

**Enhancing Teaching Effectiveness to Foster Student Academic Motivation and Student Engagement in the EFL Classroom through Organization Development Interventions: An Action Research of Zhejiang Yuexiu University of Foreign Languages in China**

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**Abstract**

The issue of student engagement is crucial in that it is not only conducive to students' academic development, but also influences their everyday experiences, both socially and physiologically. So far, there is a dearth of empirical research on implementing ODI to effectively foster student engagement in Chinese EFL classroom. Thus, a systematic inquiry through action research is considered necessary and imperative. This current research focused on enhancing teaching effectiveness to foster student academic motivation and engagement in the EFL classroom by implementing ODI. The sample was 82 freshmen from two parallel classes. The experimental group was exposed to organization development interventions, including appreciative inquiry, goal setting, team building, differentiated instruction, whereas the comparison group received no intervention. Mixed research methods were adopted to collect and analyze the data. The paired-samples *t* test showed that there was statistically significant difference in student academic motivation and engagement for the experimental group between pre-ODI and post-ODI while there was no statistically significant difference for the control group. The Pearson's Correlation Coefficient showed that there was a very strong positive relationship between academic motivation and student engagement. The qualitative analysis of students' reflection reports and classroom observation feedback by three instructors justified how the ODIs employed in this research enhanced student academic motivation and student engagement. Based on the findings, critical recommendations for further research were discussed.

**Keywords:** academic motivation, student engagement, organization development interventions, elf , appreciative inquiry, team building

## Introduction

Academic motivation is one of the most important constructs that has been considered fundamental for students' academic development. Researchers have been unanimous in demonstrating that academically motivated students are more likely to regard learning as valuable and appreciate learning-related activities (Eccles & Wigfield, 2002; Zimmerman, 2008) while lack of academic motivation is seen as a major cause for students' dropout or poor performance (Scheel, Madabhushi, & Backhaus, 2009). Academic motivation is also widely recognized as a significant factor influencing success in EFL (English as a Foreign Language) education (Ushioda, 2013). Under the context of "diverse school environments in this increasingly interconnected multicultural society" (Kim & Fry, 2014, p. 10), a lot of local English language teaching and learning practices are facing a profound motivational challenge. In the new millennium, it is believed that "the predominant motivation of learning English among most second or foreign language learners is no longer concerned with 'integration' in the target native English-speaking culture, but with the construction of a 'bi-cultural' or 'world citizen' identity, as well as identification with the international community" (Sung, 2013, p. 377). In his new ecology of language learning, Lier (2010) focuses on the interaction among elements including relationships, agency, motivation and identity and points out that in many regions, foreign language (e.g. English) is established as a required course in the curriculum. Students who are driven by this 'being mandatory' can achieve some success or pass exams. Nevertheless, in the long run foreign language learners are supposed to "make choices and employ agency in more self-motivated or directed ways" (p. 5) if they want to make enduring and significant progress.

Academic motivation also proves to be pivotal in second or foreign language acquisition in that it helps determine the extent of involvement in learning. Reeve (2012) asserts that high-quality student engagement originates from the underlying quality of students' inner motivational resources and then feeds forward to affect changes in the learning environment. The April 2017 issue of *School Psychology International* (SPI) was produced to help educational officials, and policy makers ascertain the best international practices for fostering student engagement in classroom settings. This topic is promptly put forward and crucial important in that "it reflects growing recognition that today's international policy agenda, with its focus on

college and career readiness for all, depends on the active, sustained engagement of all students” (Lawson, 2017, p. 222).

### Need for Action Research

To investigate the current situation of student academic motivation and student engagement in the EFL classroom in the focal institution, the researcher conducted preliminary diagnosis utilizing the semi-structured interview with 10 instructors and 10 juniors as well as online questionnaire from 343 students (204 sophomores, 139 juniors). Based on the preliminary diagnosis and SWOT analysis, the result showed that most of the respondents’ academic motivation was below the ‘somewhat strong’ level and the motivation level decreased as grade level increased. With regard to student engagement, less than 30% of the respondents engaged in the EFL class on a regular basis, and about 40% of the respondents seldom or never engaged in the EFL class. Student motivation and engagement were linked to certain aspects of the focal institution’s talent cultivation. If these two issues were not addressed adequately and effectively, not only would they affect college English teaching quality, but also hindered the organization development of the focal institution. Thus, a systematic inquiry through action research is considered needed and necessary to address the identified problems.

### Research Objectives

- (a) To determine the differences in student academic motivation before ODI and after ODI;
- (b) To determine the differences in student engagement before ODI and after ODI;
- (c) To examine the relationship between student academic motivation and student engagement.

In view of the aforementioned significance of academic motivation and student engagement, together with the preliminary diagnosis conducted by the researcher, this current research focuses on enhancement of student academic motivation by implementing organization development interventions in order to foster

student engagement, an research area that has not been adequately addressed in Chinese tertiary-level EFL education. Thus, the following literature review analyzed how previous studies have theorized and measured student academic motivation and student engagement. The following questions guided the review:

1. What were the central theories or models that have been used to explain student academic motivation and student engagement respectively? What overarching theoretical framework was used in this current research?
2. How was academic motivation and student engagement defined and measured respectively?
3. What was the relationship between academic motivation and student engagement? From previous literature, what was the effect of intervention academic motivation on student engagement?
4. To what extent and in what ways did the research surrounding academic motivation and student engagement investigate Chinese tertiary-level EFL education?

