书馆学》, 52 (3), 231-267。
<https://doi.org/1013090x-201509-201509150028-201509150028-231-267>
- 陈馨茹 (2020)。大学生玩兴及其与积极品质的关系研究 [硕士论文, 上海师范大学]。教育论文网。<http://www.51papers.com/lw/69/8/wz4591320.htm>
- 邓爱敏 (2010)。思想政治理论课促进大学生创造力提升的研究-以《思想道德修养与法律基础》课为例 [硕士论文, 西南交通大学]。知网空间。<https://cdmd.cnki.com.cn/Article/CDMD-10613-1013252049.htm>
- 郭淑珍 (2010)。向心理学的意涵与学习上的应用。《铭传教育电子期刊》, (2), 56-72。
<http://web.tep.mcu.edu.tw/sites/default/files/u3/15journal/2/%E6%AD%A3%E5%90%91%E5%BF%83%E7%90%86%E5%AD%B8%E7%9A%84%E6%84%8F%E6%B6%B5%E8%88%87%E5%AD%B8%E7%BF%92%E4%B8%8A%E7%9A%84%E6%87%89%E7%94%A8-%E9%83%AD%E6%B7%91%E7%8F%8D.pdf>
- 高校招生网 (2020)。中国优秀高校网络招生平台。<http://www.baokao.net/>
- 胡宝玲 (2017)。导师支持、同学支持对研究生创新行为的影响: 积极情绪的中介作用。《黑龙江高教研究》, (9), 117-120。<http://www.cnki.com.cn/Article/CJFDTotat-HLJG201709031.htm>
- 黄惠君、叶玉珠 (2008)。国中教师教学玩兴、教学动机、教学快乐感受与创意教学之关系。《教育与心理研究》, 31 (2), 85-118。<http://ericdata.com/tw/detail.aspx?no=51037>
- 侯婷好 (2007)。我国青少年正向情绪及相关因素之研究 [硕士论文, 国立高雄师范大学]。硕博论文网。<https://hdl.handle.net/11296/48635q>
- 姜丽萍 (2018)。高校创新氛围、大学生创新自我效能感、创新行为关系研究 [硕士论文, 曲阜师范大学]。爱学术。<https://www.ixueshu.com/document/994906362d7885de6084b2b298e475ef318947a18e7f9386.html>
- 吕年禾 (2017)。国中生玩兴动机与创造力关系之研究-以升学压力为调节变项和创意自我效能为中介变项 [硕士论文, 国立台湾大学]。硕博论文网。<https://hdl.handle.net/11296/cw8e6j>

- 李想 (2020)。课堂创新氛围、创新角色认同与大学生创新行为关系研究。《天津中德科技应用大学学报》, (1), 31-35。 <https://www.cnki.com.cn/Article/CJFDTOTAL-TJZD202001010.htm>
- 沈硕彬 (2008)。正向心理学在教师教学上的应用。《师说》, 203, 4-8。
- 苏燕卿 (2016)。公营银行主管正向情绪对柜台人员乐观度及幸福感之影响 [硕士论文, 南台科技大学]。硕博学位论文网。 <https://hdl.handle.net/11296/y3vc8r>
- 王升科 (2012)。大学生创新能力培养的路径研究-基于人的全面发展理论 [硕士论文, 武汉大学]。道客巴巴。 <http://www.doc88.com/p-2117736212567.html>
- 魏旭 (2017)。山东省高校在校大学生的创新创业教育探究 [硕士论文, 山东建筑大学]。爱学术。 <https://www.ixueshu.com/document/2bf4da80914dcf5c16b46c8a0736e43e318947a18e7f9386.html>
- 杨洁、张露、黄勇 (2020)。互联网企业玩兴氛围对创新行为的跨层次作用机制。《心理科学进展》, 28 (4), 523-534。 <http://journal.psych.ac.cn/xlkxjz/CN/Y2020/V28/I4/523>
- 余嫔、吴静吉、林伟文、杨洁欣 (2003)。成人玩兴量表与组织玩兴气氛量表之发展。《中国测验学会测验学刊》, 50 (1), 73-110。 <https://doi.org/10.7108/PT.200306.0073>
- 郑娟 (2019)。论高职生积极情绪的培养。《智库时代》, 33, 51-58。 <https://www.cnki.com.cn/Article/CJFDTOTAL-ZKSD201933051.htm>
- 张倩、郑涌 (2003)。美国积极心理学介评。《心理学探新》, 23 (3), 6-10。 <https://gb.oversea.cnki.net/kcms/detail/detailall.aspx?filename=xlxt200303002&dbcode=CJFD&dbname=CJFD2003>
- 周文莉、顾远东、彭纪生 (2017)。创造力效能感, 积极情绪与创新行为的关系研究。《珞珈管理评论》, 16 (4), 76-88。 <http://www.cqvip.com/qk/71990x/201704/76747176504849554852484854.html>
- 张亚军、尚古琦 (2019)。领导幽默对员工创造力的影响研究。《领导科学》, 16, 94-98。 <http://www.cnki.com.cn/Article/CJFDTOTAL-LDKI201916029.htm>
- Amabile, T. M. (1993). What does a theory of creativity require?. *Psychological Inquiry*, 4(3), 179-181。 <http://www.jstor.org/stable/1448959>
- Bagheri, A., & Akbari, M. (2018). The impact of entrepreneurial leadership on nurses' innovation behavior. *Journal of Nursing Scholarship*, 50(1), 28-35。 <https://doi.org/10.1111/jnu.12354>
- Barnett, L. A. (2007). The nature of playfulness in young adults. *Personality and Individual Differences*, 43(4), 949-958。 <https://doi.org/10.1016/j.paid.2007.02.018>
- Bateson, P. (2014). Play, playfulness, creativity and innovation. *Animal Behavior and Cognition*, 1(12), 99-112。 <https://doi.org/10.12966/abc.05.02.2014>
- Cappellen, P. V., Edwards, M. E., & Fredrickson, B. L. (2020). Upward spirals of positive emotions and religious behaviors. *Current Opinion in Psychology*, 40, 92-98。 <https://doi.org/10.1016/j.copsyc.2020.09.004>
- Choi, J. N. (2004). Individual and contextual predictors of creative performance: The mediating role of psychological processes. *Creativity Research Journal*, 16(2), 187-199。 <https://doi.org/10.1080/10400419.2004.9651452>
- Coade, N. (1997). *Be creative: The Toolkit for Business Success*. Thomson Learning.
- Csikszentmihalyi, M., & Seligman, M. E. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14。 <https://doi.org/10.1037//0003-066X.55.1.5>
- Glynn, M. A., & Webster, J. (1992). The adult playfulness scale: An initial assessment. *Psychological Reports*, 71(1), 83-103。 <https://doi.org/10.2466/pr0.1992.71.1.83>
- Isen, A. M., Daubman, K. A., & Nowicki, G. P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 52(6), 1122-1131。
- Papousek, H., & Papousek, M. (1979). Early ontogeny of human social interaction: Its biological roots and social dimensions. *Human Ethology*, 456-478。
- Isen, A. M. (1999). On the relationship between affect and creative problem solving. *Affect, Creative Experience, and Psychological Adjustment*, 7(1), 3-1
<https://doi.org/10.1037/0022-3514.52.6.1122>
- Wagner, D. (2007). Learning to innovate. *MIT Sloan Management Review*, 49(1), 10-11。

Webster, E. J. (1989). *Playfulness and Computers at Work* [Master's thesis, New York University].
Baidu Scholar. https://xueshu.baidu.com/usercenter/paper/show?paperid=1cbc293bf9b65b141cc7aa2655117c41&site=xueshu_se

Investigation into the Linguistic Landscape of Chinese Language within and around A University in Thailand

Bo Wang* Lingfen Mo Haiying Zhang Xiang You
China-ASEAN International College and Chinese International College, Dhurakij Pundit
University, Thailand
*bo.wan@dpu.ac.th

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Abstract

Studying overseas Chinese language via the theory of “linguistic language” not only creates a new perspective for the corresponding researches, but also broadens the scope of them. Without doubt each “Chinatown” throughout the globe is deemed as a top location in linguistic language study of overseas Chinese language. Nevertheless, sufficient attention is supposed to be attached to other types of areas where overseas Chinese aggregate. In this research, the linguistic language of Chinese language has been looked into both within and around A University in Thailand. Through such research perspectives as code and function analysis, comparison with surveys of “Chinatown”, it is proposed that sub-inquiries into separated regions should be adopted before reaching an integrated conclusion when probing into the overall situation of Chinese language in Thailand based on the theory of linguistic language.