## **Literature Review**

### Academic Motivation

Motivation research and theorizing about learning a foreign language entered what Dörnyei and Ushioda (2011) describe as the socio-dynamic phase, which can be characterized as understanding motivation as comprising complex interrelationships between learners' individual, internal psychological processes and the wider contexts of their learning environments. In the following literature review, central theories or models that have been used to explain student academic motivation were firstly reviewed and summarized, i.e. expectancy-value theory of achievement motivation, self-efficacy theory, self-determination theory, and MUSIC model, then a brief review of previous studies of academic motivation that were related to EFL context was presented, and research gap was identified.

### Central Theories and Model of Academic Motivation

Proposed by Eccles et al. (1983), the expectancy-value theory of achievement motivation demonstrated that achievement choices were directly influenced by

expectancies for success and values. Expectancies for success have been found to be positively associated with their motivation and performance (Meece, Wigfield, & Eccles, 1990). Cooper, Ashley, and Brownell (2017) applied Expectancy Value Theory to student engagement in active learning. In the study, they employed the main components of the theory to examine student perceptions of active learning. The result showed that students exhibited positive changes and high levels of engagement in active learning.

According to Bandura's social cognitive theory (1986), self-efficacy is a key cognitive variable influencing motivation and engagement. Research has shown that a higher sense of self-efficacy plays a positive part in motivational outcomes such as interest, choices of tasks, persistence (Schunk, & Mullen, 2012) while a lower sense of self-efficacy can have a detrimental effect on learners' engagement and motivation (Pajares, 1996). One of the most comprehensive researches about the impact of self-efficacy on academic motivation was conducted by Schunk (1991). One of the findings revealed that students who were goal-oriented tended to gain a sense of self-efficacy after achieving it, which in turn sustained motivation. Self-efficacy also plays an important role in cognitive, affective, and behavioral engagement (Schunk & Mullen, 2012).

The third major theory is self-determination theory (SDT). What distinguishes SDT from the other two is that "it emphasizes the instructional task of vitalizing students' inner motivational resources as the key step in facilitating high-quality engagement" (Reeve & Halusic, 2009, p. 152). Because of its well-documented utility, SDT has been a popular framework with which to study student motivation and engagement in educational settings and situations (Knight, 2016). It is an empirically based macro-theory of motivation, which has been applied to a wide range of domains, such as classroom instruction (Deci & Ryan, 2008). It postulates that there are three basic psychological needs that are origin of initiation and direction of human behavior and must be fulfilled for high-quality engagement, i.e. autonomy, competence and relatedness (Deci & Ryan, 2008). He (2009) used SDT to explore the connections between adult Chinese English language learners' perceived autonomy support, learning motivation, and classroom involvement. The results of this study indicated that self-determination could be one useful predictor in predicting adult Chinese English language learners' intrinsic motivation and classroom engagement. Participants showed higher learning motivation and increased engagement when they perceived more autonomy support from their instructors.

Compared with the above three theories which had a long history, a latest model of academic motivation is the MUSIC Model (Jones, 2009). The full name of the MUSIC is empowerment, Usefulness, Success, Interest, and Caring. It is derived from research and theory in areas such as education and psychology and synthesized motivation research and theory into one cohesive model (Jones, 2009). The MUSIC inventory was used in this current research, consisting of 26 items that were divided into five scales. Empirical evidence has shown that MUSIC model is a powerful tool in motivating and engaging students in the classroom. A study within the EFL context applied MUSIC model to explore college students' academic motivation in an English course in a Vietnam university. Based on the five components in the model that were believed to be great importance to student engagement in academic settings, the researchers used the survey questionnaires and the focus-group interview to collect data from 214 third-year students who have just finished the English course. By employing the MUSIC Model, the study revealed how the students were really motivated in the course (Le et al., 2014). Atashrouz et al. (2018) investigated how the MUSIC model of motivation affects students' performance, their educational motivation, and educational engagement. Compared with the control group, students who were exposed to the MUSIC model of motivation saw an increase in the internal educational motivation and the educational engagement and improved academic performance.

All of the above four theories or model reflect certain aspects of academic motivation, such as expectancy for success, self-efficacy, autonomy, competence and relatedness. However, the current research finally selected the MUSIC model as the overarching theoretical framework to guide the research. First, the result of the preliminary diagnosis and SWOT analysis conducted by the researcher at the pre-ODI stage showed congruence with the five components of the MUSIC model. Second, this was a comprehensive model in that the five key concepts captured in this model involved many different motivation theories and incorporates them into one model. Thirdly, MUSIC was a model that could be readily utilized in the classroom and easily understood by teachers and students. Fourthly, empirical evidence showed that MUSIC model was a powerful tool in motivating and engaging students in the classroom. Next was a brief review of previous studies of academic motivation that were related to current research context, i.e. Chinese tertiary-level EFL education.

Review on Previous Studies of Academic Motivation of Chinese Tertiary-level EFL Education

Grounded on the reviewed sources during the year 2007 to 2018, the researcher summarized them into nine major categories: (a) Overview of general development of EFL learning motivation; (b) Motivational strategies, such as CBI, PBL, CI; (c) Types of Chinese college undergraduates for English learning; (d) Structure of college English learning motivation; (e) Relationship between motivation and other variables; (f) Demotivation/Demotivators of EFL; (g) Writing motivation; (h) Comparative study; (i) Attribution patterns of English language learning.

### Student Engagement

In the following literature review, central theories or models of student engagement were firstly reviewed and summarized, i.e. Astin's theory of student involvement, flow theory, the student motivation and engagement wheel, and Reeve's conceptualization of student engagement, then a brief review of previous studies of academic motivation that were related to EFL context was presented, and research gap was identified.

### Central Theories and Models of Student Engagement

Astin's theory of student involvement rooted in a longitudinal study of college dropouts that attempted to identify factors in the college environment that significantly affected the student's persistence in college (Astin, 1999). He defined student involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1999, p.518). The theory assumed that the quality and quantity of student involvement was positively correlated with student learning and personal development (Astin, 1999).

The flow theory believes that when people engaged in their best work, they are likely to experience deep immersion and their performance is viewed as intrinsically rewarding and pleasurable, and the activity is perceived as worth doing for its own sake, even if no further goal is reached (Nakamura & Csikszentmihalyi, 2002). Based on the flow theory, concentration, interest and enjoyment in an activity must be experienced simultaneously in order for flow to occur (Csikszentmihalyi, 1997).

The Student Motivation and Engagement Wheel (Martin, 2002) encompasses a diverse array of constructs of motivation and engagement. The model is divided into four dimensions: "adaptive cognitive dimensions, adaptive behavioral dimensions, impeding affective dimensions and maladaptive behavioral dimensions". According

to Martin (2002), to enhance student engagement and help them deal with schoolwork pressures and stress effectively, interventions need to increase motivation boosters, and reduce motivation guzzlers.

The researcher adapted Reeve's four-aspect conceptualization of student engagement. Behavioral engagement refers to the observable behavior of students engaging in the English class such as 'attention', 'interaction with the instructor', and 'active participation'. Emotional engagement refers to the presence of positive emotions in the English class or during English task involvement, such as 'interest, enjoyment and enthusiasm' (Skinner et al., 2009). Agentic engagement refers to the extent of "students' constructive contribution into the flow of the instruction they receive" (Reeve & Tseng, 2011, p. 258). Cognitive engagement refers to how strategically the students attempt to learn in terms of using sophisticated learning strategies (Walker, Greene, & Mansell, 2006). Next was a brief review of previous studies of student engagement that were related to tertiary-level EFL education, both globally and domestically.

#### Review of Previous Studies of Student Engagement in the Context of EFL

Globally, a substantial body of research explored how to enhance student engagement in this digital era, especially with the aid of technology. Harunasari (2016) set out to investigate how to promote student engagement in a tertiary level EFL large classes with the help of digital backchannels. By assessing three aspects of student engagement—behavioral, emotional, and cognitive engagement, the result showed that utilizing digital backchannel can increase students' engagement in the learning process. Apart from making use of appropriate technology tools to facilitate student engagement, researchers also employ other strategies or techniques. Nguyen et al. (2016) used a pre-test post-test control group design to examine the effects of self-questioning on Vietnamese EFL undergraduate students literary reading engagement.

Domestically, after a review of related literature, three major research themes have been identified by the researcher: 1) Factors affecting Chinese students' engagement; 2) Chinese students' participation patterns in the college English classroom; 3) Strategies to improve Chinese EFL learners' engagement. Some researchers try to generalize the factors affecting students' engagement in the college English classroom from various perspectives, among which the following ones are the



most frequently mentioned: teacher factor, student factor, classroom atmosphere, peer influence, teacher-student relationship.

Based on the literature review of research on tertiary level student engagement in EFL context over the past decade, existing literature predominantly focused on exploration of factors affecting student's engagement in the college English classroom from various perspectives, and the factors in different research, more often than not, overlap with each other, whilst there was a relative dearth of empirical research on strategies or techniques to effectively improve student engagement in the EFL classroom. Moreover, among the literature the researcher reviewed, most of the domestic researchers equated active participation in classroom with student engagement. This reflected the fact that these researchers only focused on the behavioral aspect of student engagement without taking a holistic view of it. Last but not least, while a substantial body of research on Chinese tertiary-level EFL learners explored the relationship between EFL motivation and other variables, such as competence, language proficiency, personality traits, research on the relationship between academic motivation and student engagement in Chinese EFL context was not adequately addressed. Thus, a systematic inquiry of the relationship between student academic motivation and student engagement is considered necessary.

#### Relationship between Student Academic Motivation and Student Engagement

Although engagement, by itself, appears to be an important factor for academic achievement, Elizabeth F. Barkley (2010) acknowledges that both motivational and active learning elements of student engagement are required for meaningful learning. To better illustrate this point, she expounds "student engagement is the product of motivation and active learning....It does not result from one or the other alone, but rather is generated in the space that resides in the overlap of motivation and active learning" (p. 6).

Reeve (2012) attempts to understand the relationship between student motivation and engagement within a self-determination theory (SDT) perspective. Reeve (2012) points out that students possess inner motivational resources that allow them to be fully capable of engaging themselves constructively in the learning environment. High-quality student engagement originates from the "underlying quality of students' inner motivational resources and then feeds forward to affect changes in the learning environment" (p. 158).

Alavi and Abbasnia (2014) examined motivation and motivation-related factors and their relationship with burnout and engagement in an Iranian EFL context. The participants of the study were 95 adult learners of English from language institutes in Iran using convenience sampling. Pearson's correlation was employed to examine the relationship between learners' motivation and their engagement. The results showed that there was high correlation between Iranian EFL Learners' motivation and their engagement.

LeMay (2017) investigated the relationship between engagement, motivation, self-regulation. One of the findings revealed that for the female sophomore students, the following components of motivation were all significantly positively correlated with their engagement: intrinsic goal orientation, task value, self-efficacy, and perceived autonomy support.