Keywords: Linguistic Landscape; Site Semiology, Chinese Language, A University

泰国 A 大学校园及周边华语语言景观调查研究

王波* 莫玲芬 张海英 游翔
博仁大学中国-东盟国际学院, 中文国际学院
*bo.wan@dpu.ac.th

摘要

借助“语言景观”理论来研究海外华语, 既为海外华语研究提供了新的视角也扩展了其研究范围。世界各地的“唐人街”固然是海外华语景观研究的热门地点, 其他类型的华人华侨聚集区也应给予足够重视。本文调查了泰国 A 大学校园及周边的华语景观, 从语码与功能分析, 跟“唐人街”对比分析等多个角度进行了研究, 并提出在借助“语言景观”理论来研究泰国华语的整体状况时, 应采取先分“领域”再“整合”结论等建议。

关键词: 语言景观、场所符号学、华语、A 大学

1. 引言

联合国 2018 年版的《世界城镇化展望》一书中提到, 目前世界上有超过 55% 的人生活在城市, 城市不仅建筑众多, 人口密集, 也汇聚了各种各样的字牌和标识。近年来, 以其作为研究对象的“语言景观”理论也应运而生, 并发展迅速。通过“语言景观”理论研究海外华语是当前中国学界的一个热点课题, 世界各地的“唐人街”是进行海外华语景观研究的主要调研地。

泰国曼谷的“唐人街”是泰国华语景观研究的“热门”地点，且有一些研究尝试通过对“唐人街”等地语言景观的分析来考察泰国全国的华语情况。不过，泰国的华人华侨社会新老混杂，仅仅“唐人街”的华语状况能否真实完整地反映全泰国的华语情况呢？为此，我们可能需要进行更多不同地点的调查来加以验证，但是实际操作比较困难，因此我们可以选取一个与“唐人街”情况有所差异的地方进行调研和比较。考虑到目前在泰中国留学生的规模大和聚集性强，以及大学本身的特殊性，我们最后选择了中国留学生较多的“A 大学”，通过校园及周边的华语景观进行调研，并与曼谷“唐人街”的华语景观进行对比，来寻找前面提到的问题的答案。

2. 文献综述

2.1 语言景观

“语言景观”（Linguistic Landscape）存在多个定义且并未统一，其中以 1997 年 Laury and Bourhis 提出的“某个属地或区域公共与商业标牌上语言的可见性与突显性”的被接受程度最高。郭熙（2020）也认为“语言景观是海外华语资源的类型之一，包括各种各样的华语遗迹、碑刻（如墓碑、纪念碑等）、楹联、标牌、标语等。”“语言景观”研究把语言标牌作为主要考察对象，关注公共空间中语言标牌的呈现方式，探究标牌背后蕴含的意识形态、权势关系和语言政策等问题。“语言景观”的研究历史可以追溯到西方学者在研究中关注大城市的语言标牌，但直到近些年来，西方学者对“语言景观”研究才真正丰富起来。尚国文与赵守辉（2014）在其研究中列举了 2014 年之前的情况，在此不多赘述。需要补充的是，2015 年，John Benjamin's 公司发表了“语言景观”研究专刊及一系列研讨会；2016 年第一个“语言景观”研究的数据库 Zotero 诞生；2016 年，Manusya 杂志也在其年度特刊（2016）对“语言景观”研究的历史和发展做了细致的介绍。

中国在“语言景观”领域的研究虽然起步稍晚但发展迅速。《语言战略研究》杂志自创刊始终关注这一领域，并刊发了多篇相关的研究文章，2017 年还开辟了“语言景观”研究专题。尚国文等（2017）对“语言景观”研究领域的理论方法和分析维度进行了梳理和讨论；徐茗（2015）、高珊（2017）等学者从不同视角研究了中国国内不同城市和地方的“语言景观”；刘慧（2020）用民族志的方法调查了广州石牌村的语言景观，并据此研究了城中村语言景观和农民工身份认同问题的联系；以及以王晓梅为代表的借助“语言景观”理论来开展海外华语研究的新探索。

西方学者和泰国本土学者是泰国“语言景观”研究的主要参与者，西方学者的关注点多是泰国语言景观中的英语使用情况，泰国学者起步稍晚，研究的关注点则更加全面一些，但双方对泰国的华语“语言景观”的关注和研究都不是很多。Huebner (2006) 调查了曼谷 15 个街区“语言景观”中的语言接触和混用的情况，并从语言学角度分析了英语对泰语在词汇、发音及句法等方面的影响；Boonjoon (2018) 研究了以服务本地人为主的曼谷市内图书馆的“语言景观”，发现多数图书馆的“语言景观”以泰语为主随后是英语；Wu and Techasan (2016) 调查了曼谷唐人街主干道耀华力路的店名景观，发现对于泰国的顾客而言，华语店铺招牌更多的发挥象征功能，在传达信息上英语更具优势地；Chuaychoowong (2019) 考察了泰国北部一所大学校园的语言景观，发现该校园“语言景观”以泰语单语言为主，“泰语+英语”双语为辅。

对泰国的华语“语言景观”的研究很早就出现了，但是对泰国的华语“语言景观”进行专门研究的并不多，直到近几年才有相关的文章出现。任文雨（2019）对曼谷地区的语言景观进行了研究，发现曼谷语言景观双语或多语比例高，曼谷华人聚集区的华语景观丰富，是特定区域内的优势语言，然而他的文章中华语“语言景观”部分仅作为研究的一部分，因此研究的深度还有提升空间。更有代表性的是祝晓宏（2018）的研究，他采集了“曼谷新老唐人街、四面佛景区、湄南河岸码头夜市和西部美功火车市场”五个“华语景观最为集中的地区”的华语语言景观，并借此来研究泰国的华语使用和华语变异；文章不仅将华语“语言景观”作为单独研究对象，而且材料丰富，分析深入，专业性强而不失生动有趣。然而正如在前文所提的“新、老华侨华人社会的华语景观是否一样？不同职业范畴的华人华侨聚集区的华语景观又是否一致？

“唐人街”的华语状况能否真实完整地反映全泰国的华语情况？”若想借助“语言景观”视角来为泰国全国的华文发展状况把脉，该如何操作更为合理呢？

2.2 “场所符号学”

“语言景观”研究是一个跨学科性比较强的课题，众多学者都尝试从不同研究领域出发并构建“语言景观”研究的理论框架和研究模型，“场所符号学”便是其中颇有影响力的一个。基于研究设计，在本文中“场所符号学”理论仅作为一个补充和参考的理论模型，因此我们也暂不将其完全的展开分析，仅就与本文相关的部分做简要的介绍。

就理论本身来看，Scollon and Scollon (2003) 在其地理符号学理论中首次提出“场所符号学”，该理论主要研究物质世界中标牌、话语或行为所处的地理位置生成意义的不同方式，探讨如何在物质世界中更好的使用语言。“场所符号学”模型包括“语码取向”(Code Preference)、“字刻”(Inscription)及“置放”(Emplacement)三个组成部分。“语码取向”强调双语或多语标识牌中不同语言的空间位置、排列顺序和主次地位。认为不同的位置和排列次序反映了它们在语言环境中的优先关系、主次地位以及语言权势大小。具体说来，包围式标识牌中位于中心位置的语码具有相对优势，而次边缘位置的语码处于相对劣势；横向标识牌中居于顶端或上方的语码具有相对优势，而位于下方或底部的语码处于相对劣势；竖向标识牌中位于左侧的语码具有相对优势，而位于右侧的语码处于相对劣势。“字刻”强调标识牌语言的呈现方式，包括材料、字体、附加成分和状态变化等；标识所用的材料、字体大小、颜色、文字制作方式等都具有传达标识语信息的功能，并得到多样化的解读。“置放”则强调标识牌设置的空间位置所激活的意义，“去语境化置放”(Decontextualized)、“违规式置放”(Trausyressive)及“场景化置放”(Situating)是三种主要的置放方式。“场景化置放”是指标识牌置放于合适的空间场所中，并与场所产生有意义的互动，如学校的指路牌；“去语境化置放”是指标识不受场所、环境的影响始终保持同样的形式，例如知名品牌的 Logo 在任何情境下都可保持统一的形式和意义；“违规式置放”指标识牌出现在错误的空间或在正确的空间却置放不当，如被遮挡的海报等。

我们重点考察了中国的研究情况，有三个突出的特征，一来相关研究总体较少，二来研究都很新，2016 年以前研究极少，三来基本没有单独的研究，几乎全部与“语言景观”放在一起进行研究。相较于“语言景观”研究，“场所符号学”更被学者们视为一种分析模型，且在使用中多于其他的语言景观研究手段搭配使用。金怡(2016)较早较全面介绍了这一理论，她认为“场所符号学”是语言景观研究较为完整和成熟的理论分析框架，并从理论基础、研究重点、主要观点和研究展望四个方面梳理评述了这一理论；其他研究则多从应用角度将“场所符号学”模型与语言景观的信息功能和象征功能等配合使用，研究对象多涉及大到一个城市小到一条街道，还有风景区、地铁线以及学校等地。如潘红英(2020)，调查了英国南安普顿大学沿途的中国商店标识，并借助“场所符号学”理论进行了分析，比较生动的分析了这些店招的语码情况和功能情况，美中不足是采集的材料太少，也缺乏对调查截取语言景观的整体描写。其他国家的研究情况与中国情况类似，鉴于篇幅不再过多的展开。

3. 研究方法

3.1 个体研究法

在对采集到的“语言景观”照片进行研究时，采取符合国际语言景观研究管理的个体研究法，即将每个采集到的语言标牌作为一个单独的分析单元。

3.2 实地调研法

确定并划分数据采集的区域，并拟定采集顺序；以手机拍照的形式对各分区进行实地图像采集；将符合采集要求且具有研究价值的图像信息进行整理和编号，采集并录入研究需要的关键信息；对相关数据进行量化统计，根据研究需要选取数据并进行分析；将调研到的数据与语言学理论结合研究分析，研究问题的本质进行探索。

4. 正文

一方面，据中泰官方数据显示，目前中国在泰留学生总人数接近四万人，是一个不容忽视的群体；另一方面，留学生要在当地连续学习生活几年的时间，与当地社区发生频繁和密切的联系；此外，大学校园作为高等教育主战场和国家语言政策的重要实践者，在语言文字的使用上较一般场所具有示范性和规范性。鉴于此，从景观语言学角度对大学校园及其周边的华语使用情况进行调查，既可在了解所调查的大学的华语情况并与前人的相关研究成果做对比分析，又可在某种程度上研判泰国的华语政策走向。

4.1 A 大学校园及周边华语语言景观描写

A 大学（英语：A University）创建于 1968 年，是位于泰国首都曼谷的一所综合性私立大学，学校位于曼谷 Laksi 区 Prachachuen 路。经过几十年的发展，目前在校生总人数超过 30000 人，教职工 2000 余人；在校的中国留学生超过 3000 人，此外还有来自中国大陆等地的教师团队 100 余人。学校内教学、休闲和商业功能区齐备，学校周边形成了规模不小的商业服务区；校外周边一公里内，分布有几十家各式餐厅、快餐店、咖啡店等为主要为 A 大学的学生为服务对象的商家。为方便服务数量众多的中国师生，校内外很多场所拥有数量众多的华语语言景观。

在本次调查中，我们将分为校园内区（Inside）和校园周边一公里（Outside）两大区域，又根据校园内各区域的不同职能将华语“语言景观”的采集区分为 I1 校内教学区、I2 校内生活区、I3 校内休闲区、I4 校内商业区和 O1 校外周边一公里区。A 大学校外周边一公里内，分布有 68 家各式商家，其中以餐馆最多，占比高达 50%，中餐馆明显多于其他类型餐馆。此外还有咖啡、饮品店等，商家情况见表 1：

表 1 A 大学校外周边一公里内商家统计表

序号	商家类型	数量	比例
1	中餐馆	22	32.4%
2	餐馆（不含中餐馆）	12	17.7%
3	咖啡/饮品店	5	7.4%
4	商店/便利店	5	7.4%
5	美容/理发店	4	5.9%
6	照相/复印店	6	8.9%
7	数码/手机店/网吧	5	7.4%
8	其他（物流、洗衣店、门诊等）	9	13.2%
	合计	68	100%

通过采用实地拍照取景的方法，对 A 大学校园和学校周边一公里内自上而下（校园官方语言标牌）和自下而上（非校园官方的以商家为主自制为主的语言标牌）的华语景观进行收集，拍摄时间为 2020 年 11 月 7 日，有包括作者在内的四位拍摄者分为两组进行拍摄，其他三位拍摄者为 A 大学在校生，熟悉校园和周边的环境，且在拍摄之前进行了一小时的培训，对于拍摄目的和要求都有较好的理解。拍摄共用时 6 个小时，以有无华语（汉字）出现作为是否采集的标准，共采集到有效照片合计 463 张，具体分布见表 2：

表 2 A 大学校园和学校周边华语景观采集区域分布表

编号	采集区域	数量
1	I1 校内教学区	183
2	I2 校内生活区	34
3	I3 校内休闲区	32
4	I4 校内商业区	29
5	O1 学校周边一公里内	185
	合计	463

4.2 A 大学校园及周边华语语言景观分析

4.2.1 语码分析

通常情况下对于语言景观的研究，研究者多从语码分析和功能分析两个方面展开。在语码分析上，多由语种组合和语码排序两个研究维度构成，我们认为这样还不够细致。因此，在本研究中我们尝试在一般语码分析（即语种组合和语码排序分析）的基础上结合“场所符号学”理论模型，增加“相对位置”、“字体大小”、“文字制作方式”、“媒介材料”、“字体颜色”、“置放方式”以及“繁/简字”等分析维度来丰富我们对语言景观的语码分析：

（1）语种组合分析：按照语种组合方式研究发现，A 大学校园和学校周边华语景观共存在 10 种组合类型（详见表 3），其中主要的组合类型有 4 种，占比最多的组合为“中文+英文+泰文”（37.6%），其他三种依次为“单独中文”（23.3%）、“中文+泰文”（22.9%）和“中文+英文”（12.5%）。

表 3 A 大学校园和学校周边华语景观语种组合情况表

序号	语种组合	数量	比例
1	单独中文	108	23.3%
2	中文+拼音	1	0.2%
3	中文+英文	58	12.5%
4	中文+泰文	106	22.9%
5	中文+数字	3	0.7%
6	中文+英文+泰文	174	37.6%
7	中文+英文+数字	6	1.3%
8	中文+泰文+数字	1	0.2%
9	中文+英文+泰文+数字	5	1.1%
10	中文+英文+泰文+拼音	1	0.2%
	合计	463	100%

（2）语码排列分析：按照语码排列方式（详见表 4）研究发现，A 大学校园和学校周边华语景观以“从左到右的横向语码排列”为主（83.4%），该排列方式简洁明了，更符合现代人的阅读习惯和计算机的工作原理，绝大多数的建筑物名和教室名，校内公告和宣传语，大部分的店铺招牌和宣传语等采取了这种方式；其次为“从上到下竖排排列”（14.7%），主要由部分店招、商家海报、对联、以及一些吉祥符号构成，多出于展示艺术性的需要，它们数量不多但丰富了 A 大学校园及周边的华语景观的多样性；另外三种情况出现非常有限，出现原因一部分与艺术设计有关，还有一些是由于“错误”或失误造成，此外还有一些不涉及语码排列，多是仅有一个汉字构成的吉祥图案，如编号为 I1016 的照片为剪纸“春”字。

表 4 A 大学校园和学校周边华语景观语码排序情况表

序号	语码排序	数量	比例
1	横排：从左到右	387	83.6%
2	横排：从右到左	3	0.6%
3	竖排：从上到下	68	14.7%
4	竖排：从下到上	1	0.2%
5	其他	4	0.8%
	合计	463	100%

（3）其他维度分析：从相对位置来看，在采集的图像中华语位于相对优势位置（独占/顶部/左边/中心）的比例为 62.2%，位于相对劣势位置（底部/右边/边缘）位置的比例为 37.8%。

从字体大小来看,在采集的图像中华语字体“相对更大”的比例为48.2%，“大小接近”的比例为30.0%，二者合计为78.2%；仅有21.8%为“相对更小”。以上两点与“语码组合”维度和“语码排序”维度共同表明华语在A大学校园和学校周边为优势语言之一，在特定的地点或情境下甚至占据主导地位。在文字制作方式上，以计算机打印体为主（97%）；手写体仅占2.4%，且多出于艺术需要，如春联；打印和手写混用情况极少，仅出现在有临时性的信息需要修改又不能使用现代办公设备时。在字刻的媒介及标识所用的材料上，以纸质（49.7%）和塑料材质（27.0%）为主，大部分普通的和临时性的标识采用这两种形式；有少量意义比较重要或者需要长期保留的字刻采用了金属（7.3%），如孔子铭牌；石质（3.9%），如教学楼名字；木质（3.7%）如一部分店招等。在颜色方面，黑色（43.0%）所占比例最高，其次为白色（25.9%），红色（13.0%）占比位列第三，适用场合多为了渲染和表现中国文化特色；紫色（4.1%）是A大学的学校代表色，多使用在需要突出学校身份的场合；金色（7.3%）在泰国的多学多代表财富和商业，A大学大量使用金色符合其注重商科的办学特色；绿色（1.5%）总体不多但集中分布在海上丝路孔子学院区域。以上三个维度体现了学校在华语使用上更突出其传达信息的实际功能的特点。在“置放方式”上，85.8%的情况为“场景化置放”，如大量的学校指示牌和通告等；8.4%为“去语境化置放”，如学校的中文LOGO；5.8%为“违规式置放”，如在杂物堆倒置的“汉语桥”比赛宣传板。这表明A大学校园及周边的绝大部分华语语言景观都都布置的比较妥当，能与环境较好的融合与互动，且绝大多数得到了较好的保持和维护，也侧面反映了A大学校园内语言景观的规范性较高。

此外，我们还对繁简字的使用情况做了考察，其中简体中文使用占比高达90.3%，具有绝对优势；繁体中文仅占3.2%，主要使用在特殊情况下，如春联等，多以象征意义为主，不具传达实际信息的作用；值得注意的是，在这二者之外还有6.4%的情况为繁简混用，这个占比是是使用单独繁体字的两倍，我们认为这是该区域汉字使用正在全面“简体字化”的过渡状态的体现，从中也可以窥探到在A大学区域中国大陆语言文化的影响力是巨大的。

4.2.2 功能分析

根据我们的调查结果，华语在A大学校园及周边主要出现在建筑物名、指示牌、告示、菜单、海报、警示语等语言标识或字刻上，我们对其功能做了总结，详见表5：

表5 A大学校园和学校周边华语景观功能情况表

序号	功能类型	具体功能	数量	比例
1	指示和服务功能	建筑物名	11	2.4%
2		房间名	21	4.5%
3		地点名/地图/指示牌	36	7.8%
4		通知/告示	60	13.0%
5	管理和工具功能	海报/宣传语/菜单	207	44.7%
6		警示语	106	22.9%
7	文化装饰和宗教祈福功能	吉祥标志	22	4.8%
		合计	463	100%