Maenpaa et al. (2017) investigated academic motivation regulation related to study engagement and study burnout in higher education. The result showed that those students who demonstrated high motivation regulation skills tended to experience increased levels engagement and low risk of study burnout.

### Conceptual Framework

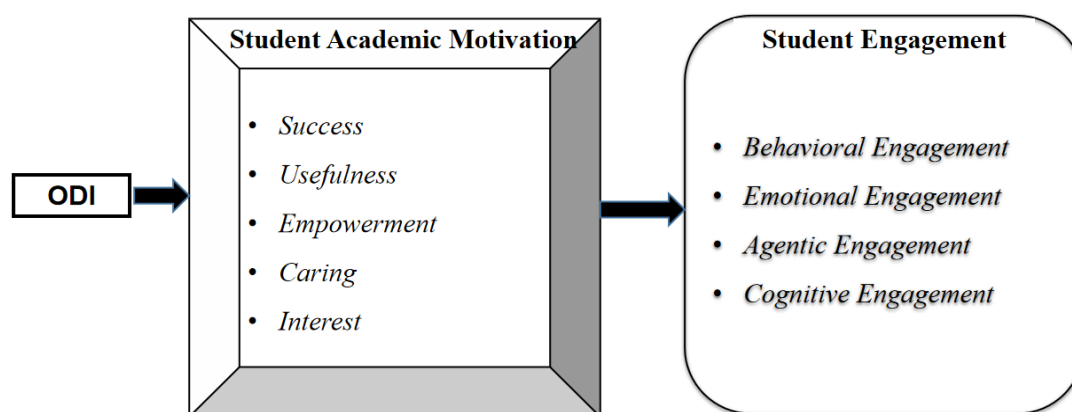


Figure 1 Conceptual Framework (Researcher, 2018)

The independent variable is student academic motivation which consists of five sub-variables adapted from Jones' MUSIC model (2009), i.e. empowerment, usefulness, success, interest, and care. The dependent variable is student engagement which comprises of behavioral, emotional, cognitive and agentic engagement based on Reeve's (2013) conceptualization regarding student engagement. The choice of

these variables was based both on the findings from the preliminary diagnosis and SWOT analysis and the discourse on the theories and studies.

### **Methodology**

This section consists of research hypotheses, sample, research instruments and reliability test, and OD design Process.

#### ***Hypotheses***

Ho1: There is no significant difference in student academic motivation between Pre-ODI and Post-ODI;

Ha1: There is significant difference in student academic motivation between Pre-ODI and Post-ODI.

Ho2: There is no significant difference in student engagement between Pre-ODI and Post-ODI;

Ha2: There is significant difference in student engagement between Pre-ODI and Post-ODI.

Ho3: There is no significant relationship between student academic motivation and student engagement;

Ha3: There is a significant relationship between student academic motivation and student engagement.

#### **Sample**

The sample was 82 freshmen from the same college. The sample was divided into two groups. These two classes were randomly selected as the researcher was not involved in any class assignment decision. One was assigned as the experimental group (N=40), and the other was assigned as the comparison group by tossing a coin. The demographic profile of the two groups is shown in Table 1. The experimental group was exposed to organization development intervention, whereas the comparison group received no intervention.

Table 1

*Demographic profile of the experimental group and control group*

	<i>Experimental Group</i>	<i>Control Group</i>
Class size	40	42
Male to female ratio	5:35	4:38
Age	18	18
English learning experience	10 years	10 years
College Entrance English Exam	104.75	101.76

## Research Instruments and Reliability Test

Mixed research methods were employed in this research. For quantitative data collection, survey questionnaires were administered as pretests to measure the entry level of each group before the ODI and were administered again at the end of the semester to determine the change level. For qualitative data, several self-reflection reports and classroom observation by three instructors were utilized.

To measure the participants' academic motivation, the MUSIC model of academic motivation inventory developed by Jones (2017b) was administered, consisting of 26 items that were divided into five scales. Students responded to the scale items by choosing one of six-point Likert scale: 1 = Strongly disagree, 2 = Disagree, 3 = Somewhat disagree, 4 = Somewhat agree, 5 = Agree, 6 = Strongly agree. To assess student engagement, the four dimensions of student engagement questionnaire adapted from Reeve (2013) was administered. The inventory consisted of 21 items that were divided into four scales.

Before administering the questionnaire to the subjects, the pilot testing was conducted to 30 participants to ensure internal consistency in responses. Cronbach's alpha values were empowerment .707, usefulness .926, success .836, interest .895, caring .901, all 26 items was .929; behavioral engagement .878, emotional engagement .884, agentic engagement .890, cognitive engagement .842, all 21 items

was .951. Scales with a coefficient  $\alpha$  between 0.80 and 0.95 are considered to have very good reliability (Zikmund et al., 2012). Based on the result of the above reliability analysis, the two sets of questionnaires were reliable to be used.

**ODI Process**

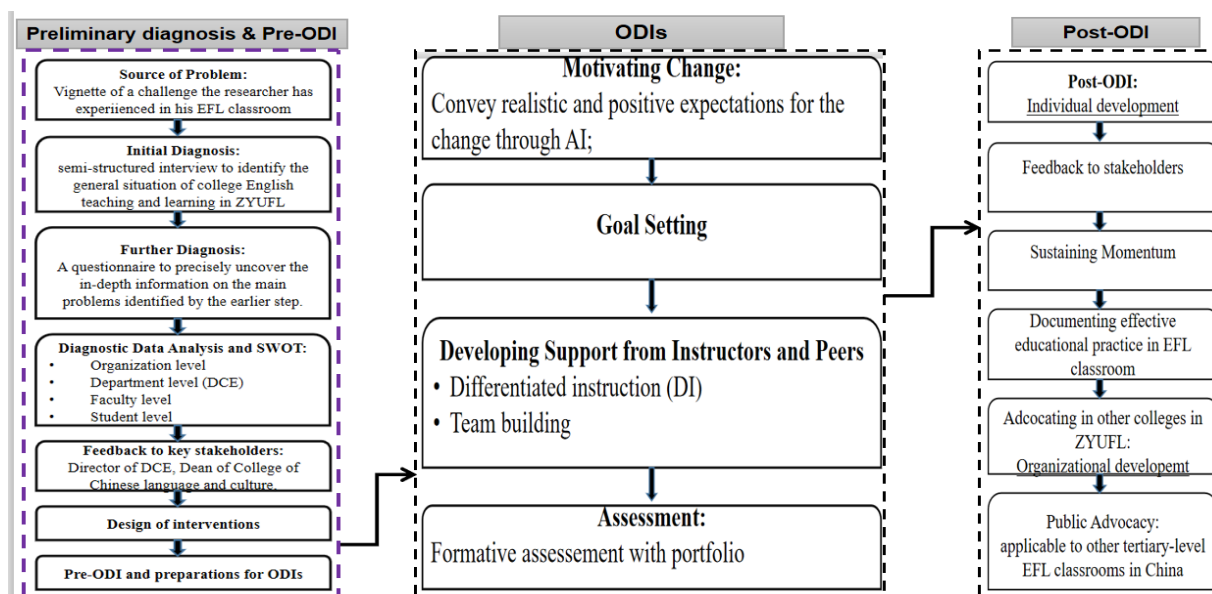


Figure 2 OD Design Process (Researcher, 2018)

1. Pre-ODI Stage

During this stage, the researcher conducted preliminary diagnosis to identify the general situation of non-English major students’ academic motivation and engagement through semi-structured interview, online questionnaire and SWOT analysis. The semi-structured interview was conducted with 10 instructors from the Department of College English and 10 juniors and it was a convenience sample. The online questionnaire was administered to 343 students (204 sophomores, 139 juniors) from six colleges. After preliminary data collection and analysis, the researcher provided feedback to key stakeholders and designed ODIs accordingly.

2. ODI Stage

Adapted from Cumming and Worley’s (2013) model of managing change, the ODI stage of current research was divided into four sub-stages: motivating change and conveying positive expectations through Appreciative Inquiry (AI), goal setting, developing support through team building and differentiated instruction, and

formative assessment with portfolio. The following is a brief introduction of each of the ODI process in this research.

#### ODI#1: Appreciate Inquiry (AI) Workshop

This AI workshop was adapted from Cumming and Worley (2013) effective change management, which involved five phases. Phase One—Defining affirmative topic: How can we make our class highly motivated and engaged in the EFL classroom?; Phase Two—Discovering ‘the best of what is and what has been’ in relation to the topic through appreciative interview within the group; Phase Three—Envisioning the ideal future; Phase Four—Building pathways toward the shared future; Phase Five—Implementing the desired changes. At the end of the workshop, each group made a six-minute presentation of what they had achieved in the previous five phases as a whole to other groups. After the presentation, all participants finished the AI workshop reflection report.

#### ODI#2: Goal Setting

Goal setting has been shown as “an effective OD intervention and a key part of an overall performance management process” (Cumming & Worley, 2013, p. 445). Goals can energize behavior, motivating people to put forth the effort to reach difficult goals that are accepted, and when goals are difficult but achievable, goal setting prompts persistence over time (Cumming & Worley, 2013). The goal setting intervention in this research was adapted from adapted from Tabrizi and Terrell’s (2013) *The Inside-Out Effect*, which consisted of five steps, i.e. identifying core values; goal discussion, goal formation, goal implementation, and goal review.

#### ODI#3: Team Building

Team building refers to “planned activities that help groups improve the way they accomplish tasks, help members enhance their interpersonal and problem-solving skills, and increase team performance.” (Cumming & Worley, 2013, p. 277). It can help members highly motivated to perform group decisions and help groups overcome specific problems, such as apathy and general lack of member interest (Cumming & Worley, 2013). According to Peterson (2007), an empowered team environment could assist in fostering greater motivation within the project team, department, and organization. The intervention technique employed was adapted from Tuckman’s

(1965) four stages of team building process: Forming, Storming, Norming, Performing.

Table 2

*Activities Performed in Each Phase of the Team Building*

Phase 1	<p><b>Forming</b> workshop</p> <p>Team project#1 announcement</p>
Phase 2	<p>Team project#1 presentation</p> <p>Conversation with the six team leaders to identify the problems</p> <p><b>Storming</b> workshop</p> <p>Team project#2 announcement</p>
Phase 3	<p>Team project#2 presentation</p> <p>Conversation with the six team leaders to identify the problems</p> <p><b>Norming</b> workshop</p>
Phase 4	<p><b>Performing</b> workshop: Marshmallow Challenge</p> <p>Self-reflection report of the whole team building process</p>

ODI#4: Differentiated Instruction (DI)

Differentiated instruction, according to Tomlinson (2017), is the process where “the teacher proactively plans and carries out varied approaches to content, process, and product in anticipation of and response to student differences in readiness, interest, and learning needs” (p. 33). The researcher conducted DI following five steps: (a) studied the profile of the students; (b) followed general principles of differentiation set by Tomlinson; (c) Determined learning goals for each

unit, and set corresponding content, language, academic motivation and engagement objectives; (d) Designed lesson plans; (e) Designed assessment, adjusting teaching and learning as necessary.