梳理这些用途各异的华语景观，可以归结为以下三种不同的功能类型：

（1）指示和服务功能。包括建筑物名、房间名、地点名、地图、指示牌等，如“海上丝路孔子学院”（图1）的楼名和路线引导牌，为控制新冠疫情设置“健康疾控中心”（图2）等，多以多语种组合形式出现，字刻简明醒目，需要具有很好的为校内各国师生和校外访客有效传递信息和正确提供指引服务。



图1 海上丝路孔子学院
资料来源：本研究整理



图2 健康疾控中心
资料来源：本研究整理

(2) 管理和工具功能。包括学校内的通知、告示、宣传语、警示语和校内海报等，如“中泰一家亲”（图3）的校园宣传牌，“禁止吸烟”（图4）警示标志，以及新冠疫情特殊时期的“戴口罩”、“勤洗手”、“保持社交距离”的防疫宣传语等；还包括校内外的商家的宣传海报、张贴广告、菜单等。校内多发挥对于学生和教学秩序的管理功能，在校外则多起到营销宣传和辅助交易的工具功能。



图3 中泰一家亲
资料来源：本研究整理



图4 禁止吸烟
资料来源：本研究整理

(3) 文化装饰和宗教祈福功能。A 大学校内有很多中国元素的符号标识，如对联、剪纸、吉祥图案等，如办公室门口的“招财进宝金童门贴”（图5）可渲染出校园内浓厚的中国风和体现中华语化氛围；泰国作为一个宗教发达的国家，佛教符号、道教附录，华人吉祥标志随处可见，人们将其放置在特定的地点趋吉避凶，如院长办公室门上就贴有平安福录（图6）。



图5 招财进宝
资料来源：本研究整理



图6 平安福录
资料来源：本研究整理

4.2.3 “A 大学”与“唐人街”华语语言景观对比分析

我们将 A 大学校园及周边华语景观（以下简称“A 大学”）的调研结果与祝晓宏（2018）对“曼谷新老唐人街、四面佛景区、湄南河岸码头夜市和西部美功火车市场”五个华人传统商业区和热门景点的华语语言景观（以下简称“唐人街”）的调查进行了一些关键点对比研究，如下：

A. 语码对比分析

在语种组合层面,“唐人街”以“华语+泰语”双语景观为主(占比 65%),“A 大学”以“中文+英文+泰文”三语景观(占比 37.6%)为最多,其次是“中文+泰文”(占比 22.9%);“唐人街”华语多语景观不多见(占比 23%),而“A 大学”华语多语景观颇多(占比 38.9%);A 大学作为泰国高等教育的场所,也是泰国语言政策的重要和引领性的实践者,在语言文字的使用上较一般场所更具有规范性,同时作为一所高等院校也会注意体现学校的国际性,“中文+英文+泰文”既能很好的落实政府“泰语是国家通用语”的语言政策,又可很好的展现 A 大学的国际化办学的定位,这应该是造成两者以上差异的原因之一。

此外,“唐人街”华语单语情况较少(占比 7.7%),且“多制作年代久远”;而“A 大学”华语单语数量颇多(占比 23.3%),而且校外商业区出现率(32%)远高于校内区域(18%)。其原因可能是留学生在学校社区内需要持续学习生活几年的时间,和学校社区发生频繁和密切的联系,这是短期来泰的游客所没有的,“单独华语”即体现了这种更长时间更多接触的“留学生—学校社区”联系,也表明华语在 A 大学及其周边发挥着具有实际意义的信息传达作用。

在字刻及其他层面,“唐人街”,“华语+泰语”双语景观的结构布局中,“泰语总是处于中心或抬头位置,华语位置靠下或居于边缘,华语字体的大小和数量一般也不会超过泰语。”而“A 大学”的华语景观中华语位于相对优势位置(独占/顶部/左边/中心)的比例为 62.2%,位于相对劣势位置(底部/右边/边缘)位置的比例为 37.8%;华语字体“相对更大”的比例为 48.2%，“大小接近”的比例为 30.0%，二者合计为 78.2%，仅有 21.8%“相对更小”。

此外,“唐人街”华语语言景观中“单语华语景观大部分是历史华语景观,制作年代比较久远,其华语字在标识上的呈现顺序多为从右到左,材质多以木头和金属为主,字体多为繁体、楷体书写”;而“A 大学”的华语景观中语码排列以从左到右横向排列占绝对多数主(83.4%),在所用的材料上以纸质(49.7%)和塑料材质(27.0%)为主,再繁简字选用上简体中文占比高达 90.3%,在文字制作上以现代化计算机打印为主(97%),在以上方面对比二者存在明显的差异。一方面说明在不同的区域内,基于区域的性质、华人的数量和类型、以及华人、华语与所在区域的互动关系的不同,华语发挥的作用不同,华语所处的地位和具有的语言权势也不同;另一方面“唐人街”的华语景观整体上年代较久远,而“A 大学”的华语语言景观基本都是近几年的为主,可以在一定程度上推测泰国的华语环境这些年正逐渐宽松,华语的地位也渐渐提高。第三、“唐人街”的华语环境形成历史久远受语言文化传承影响较大,而“A 大学”的华语环境主要在近几年来与中国大陆不断交流和大量中国留学生的到来才形成的,这也是造成二者差异巨大的原因。

B. 功能对比分析

(1) 功能类型的差异。我们调查发现 A 大学校园及周边华语标识以发挥实际的信息传达功能为主(95.2%),具体分为指示、服务功能和管理、工具功能,仅有少量以发挥象征意义的文化装饰和发挥宗教祈福功能(4.8%)。祝晓宏(2018)在研究中认为“在唐人街华语主要是在金行、餐饮等行业标识中发挥信息沟通作用,在景区、夜市和火车市场,华语也主要是在这些行业标识中发挥信息功能。”我们对此的理解是特指针对中国人或懂华语的其他国家人。因为,泰国的研究者对此做过调研并认为曼谷唐人街的以店名为主华语景观店名,对于泰国的顾客(包括完全不懂华语的泰国华裔)而言更多的是象征功能,而非信息传达功能。

(2) 具体功能类别的差异。祝晓宏(2018)在研究中,从数量看“店名”(32.5%)、广告牌(28.8%)和菜单(26.2%)是“唐人街”华语语言景观的主要具体功能,以指导和服务为目的;“A 大学”华语景观中,从数量看校内以海报/宣传语/和校外商家海报和菜单居多,合计占比(44.7%),其次是校内的警示语(22.9%),内容以的“禁止吸烟”等校园日常管理以及疫情特殊时期的“戴口罩”、“保持社交距离”等防疫宣传为主,在校内多发挥对学生和教学秩序的管理功能,在校外则多起到营销宣传和辅助交易的工具功能。

(3) 吉祥标识的差异。祝晓宏(2018)在研究中发现“唐人街”的吉祥标识较普遍(6.6%),室内多为日历、对联、招贴等,室外多为灯笼、神龛、等,寓意多涉及生意、财运

和平安;“A 大学”华语景观中,吉祥标识相比更少(4.8%),主要集中在校内,形式上多为对联、剪纸、“福”字以及“龙”图案等各式中国风格装饰符号,主要作用是渲染校园内浓厚的中国风,营造中华语化氛围,从而更好的服务中国留学生和促进学校的宣传,当然也有小部分吉祥标志是为了祈求平安和财富好运。

5. 结论及余论

综合上文对 A 大学校园及周边华语景观的分析研究,我们可以得出以下几个结论:

A. 总体上看,在 A 大学校园及周边泰文作为官方通用语具有绝对优势地位,英语作为国际通用语被广泛使用,华语在特定区域内具有优势。

B. A 大学校园及周边的华语语言景观较之非校园区域,在整体上规范性更好,现代化程度更高,更注重实用性和便利性;在功能上强调发挥实际的信息传达功能,其中指示、服务功能和管理、工具功能尤为突出。

C. 借助“语言景观”理论研究泰国华语的整体状况时,可尝试采取分先“领域”再“整合”的方式。

在我们的调查中,真切地感觉到这些华语字牌对中国留学生的实际意义,对 A 大学的中国留学生来说,它不仅仅是一道“语言景观”,也是留学生在“语言生活”。李宇明(2016)在《语言生活与精神文明》中指出:“运用和应用语言文字的各种社会活动和个人活动,可概称为“语言生活”;“语言生活”中的“语言”,也包括“文字”;对于“语言生活”的研究他提出要“分领域观察语言生活”。结合本研究,特别是“A 大学”、与“唐人街”的对比研究,我们发现由于“领域”和区域的不同,华人的数量和类型的不同,以及各区域内主要华人和华语与所在区域的互动关系的不同,华语在不同区域发挥的作用各异,所处的地位和具有的语言权势不同,因此很难通过采集一个或者几个的地点的华语语言景观来研究泰国整体的华语状况,我们认为在具体问题具体分析原则的指导下,按照不同的标准划分“领域”并进行“语言景观”研究,通过整合不同“领域”的研究结果,来分析泰国华语的整体状况也许是更好的研究方式。关于划分“领域”的标准,还有需要后续大量的调查研究。