### 3. Post-ODI Stage

MUSIC model of academic motivation inventory and four dimensions of student engagement questionnaire was administered again to the subjects to determine whether there was any statistically significant difference in academic motivation and student engagement before and after ODI. At the same time, data collected from several self-reflection reports and classroom observations were analyzed to justify how the ODIs employed in this research enhanced student academic motivation and engagement.

## Results

### Quantitative Findings

To test if there was statistically significant difference in academic motivation between pre-ODI and post-ODI, a paired-samples t test was conducted to both groups.

Table 3

*Paired Samples t-test of Academic Motivation for the Experimental Group*

		Mean	t	df	Sig. (2-tailed)
Pair 1	Empowerment1	5.245	14.624	39	.000
	Empowerment2	3.690			
Pair 2	Usefulness1	4.985	9.289	39	.000
	Usefulness2	3.690			
Pair 3	Success1	4.975	16.566	39	.000
	Success2	2.863			
Pair 4	Interest1	5.067	11.968	39	.000
	Interest2	3.591			
Pair 5	Caring1	5.467	9.910	39	.000



Caring2	4.279
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Note. 1 = post-ODI, 2 = pre-ODI

Based on the above statistics, there was statistically significant difference in all of the five pairs ( $p < .05$ ) between pre-ODI and post-ODI. Thus, there was statistically significant difference in student academic motivation for the experimental group.

Table 4

*Paired Samples t-test of Academic Motivation for the Control Group*

		Mean	t	df	Sig. (2-tailed)
Pair 1	Empowerment 1	3.805	-.205	41	.838
	Empowerment 2	3.829			
Pair 2	Usefulness 1	3.719	-1.293	41	.203
	Usefulness 2	3.857			
Pair 3	Success 1	3.148	1.09	41	.282
	Success 2	2.994			
Pair 4	Interest 1	3.559	-1.846	41	.072
	Interest 2	3.754			
Pair 5	Caring 1	4.428	-.633	41	.530
	Caring 2	4.510			

Note. 1 = post-ODI, 2 = pre-ODI

Based on the above statistics, there was no statistically significant difference in all of the five pairs ( $p > .05$ ) for the control group between pre-ODI and post-ODI.

To test if there was statistically significant difference in student engagement between pre-and post-ODI, a paired-samples *t* test was conducted to both groups.

Table 5

*Paired Samples t-test of Student Engagement for the Experimental Group*

		Mean	t	df	Sig. (2-tailed)
Pair 1	BE 1	4.810	11.13	39	.000
	BE 2	3.505			
Pair 2	EE 1	5.000	9.35	39	.000

	EE 2	3.585			
Pair 3	AE 1	4.840	13.93	39	.000
	AE 2	3.100			
Pair 4	CE 1	4.775	11.33	39	.000
	CE 2	3.162			

Note. 1 = post-ODI, 2 = pre-ODI, BE=behavioral engagement, EE=emotional engagement, AE=agentic engagement, CE=cognitive engagement

Based on the above statistics, there was statistically significant difference in all of the four pairs ( $p < .05$ ) between pre-ODI and post-ODI. Thus, there was statistically significant difference in student engagement for the experimental group.

Table 6

*Paired Samples t-test of Student Engagement for the Control Group*

		Mean	t	df	Sig. (2-tailed)
Pair 1	BE 1	3.400	-1.492	41	.143
	BE 2	3.543			
Pair 2	EE 1	3.505	.078	41	.938
	EE 2	3.495			
Pair 3	AE 1	3.276	.507	41	.615
	AE 2	3.214			
Pair 4	CE 1	3.381	-.460	41	.648
	CE 2	3.436			

Note. 1 = post-ODI, 2 = pre-ODI

Based on the above statistics, there was no statistically significant difference in all of the four pairs for the control group ( $p > .05$ ) between pre-ODI and post-ODI.

A Pearson correlation was conducted to examine the relationships between academic motivation and student engagement. The interpretation of Pearson product-moment correlation  $r$  was based on Evans (1996):

0.00-0.19: very weak relationship; 0.20-0.39: weak relationship; 0.40-0.59: moderate relationship; 0.60-0.79: strong relationship; 0.80-1.0: very strong relationship.

The correlation coefficient between academic motivation and engagement, as well as between each component of academic motivation and student engagement was shown in table 7 and table 8.

Table 7

*Correlation between Academic Motivation and Engagement*

		Student Engagement
Academic	Pearson Correlation	.855**
motivation	Sig. (2-tailed)	.000

*Note.* \*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 8

*Correlation between each component of Academic Motivation and Student Engagement*

		Student Engagement
Empowerment	Pearson Correlation	.781**
	Sig. (2-tailed)	.000
Usefulness	Pearson Correlation	.696**
	Sig. (2-tailed)	.000
Success	Pearson Correlation	.766**
	Sig. (2-tailed)	.000
Interest	Pearson Correlation	.750**
	Sig. (2-tailed)	.000
Caring	Pearson Correlation	.465**
	Sig. (2-tailed)	.003

*Note.* \*\*. Correlation is significant at the 0.01 level (2-tailed).

The result of Pearson correlation showed that there was a very strong positive relationship between student academic motivation and student engagement, and the variables of empowerment, usefulness, success, and interest all had strong positive relationship with student engagement while the variable of caring had a moderate positive relationship with student engagement.