本文也有很多不足之处。一方面,由于时间和精力的局限,本人仅采集了 A 大学一个学校的华语语言景观,采集到的素材数量也并非十分丰富,如有后续研究可以对 A 大学内包含各种语言的全部的语言景观进行穷尽式的采集和研究,或对泰国全国范围内包括不同地域、不同性质、不同规模的多个大学进行华语语言景观的采集和研究;另一方面,作为“语言景观”理论的初窥门径者,本人的研究思路和研究能力还有待提高;最后,祝晓宏、王晓梅等前辈的相关研究给了本人重要对的研究启示,在文中所涉及到的任何讨论都是出于学术的目的,在此对各位学者前贤致谢。

6. 参考文献:

- 高珊、付伊(2017)。国内语言景观研究综述。《湖州师范学院学报》,39(05),73-78。
<https://chn.oversea.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2017&filename=HZHX201705013&v=PUwRtutJJNhydi4MILu9OEGroXCVfvXe78blImhZIHtpAR08j4wSVOQh3AJGbQvg>
- 郭熙、刘慧、李计伟(2020)。论海外华语资源的抢救性整理和保护。《云南师范大学学报》,52(02),55-64。
<https://chn.oversea.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2020&filename=YNSF202002010&v=4sPPL2yqiSCksD1DOYQ2R7vtr%25mmd2FiIiHJtNtwwyHV%25mmd2BkPbgLxiQjI0HZ9GWj%25mmd2BYzrcX>
- 金怡(2016)。语言景观之场所符号学研究述评。《宿州学院学报》,31(06),59-62。
<https://chn.oversea.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2016&filename=SZSY201606019&v=H9vDt2of6KdCyckOQtjLpLXKj28iRWA3PI8PvbuSqeto174NFTZgmjdPL6qSa45A>
- 金怡(2017)。语言景观理论框架研究。《皖西学院学报》,33(04),106-110。
<https://chn.oversea.c>

- nki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2017&filename=WXXB201704021&v=GG9RWwv7Gyw7HlchSY7U2XKvrzAbxsVQ3tdRd7D%25mmd2BTqV%25mmd2BRp8ZFgNATg6BegmiP7p0
- 李宇明 (2016)。语言生活与语言生活研究。《语言战略研究》，1(3)，15-23。
<https://wenku.so.com/d/bde670d4c2724aaf225b277a20b53071>
- 潘红英 (2020)。英国南安普顿大学沿途中国商店语言景观的构建。《西部学刊》，16，152-154。
<https://chn.oversea.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2020&filename=XB XK202016047&v=ZucGXnuPwrCppPjZwn2dUcYbCWAWZzpeiT87b27npirPzLHFxnUHtl40NbC656CF>
- 任文雨 (2019)。泰国曼谷地区语言景观及其汉语使用情况研究 [硕士论文，华侨大学]。中国知网 (CNKI)。
<https://cdmd.cnki.com.cn/Article/CDMD-10385-1019625849.htm>
- 尚国文、赵守辉 (2014)。语言景观的分析维度与理论构建。《Journal of Foreign Languages》，37(06)，81-89。
<https://chn.oversea.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2015&filename=WYXY201406020&v=H3KLoLo%25mmd2BhZgDpTmyYJpu85YpCmx2gJG9Nz9%25mmd2BF8agloS2JygfnqWcJmrUoIjgNotp>
- 王晓梅 (2020)。语言景观视角下的海外华文研究。《云南师范大学学报》，52(02)，65-72。
<https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2020&filename=YNSF202002012&v=4sPPL2yqiSD7aMXu7OVc9YF7530r8JjqeBjhUtxVBhigNteRVxV1e7E%25mmd2FVB0dLkWe>
- 徐茗、卢松 (2015)。城市语言景观进展与展望。《人文地理》，30(01)，21-25。
<https://chn.oversea.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2015&filename=RWDL201501005&v=ydnuovdk9%25mmd2B47IEGdS%25mmd2BYkTvaDObLwBCJ0Ffemc3pl3JdNune%25mmd2BeqsX9JSo0H3FESQ>
- 祝晓宏 (2018)。语言景观视角下泰国华文使用及其变异。《中国语言战略》，5(02)，19-29。
<https://chn.oversea.cnki.net/KCMS/detail/detail.aspx?dbcode=CCJD&dbname=CCJDLAST2&filename=YYZV201802003&v=mAAuJt8XIV%25mmd2BNzKwhjfJ%25mmd2BiV%25mmd2ByTbc7dy7Q1oRw0VsxPYFyecuyOPUxbJ0KsM94fFB8>
- Boonjoon, N. (2018). Linguistic Landscape of Libraries in Bangkok: A Preliminary Analysis. Thailand.
https://www.researchgate.net/publication/328365074_Linguistic_Landscape_of_Libraries_in_Bangkok_A_Preliminary_Analysis
- Chuaychoowong, M. (2019, April). *Linguistic Landscape on Campus: A Case Study of a Thai University* [Published online]. RSU International Research Conference 2019, Thailand.
<https://rsucon.rsu.ac.th/files/proceedings/inter2019/IN19-212.pdf>
- Huebner, T. (2006). Bangkok's linguistic landscapes: environmental print, codemixing and language change. *International Journal of Multilingualism*, 3(1), 31-51.
<https://www.tandfonline.com/doi/abs/10.1080/14790710608668384>
- Landry, R., & Bourhis, R. Y. (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology*, 16(1), 23-49.
<https://journals.sagepub.com/doi/abs/10.1177/0261927x970161002>
- Scollon, R., & S. W. Scollon., (2003). *Discourses In Place: Language In The Material World*. London.
https://www.researchgate.net/publication/290857050_Discourses_in_Place_Language_in_the_Material_World
- Wu, H. M., & Techasan, S. (2016). Chinatown in Bangkok: The Multilingual Landscape. *Journal of Humanities*, Special Issue, 22, 38-52. https://brill.com/view/journals/mnya/19/3/article-p38_4.xml

A Literature Analysis on the application of Flipped Classroom for Higher Education: Evidence from Teaching Online for Undergraduate Students

Quan Su^{1*} Fangyu Xiang² Chaoqiao Yang³ K. C. Tsai⁴

^{1*-3} China-ASEAN International College, Dhurakij Pundit University, Thailand

⁴Harrow International School Bangkok, Thailand

*suquanspring@foxmail.com

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Abstract

The spread of the novel coronavirus pneumonia COVID-19 has prevented college students from many places across the country regarding the on-site learning as scheduled. To comply with the announcement of the Ministry of Education “suspending the classes without terminating the teaching activities”, colleges and universities are required across the country to deliver the way of online teaching. However, teaching online in the epidemic is different from traditional online teaching activities. The teaching online mode is using the modern technology and computer-related technology to break the limitations of time and space and region. It is different from the traditional offline teaching mode, complements and promotes each other. Under this special circumstances and conditions, the online teaching mode can also conduct independently with the offline teaching mode. This article is conducted by the application of flipped classroom for undergraduate online teaching by carrying out a systematic literature analysis method. After searching for keywords through Baidu academic database, the conditions are referred. There are 1340 articles in the literature, and among the 1340 articles that meet the conditions, 1254 articles remain after repeated function screening through endnote software. After setting the conditions of journal article, journal category, undergraduate, non-undergraduate, and literature supplement, thus the selected reading documents are generated as total of 21 articles. Through the analysis of the 21 articles, the application of flipped classrooms in undergraduate online teaching, the enthusiasm of students in class under this mode, and the impact on later education curriculum reform are obtained.

Keywords: Online Teaching, Flipped Class Model, Document Analysis, Undergraduate

翻转课堂在本科线上教学运用之系统性文献分析

苏泉^{1*} 向方玉² 杨朝俏³ 蔡冠群⁴

^{1*-3} 博仁大学—中国东盟国际学院

⁴Harrow International School Bangkok

*suquanspring@foxmail.com

摘要

新型冠状病毒肺炎 COVID-19 的蔓延导致全国多地大学生无法如期开学。在教育部“停课不停教，停课不停学”号召下，各地高校广泛开展在线直播授课，然而疫情下直播授课不同于传统在线教学。网络教学模式是利用现代网络技术，以计算机相关技术为依托，打破时空、地域限制的线上教学模式，其与传统的线下教学模式既一脉相承又相互区别，相互补充，相互促进。在特殊环境和条件下，网络教学模式亦可与线下教学模式并行独立运行。文章以翻转课堂

在本科线上教学的运用研究为题目进行系统性文献分析法,本研究以翻转课堂在线上教学的运用研究为搜寻,通过百度学术资料库对关键字的筛选后查询到符合条件的文献共有 1340 篇,在符合条件的 1340 篇文献中通过 Endnote 软件进行重复功能筛选后剩余 1254 篇,再设定期刊文章、期刊类别、本科、非本科、文献增补的条件后最终得到筛选阅读文献共 21 篇,通过最终 21 篇的文献中分析得出翻转课堂在本科线上授课的运用情况,学生在此模式下上课的积极性以及对后期教育课改的影响。