### Qualitative Findings

At the end of the whole team building process (after the performing stage and the completion of the last team project), the team building self-reflection report was administered to each participant in the experimental group. Based on data analysis of the team building self-reflection report, how team building improved the participants' academic motivation in the experimental group reflected in the following aspects: Flexibility in what was allowed to do in the team projects, such as free choice of subject and product design, free expression of personal opinions and suggestions (N=37); 85% of the participants (N=34) believed that working within a collaborative team to finish the four team projects was a realistic simulation of a real-world work experience; Good teamwork (shared responsibility, collaboration, strong team cohesion, caring among team members) contributed to the final success (N=17); Meeting the academic challenges in the team projects (N=30); 77.5% of the participants (N=31) reported that their interest in the projects increased compared with the very beginning; Instructor and peer's caring (N=35).

Major factors that fostered student engagement in the team projects and team building included: Clear roles and responsibilities among the team members (N=34); Acquirement and application of useful knowledge and skills, such as how to conduct an interesting and effective lesson, public speaking (in English) skill, technical skill in making PPT (N=31); Free choice of subject, product design, and product presentation based on interest (N=29); Team meetings to discuss together and decide what to do next, efficiency improved (N=27); Effort, ideas or contribution was recognized by other team members, a sense of achievement and belonging (N=27); Sense of teamwork, collaboration and responsibility was enhanced through accumulated experience, which would lay a foundation for future career life (N=27).

Classroom observations by three instructors were also employed to collect data to identify areas of strengths and weaknesses related to student academic motivation and class engagement. A classroom observation checklist was

administered to each of the three observers, which consisted of three parts: instructions, items to be observed, and feedback. The observers rated the above items using the five-point scale. The following is the summarized feedback from the three observers.

“Based on my previous observations, I noticed the changes in the following aspects such as student engagement, motivation, teaching & learning methods. Collaboration with peers and the instructor represented engaged students and created good learning environment. The instructional methods that were used in the classes fostered student motivation and engagement as far as it activated students’ cognition, stimulated their emotions, took their values and interests into account, and made the learning experience enjoyable” (observer 1).

“I could see that students were more and more interested and involved in English learning, which could be seen from their performance—more and more active participation, preparation, and cooperation in class. The instructor always respected and cared about his students, willing to help them anytime in class. He often walked around the classroom and bent over to answer students’ questions.”(observer 2).

“I saw the change from teacher-centered classroom to student-centered classroom. The instructional strategy used by the instructor played an important role in enhancing students’ motivation and engagement in the class. When designing the lessons, the instructor took students’ cognition, language proficiency, interest and other factors into consideration and designed various tasks to cater to different needs.” (observer 3)

### **Conclusion**

The findings indicated that the above ODIs significantly enhanced student academic motivation and student engagement in the EFL class. The findings also indicated that there was a very strong positive relationship between academic motivation and student engagement, which supported the results from previous studies as discussed in literature review.

### **Recommendations**

Based on both the findings of current research, several recommendations concerning the enhancement of student academic motivation and student engagement

in the Chinese EFL context are put forward by the researcher to sustain the momentum, as is shown in Figure 3.

Firstly, appreciative inquiry is recommended to convey students realistic and positive expectations for success and change, then encourage every student to make specific, measurable, attainable, and individualized learning plan. Secondly, to enhance the utility value of EFL class, it is suggested that the instructor offer opportunities for students to participate in activities that demonstrate how what they are learning is practical or beneficial for their future career or long-term goals. It is recommended that EFL instructors integrate team building into college English teaching and learning. Not only can team building enhance students' motivation and engagement, but also prepare them to be willing and able to work effectively with others, and enhance student employability in the future. Thirdly, students' needs and differences should be given more prominence to avoid "one size fits all".

### **Significance of the Study**

#### **Benefits to students**

Through intervention, students had more control and flexibility to make decisions about some aspects of their learning. Instead of being exam-oriented, they now focused more on usefulness of English for future career and real world communication. Their self-efficacy was also improved. In terms of student engagement, in short term, they became an active participant in the process of English learning and evaluation instead of passive listeners. In the long run, if students learned how to engage themselves when they were at school, then they would be well prepared for a more complicated life work and social environment.

#### **Benefits to instructors**

The ODIs the current research employed would help the EFL instructors change the teacher-centered instructional method while lay more emphasis on innovating instructional strategies to enhance students' motivation and engagement. Once students became more motivated and engaged, it was likely that they would demonstrate more satisfaction towards college English teaching and the instructors.

#### **Benefits to school development of the focal institution**

Lu (2015) stated that “personal professional skills and personal behaviors embody an organization’s values and influence an organization’s strategy and its characteristics” (p.5). An academically motivated student can demonstrate initiative and go beyond basic mastery of English skills and curriculum to direct their own learning. At the same time they incorporate 21st century learning themes, such as global mindset, into English language learning, which in accordance with the mission and goal of the focal institution, which is global mindset and global citizen. Besides, learning English is not limited to exam but usefulness-oriented. They can use English in their life and future career, which is in line with ‘the ability to utilize professional knowledge in practice’ in the SPT system of the focal institution.