关键词: 在线教学、翻转课堂、文献分析法、本科

1. 研究背景

翻转课堂 (Flipped Class Model), 一般被称为“反转课堂式教学模式” (Inverted Class Model), 是一种颠覆性理念的教学术语 (张婧, 2018)。传统的教学模式是老师在课堂上讲课, 布置作业, 让学生课后完成。与传统的课堂教学模式不同, 在“翻转课堂”下, 学生在家完成知识的学习, 而课堂变成了老师学生之间和学生与学生之间互动的场所, 包括答疑解惑、知识的运用等, 从而达到更好的教育效果 (张金磊等, 2012)。其翻转课堂核心理念是课堂由“先教后学”向“先学后教”翻转。(卢强, 2013)。所以说课堂翻转不仅仅课堂教学方式的反转, 而是教师的教育观念的翻转。

基于翻转课堂理念的混合式教学模式设计与实践可以实现教学方式和教学模式的创新与发展。“互联网+”时代的混合式学习是一种将传统的面授课堂教学与现代网络信息化教学方式结合起来的教与学的新方式 (王艳丽等, 2016)。而翻转课堂是在信息化环境中, 实现对传统教学流程的改变和实现基于“以学生为中心”教学的真正本质。众所周知, “互联网+”时代的教育崇尚和确立的是一种“为学习服务”的全新教育观, 而“互联网+翻转课堂”理念的协同贯穿, 既能充分发挥混合式教学优势, 又能改变单一陈旧的学习方式, 激发学生的学习热情和主动性。据此模式对高校生物学相关课程进行有效的探索和应用, 对于解决基础课程传统的教学难点、有效提高教学质量、促进教学改革具有重要意义。这种新型的混合式教学将为今后生物学基础课程的教学改革和创新提供新的思路。

新型冠状病毒肺炎 COVID-19 的蔓延导致全国多地大学生无法如期开学。在教育部“停课不停教, 停课不停学”号召下, 各地高校广泛开展在线直播授课, 然而疫情下直播授课不同于传统在线教学。网络教学模式是利用现代网络技术, 以计算机相关技术为依托, 打破时空、地域限制的线上教学模式, 其与传统的线下教学模式既一脉相承又相互区别, 相互补充, 相互促进。在特殊环境和条件下, 网络教学模式亦可与线下教学模式并行独立运行。例如, 在当前新型冠状病毒传播流行之际, 传统线下教学模式无法实施, 则可应用网络教学的方式来完成教学目标, 达到相同甚至超过传统教学方式的效果。教学模式既是特殊环境条件的需求, 又是未来现代化教学模式的体现, 因此, 深入研究和探索网络教学模式的设计、建立、运行及应用有助于提高教学质量, 培养适应社会发展需求的新时代人才。与理论教学相比, 实践教学在网络环境下更难于操控。现有的网络实践教学模式大致都可归类为讲授模式和协作学习模式两种 (潘万龙等, 2017)。其中, 讲授模式更接近于传统教学模式, 该模式将整个教学过程赋予网络载体之上, 教师利用直播通讯软件, 如: 腾讯直播/会议、超星直播课堂、钉钉直播、雨课堂等, 实现与线下课堂相同的同步教学模式; 亦可利用录屏软件, 如 EV 录屏、Camtasia 等软件将课程提前录制好, 供学生自学的异步教学模式。协作学习模式则是更具开放性的教育教学方式, 这一学习模式可运用 PBL、CBL 教学法, 以问题、案例为导向, 教师布置问题或案例, 学生通过网络端协作完成对问题或案例的探讨, 在过程中完成学习; 亦可通过竞争、协作及角色扮演等方式来进行 (代冬梅等, 2020)。学生在学习过程中应该注意自身发展, 切实对知识的理解和运用, 有意识的发展自我, 而不是积极抄写教师教授的课堂笔记, 完成教师布置的作业等,

教导学生有意识的借助翻转课堂模式支持主动获取知识，全方面发展自己而不是被动接受知识和能力，这是此研究的最重要的意义所在。因此，老师怎么合理利用翻转课堂去如何引导学生有意识的对自己进行主动学习，是教师需要着重思考的问题。同时，教师必须本身要深刻理解掌握教育科技发展下的新技术才能在施教过程中，不断创新和寻找出更适合自己的课堂教学方法和教学课程体系。

根据研究背景作者提出以下问题：

1. 翻转课堂运用在本科线上教学专业使用情况？
2. 翻转课堂运用再本科线上教学是否能提高学生的自我学习积极性？
3. 翻转课堂运用在本科线上教学对教学改革的意义？

2. 研究方法

文献收集与文献资料萃取

文章以翻转课堂在本科线上教学的运用研究为题目进行系统性文献分析法，本研究一开始以翻转课堂在线上教学的运用研究为搜寻，藉此先行掌握小学，中学，大学，研究生的几个阶段的授课程度，再根据所找到的文献资料以及结合作者自身的工作经验把研究的范围缩小到翻转课堂在本科线上教学的运用进行文献分析。

2.1 筛选电子资料库

翻转课堂在线上教学的运用研究属于社会科学领域中的教育议题，所以作者选取百度学术作为论文收集资料库来进行文献收集和筛选，筛选侧重于社会科学和教育两个领域，不同的资料库虽有不同的搜索界面与可指定的搜索条件，但搜索关键字、出版年份与文献所使用的语言三者是其中共通的搜索条件。除时间范围设点在 2016 以后，出版物设定为期刊，文献所使用的语言一律为中文之外，其他一致设定搜索关键字“翻转课堂”，“线上教学”，关键字来代表各个领域的关键点，例如，“翻转课堂”，“线上教学”，来代表可能在翻转课堂运用在本科线上授课应用所可能采用的字样，关于教学科教方面其中加入“线上教学”作业检视了关于科技信息教育的文章，发现所有文献都含有“翻转课堂”但是不一定有“本科”如：贾永侠（2017），翻转课堂在高中生物教学中的应用研究。文章并未出现“本科”字样，所以在第一组关键字中加入了“本科”。

2.2 文献搜寻与建立资料库

确定了所要搜寻的文献库和所要找的主题关键字，即开始进行搜寻并将所找到的资料整理收集放入 Endnote 项目软件中，以便进行后续的资料文献筛选，本小节陈述了在百度学术资料库中所搜查到的文献资料过程和结果

百度学术资料库

搜索日期为 2020 年 11 月 9 日，按照以下顺序步骤条件进行搜索。

1. 关键字：符合条件的文献共有 290000。
2. 出版年份：指定年份在 2016 年至今符合条件的文献共有 58400。
3. 语言：指定出版语言为中文，符合的文献共有 55800。
4. 来源类型：指定学术期刊为文献的来源类型，符合文献共有 55300。
5. 期刊核心类别：指定为中国科技核心期刊，符合文献的共有 1340。

2.3 资料分析

笔者将筛选出的资料进行统计性资料整理，整理流程如下图示 2-1。

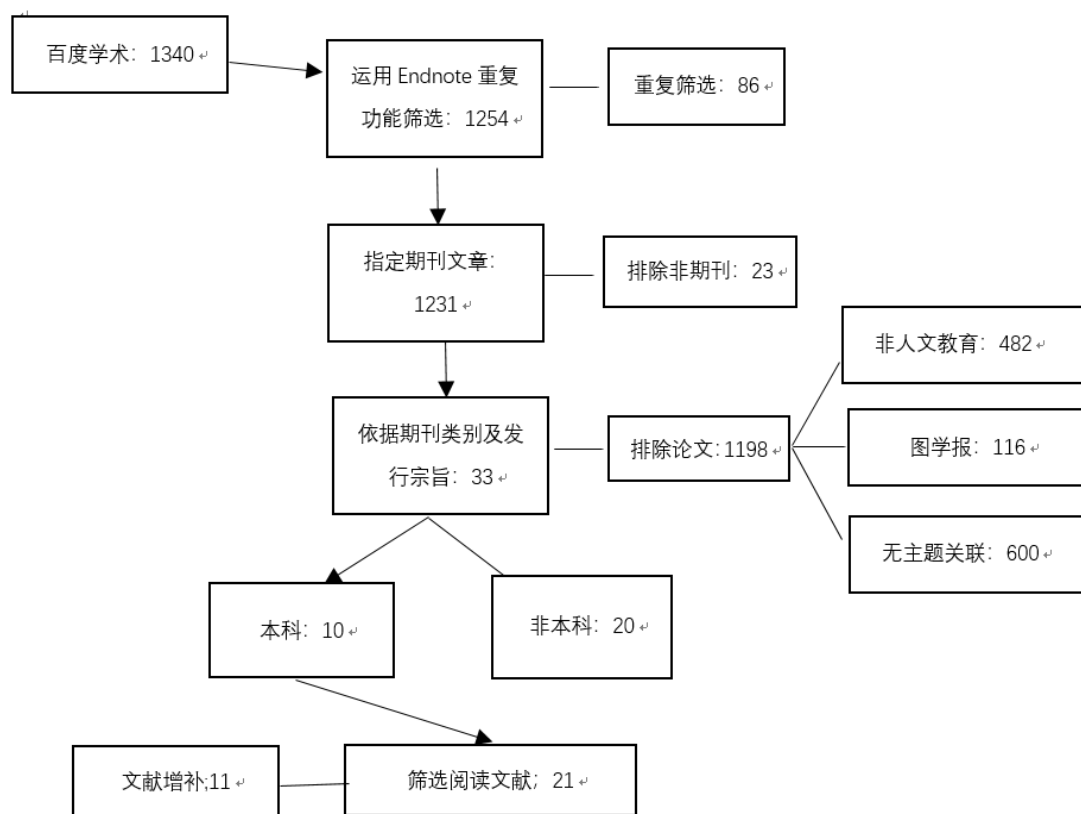


图 1 文献搜集流程图

3. 研究结果

本节针对符合本研究的研究主题和符合筛选条件以及增补的文献共计 21 篇，进行整理分析，来展示出翻转课堂在本科线上教学运用分析。本部分为三部分：第一部分为文献基本资料分析，根据文献研究的内容和方向，为翻转课堂在本科教学分别就教育类别，专业上进行归纳；第二部分在文献资料中分析总结翻转课堂在教学过程中对学生自主学习的总结；第三部分就文献资料对本科层次阶段线上教学课程质量评估意见进行分析，整理课改建议和改革的意见进行分析和总结。

第一部分文献学科基本分类

研究者所研究学科方向

表 1 文献学科基本分类

科目类别	创新创业类	公共基础类	医学类	理工类	语言类	艺术设计类	不明确
篇数	1	7	3	2	4	2	2

从资料整理分析得出在翻转课堂在本科线上授课中公共基础课程比其他学科类频率高，同时也反映出，翻转课堂在公共基础课在中使用的概率是比较多，虽然语言类和医学类频数也高，但是和公共基础类课程相比翻转课堂线上线下模式还是不太成熟，教师使用翻转课堂使用在创新创业类课程和艺术设计类课程比较少。

第二部分为翻转课堂对学生自主学习的影响

对符合本研究的研究主题和符合筛选条件以及增补的文献 21 篇，进行整理分析，有 7 篇指出展示出翻转课堂在本科线上教学对学生自主学习，总结出如下表格 2。

表 2 翻转课堂对学生自主学习的影响

文献名称	内容	出版年份
以大学生“双创”为核心的《方便食品加工》翻转课堂教学设计	“课前”线上教学资源自主学习，“课中”多元化组合式教学以及“课后”过程化综合性评价三位一体的全方位教学设计，构建本科生翻转课堂教育教学新模式，强化大学生创新思维，创业意识及实践能力的培养。	2018
混合式教学在本科护理管理学课程中的应用	混合式教学在护理管理学课程中的应用取得较好成效，线上教学部分要注意培养学生的自主学习能力，课程平台需增加支持个性化学习的功能。	2019
疫情防控时期高校本科线上教学工作的思考与探索	学生应该适时翻转课堂，少教多学地发挥自己学习的主观能动性。只要学校、教师、学生三位一体，各司其职、戮力同心，一定会探索出疫情防控特殊时期高等学校本科线上教学工作的新路径与新方法。	2020
微信公众平台在本科生翻转课堂中的应用	为了降低教师与学生的使用成本，保证教学消息的及时性并且提高学生的主动性，利用微信公众平台来作为线上翻转课堂的平台的产品将取得一定优势。	2017
“植物保护通论”课程（昆虫学部分）在线教学探索与实践	翻转课堂教学模式相结合的线上教学模式，实现了从课堂教学到线上教学的转换。实施后学生积极性高、教学节奏顺畅、教学效果良好。	2020
Spoc 翻转课堂教学有效性的系统评价与元分析	翻转课堂的考试成绩、知识理解能力、知识应用能力、自学能力、自我管理能力、学习动机均高于传统课堂。	2019
翻转课堂的教学反思——基于无锡科技学院的个案研究	这一教学模式能够有效地激发学生的学习积极性和主动性，明显提升了学习效能。	2019
混合式教学模式用于妇产科护理学课程的实践效果研究	翻转课堂的内容具有整合性、提高了对课程的深入理解、时间安排较为合理、师生间和学生间的互动和交流。	2019
翻转课堂教学模式对飞行学员科学素质的促进性研究	翻转课堂教学模式试验教学.通过大量数据和学员的反馈发现,翻转课堂教学模式对科学素质的培养有着很好的促进作用。	2019
如何构建“互联网+ 翻转课堂”下生物学教学模式之创新和发展。	“互联网+翻转课堂”模式在提升教学品质上具有深远影响，由微课和混合式学习为中介构建此模式可有效提高教学质量，实现具有网络信息化特色的新型课堂翻转，为高校本科生基础教学改革和创新提供思路。	2019
英语翻转课堂中的案例教学研究——评《翻转课堂模式中的英语案例教学研究》	翻转课堂突破了传统的英语教学模式，将线上教学和课堂教学进行了创新融合，加强了课内的教学互动，延伸了课外的网络自主学习，进而多角度地优化了大学英语的教学效果。	2019

表 2 (续)

文献名称	内容	出版年份
试析翻转课堂在大学语文教学中的应用	作为高校人文素质课, 大学语文承担着培养学生人文素养和语言表达能力的重要作用。但目前大学语文课堂多是延续文本分析的教学方式, 难以激发学生的学习主动性, 因此应改革大学语文教学方式。引入翻转课堂教学模式, 能将线上教学与线下教学相结合, 促使学生积极参与语文教学活动, 并提高学生的综合素质。	2018
基于翻转课堂的《c 语言程序设计》教学改革研究。	翻转课堂以培养学生主动学习为主, 教师引导为辅, 使课堂发生重大变革	2018

根据表格总结可以看出对符合本研究的研究主题和符合筛选条件以及增补的文献 21 篇文献中, 有 61.9% 的文献直接提出翻转课堂结合线上教学模式能够有效提高学生的积极主动性。

第三部分文献资料对翻转课堂在本科层次阶段线上教学课程质量和课程改革意义

对符合本研究的研究主题和符合筛选条件以及增补的文献 21 篇, 进行整理分析, 有 7 篇指出展示出翻转课堂在本科层次阶段线上教学课程质量和课程改革意义, 总结出如下表格 3。

表 3 翻转课堂在本科层次阶段线上教学课程质量和课程改革意义文章

文献名称	内容	出版年份
基于翻转课堂的大学实验化学教学研究与实践。	学生学习为中心构建了由课程资源准备, 线上教学与线下教学三者相结合的翻转课堂教学模式, 以信息技术与课堂教学的深度融合为契机, 依托我校网络教学平台进行教学实施。经学生问卷反馈, 教学效果良好。	2019
以大学生“双创”为核心的《方便食品加工》翻转课堂教学设计	“课前”线上教学资源自主学习, “课中”多元化组合式教学以及“课后”过程化综合性评价三位一体的全方位教学设计, 构建本科生翻转课堂教育教学新模式, 强化大学生创新思维, 创业意识及实践能力的培养。	2018
如何构建“互联网+ 翻转课堂”下生物学教学模式之创新和发展。	“互联网+翻转课堂”模式在提升教学品质上具有深远影响, 由微课和混合式学习为中介构建此模式可有效提高教学质量, 实现具有网络信息化特色的新型课堂翻转, 为高校本科生基础教学改革和创新提供思路。	2019
情防控时期高校本科线上教学工作的思考与探索	本科生课程的教与学活动; 教师可根据自己课程的专业属性, 利用信息化手段	2020

表 3 (续)

混合式教学模式用于妇产科学护理学课程的实践效果研究	<p>“因材施教”地开展形式多样的线上教学；学生应该适时翻转课堂，少教多学地发挥自己学习的主观能动性。只要学校、教师、学生三位一体，各司其职、戮力同心、一定会探索出疫情防控特殊时期高等学校本科线上教学工作的新路径与新方法。</p> <p>混合教学的内容科学,资源丰富,组织形式合理,考核方式综合全面,在线平台易操作,翻转课堂的内容具有整合性,提高了对课程的深入理解,时间安排较为合理,师生间和学生间的互动和交流。</p>	2019
“金课”视阈下地方本科高校经管类专业课程开展基于spoc 的翻转课堂教学模式研究	<p>地方本科高校经管类专业课程开展基于SPOC的翻转课堂教学模式的诸多障碍,在此基础上提出从出台激励政策与完善评价机制,构建适于翻转课堂的在线学习环境,全程推进基于SPOC翻转课堂教学模式等角度来完善与改进。</p>	2020
“植物保护通论”课程(昆虫学部分)在线教学探索与实践	<p>翻转课堂教学模式相结合的线上教学模式,实现了从课堂教学到线上教学的转换。实施后学生积极性高、教学节奏顺畅、教学效果良好。</p>	2020
翻转课堂的教学反思——基于无锡科技学院的个案研究。	<p>从教学和管理多维方法和策略角度,对高职院校教学中如何尝试翻转教学模式提出了参考和建议。</p>	2019
如何构建“互联网+ 翻转课堂”下生物学教学模式之创新和发展。	<p>“互联网+翻转课堂”模式在提升教学品质上具有深远影响,由微课和混合式学习为中介构建此模式可有效提高教学质量,实现具有网络信息化特色的新型课堂翻转,为高校本科生基础教学改革和创新提供思路。</p>	2019
英语翻转课堂中的案例教学研究——评《翻转课堂模式中的英语案例教学研究》	<p>大学英语翻转课堂的创新应用来说,翻转课堂突破了传统的英语教学模式,将线上教学和课堂教学进行了创新融合,</p>	2019