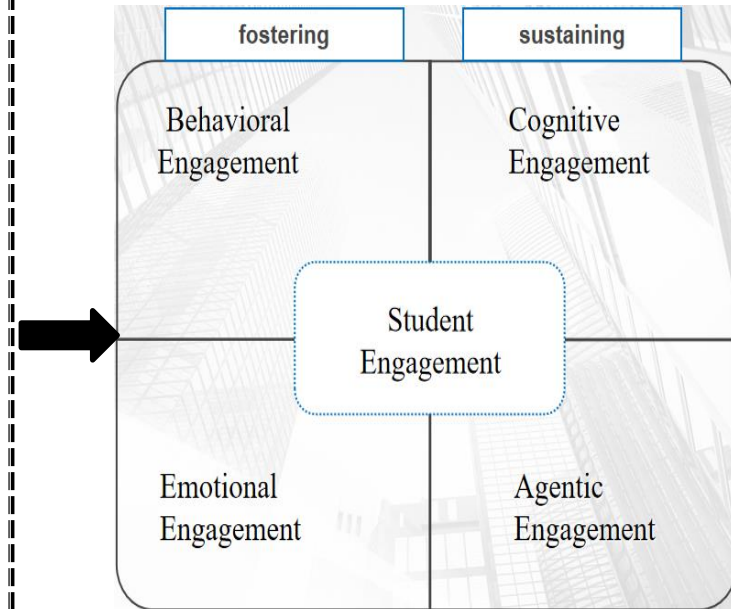
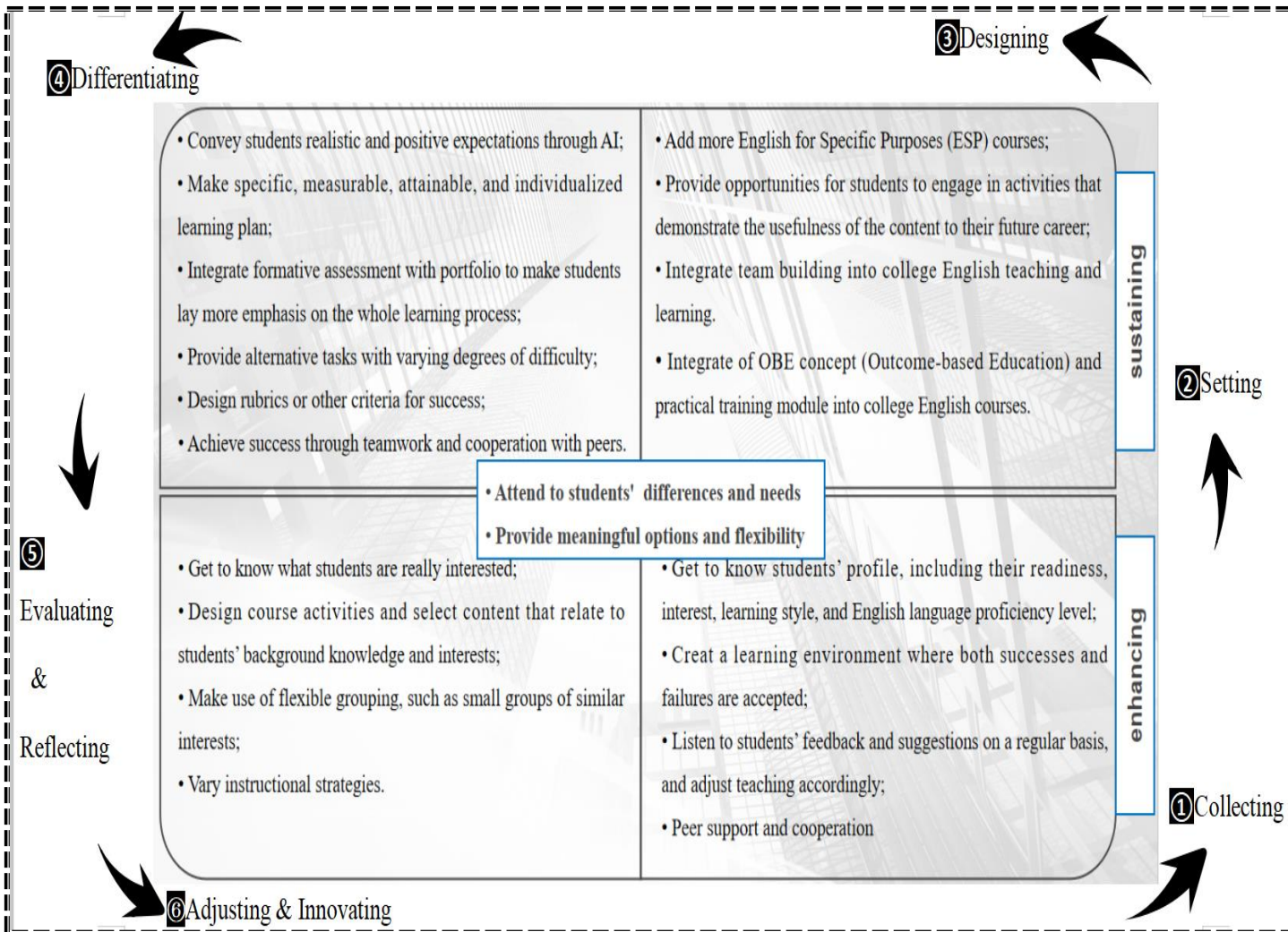


Figure 3 Recommendations for Sustaining Momentum



### **Limitation and Future Study**

First, the study sample is relatively small with only 82 freshmen from the same major and the same college of ZYUFL, so the findings may have limitation in generalizability to other majors or universities. Future research may use a larger sample from different majors and universities to address this issue.

Second, this study has only focused on five factors of academic motivation to investigate the relationship with student engagement while there are other factors related to student engagement. Future research may take other factors into account.

Third, most of the subject of this study are female students, so it is unclear to what extent the findings are applicable for male university students in the EFL classroom. Future research may consider the gender differences.

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