表三（续）

大学英语翻转课堂教学的影响因素研究	加强了课内的教学互动，延伸了课外的网络自主学习，进而多角度地优化了大学英语的教学效果。	2018
如何实现课堂与线上教学的有机整合	大学英语翻转课堂教学受到设备与资源，教师及学生三方面因素的影响。	2018
试析翻转课堂在大学语文教学中的应用	翻转课堂是一种有别于传统教学的方法，更多地是强调学生的主体性。以微信, QQ 等“即时通”工具为平台，引入翻转课堂理念，让学生成为录制视频的主角，既可以突破数学教学难点，又可以实现课堂与线上教学的有机整合,从而轻松展现数学学科的独特魅力。 引入翻转课堂教学模式，能将线上教学与线下教学相结合，促使学生积极参与语文教学活动，并提高学生的综合素质。	2018

根据文献内容整理有 13 篇的文献引入翻转课堂教学模式，能有效提高教学质量，从学生的学习主动性和课堂教学效果都比传统课堂有优点，加上线上授课形式实现具有网络信息化特色的新型课堂翻转，为高校本科生基础教学改革和创新提供新思路。

4. 结论

文章以翻转课堂在本科线上教学的运用研究为题目进行系统性文献分析法，本研究以翻转课堂在线上教学的运用研究为搜寻，通过百度学术资料库对关键字的筛选后查询到符合条件的文献共有 1,340 篇，在符合条件的 1,340 篇文献中通过 Endnote 软件进行重复功能筛选后剩余 1,254 篇，再设定期刊文章、期刊类别、本科、非本科、文献增补的条件后最终得到筛选阅读文献共 21 篇，通过最终 21 篇的文献中分析得出翻转课堂在本科线上授课中公共基础课程比其他学科类频率高，同时也反映出，翻转课堂在公共基础课在中使用的概率是比较多，虽然语言类和医学类频数也高，但是和公共基础类课程相比翻转课堂线上线下模式的运用程度还是不太成熟，教师使用翻转课堂使用在创业创新类课程和艺术设计类课程比较少。并且有 61.9% 的文献直接提出翻转课堂结合线上教学模式能够有效提高学生的积极主动性。引入翻转课堂教学模式,能将线上教学与线下教学相结合，促使学生积极参与课堂教学活动，并提高学生的综合素质。翻转课堂教学模式相结合的线上教学模式，实现了从课堂教学到线上教学的转换。实施后学生积极性高，教学节奏顺畅，教学效果良好。同时以翻转课堂在本科线上教学的运用下，翻转课堂教学受到设备与资源，教师及学生三方面因素的影响，Covid-19 的大背景下翻转课堂教学模式相结合的线上线下模式是一种大趋势，也是今后各高等院校授课方式选择的方式之一，“互联网+翻转课堂”模式在提升教学品质上具有深远影响，由微课和混合式学习为中介构建此模式可有效提高教学质量，实现具有网络信息化特色的新型课堂翻转，为高校本科生基础教

学改革和创新提供思路。

5. 不足与建议

根据本研究结论部分在课程改革以及指导建议上, 翻转课堂在本科线上授课方式需要教师借助教具来进行授课, 比如在线授课的网络平台: 腾讯会议、Zoom、钉钉、微信、微助教、QQ 直播等平台。需要各专业教师具备熟练的操作技巧以及稳定的网络才能够让课程成功完成。同时本研究采取系统性文献分析方法, 但是由于文献资料库不足, 本研究只选取了一个中文资料文献库, 故存在研究单一性和代表性不足, 文章的结论缺乏足够的文献来支撑结论结果。

6. 参考文献

- 崔宁、刘向阳 (2019)。基于翻转课堂的高职《单片机应用》课程混合式教学模式探析。《教育与职业》, 000(002), 88-92。http://www.cnki.com.cn/Article/CJFDTotal-JYYZ201902019.htm
- 陈爱香、秦志萍 (2019)。混合式教学模式用于妇产科护理学课程的实践效果研究。《护理研究》, (6), 25。http://www.cnki.com.cn/Article/CJFDTotal-SXHZ201906025.htm
- 代冬梅、陈佳、沈昊宇、龙能兵、干宁 (2020)。基于“互联网+”背景的仪器分析类课程MTSAE教学模式构建。《大学化学》, 0-0。http://www.dxxh.pku.edu.cn/CN/10.3866/PKU.DXHX202001001
- 佟悦、胥馨、汪瑜 (2019)。翻转课堂教学模式对飞行学员科学素质的促进性研究。《物理通报》, 1, 14-17。http://www.cnki.com.cn/Article/CJFDTotal-WLTB201901004.htm
- 龚芸 (2019)。基于问题导向的翻转课堂教学模式实践与思考——以环艺模型设计与制作课程为例。《装饰》, (2), 31。http://www.cnki.com.cn/article/cjfdtotal-zshi201902031.htm
- 雷耀花 (2018)。基于翻转课堂的《C语言程序设计》教学改革研究。《福建电脑》, 34 (8), 165-165。http://www.cnki.com.cn/Article/CJFDTotal-FJDN201808083.htm
- 李艳玲 (2008)。新工科背景下的混合教学模式探究——以大学“计算机基础及应用”教学改革为例。《长治学院学报》, 035 (002), 82-84。http://dx.chinadoi.cn/10.3969/j.issn.1673-2014.2018.02.025
- 柳春艳、李丹、张宝仁、胡晓玲 (2019)。SPOC 翻转课堂教学有效性的系统评价与元分析。《开放教育研究》, 25 (1), 82-91。http://www.cnki.com.cn/Article/CJFDTotal-JFJJ201901010.htm
- 梁延秋 (2019)。多维度教育教学改革——评《MOOC+ SPOCs+ 翻转课堂: 大学教育教学改革新模式》。《教育发展研究》, (1), 16。http://www.cnki.com.cn/Article/CJFDTotal-SHGJ201901016.htm
- 李甦、白柯晨 (2019)。翻转课堂教学设计与实践问题研究。《成人教育》, (4), 27-31。http://www.cnki.com.cn/Article/CJFDTotal-CRJY201904006.htm
- 廖灵志、刘菊荣、库锡树 (2015)。“电子技术基础实验”课程教学模式的探索。《通信电子电路问题牵引探究式教学法探索》, 22。
- 贾永侠 (2017)。翻转课堂在高中生物教学中的应用研究。《课程教育研究》, (6), 121。https://d.wanfangdata.com.cn/periodical/kcyjy201706121
- 梅新兰、谢文娟、尹智敏、杨金凤 (2019)。基于翻转课堂的大学实验化学教学研究与实践。《大学化学》, 34(9), 64-69。http://www.cnki.com.cn/Article/CJFDTotal-DXHX201909011.htm
- 马瑜、李霄翔 (2019)。翻转课堂的教学反思——基于无锡科技职业学院的个案研究。《中国职业技术教育》, (5), 12。http://www.cnki.com.cn/Article/CJFDTotal-ZONE201905012.htm

- 潘万龙、冯亚岚、张晓英 (2020)。医学免疫学实验课程网络在线教学模式探索与研究。《中国免疫学杂志》, 36 (19), 2353。
- 秦俊嫻 (2018)。试析翻转课堂在大学语文教学中的应用。《新课程研究 (中旬)》, (03), 96-97。 <http://www.cnki.com.cn/Article/CJFDTotat-XKCT201806038.htm>
- 沈佳雯、江静嫻、苗扬扬 (2017)。微信公众平台在本科生翻转课堂中的应用。《时代经贸》, (7), 77-80。 <http://www.cqvip.com/QK/87558X/20177/671825911.html>
- 王琳、朱卓非、章雅青 (2019)。混合式教学在本科护理管理学课程中的应用。《中华护理教育》, (4), 8。
- 王艳丽、程云、王锋 (2016)。基于翻转课堂理念的混合式教学模式设计与实践——以《教育技术专业英语》为例。《中国教育信息化》, (10), 11-15。
<https://d.wanfangdata.com.cn/periodical/glxxxt-jcgy201605004>
- 张咏莉、余敬伟 (2019)。如何构建“互联网+ 翻转课堂”下生物学教学模式之创新和发展。《教育教学论坛》, (30), 31。 <http://www.cnki.com.cn/Article/CJFDTotat-JYJU201930031.htm>
- 周睿、王宪青、王坤、刘妍妍、包鸿慧、韩静 (2018)。以大学生“双创”为核心的《方便食品加工》翻转课堂教学设计。《中国多媒体与网络教学学报 (上旬刊)》, (8), 24。
<http://www.cnki.com.cn/Article/CJFDTotat-JMNT201808024.htm>
- 张金磊、王颖、张宝辉 (2021)。翻转课堂教学模式研究。《远程教育杂志》, 211(4), 46-51。
<https://www.hanspub.org/reference/Reference.aspx?ReferenceID=143820>