

**Enhancing Student Class Engagement by Improving Students' Self-efficacy and Motivation through Organizational Development Interventions — A Case Study of Zhejiang Yuexiu University of Foreign Languages in China**

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**Abstract**

This paper aims to study the impact of organizational development interventions on self-efficacy and motivation, so as to enhance student class engagement. The relationship of self-efficacy and motivation on student class engagement is the foundation of the conceptual framework of this study. Social skills, cognitive operation, affective coping, integrative motivation and instrumental motivation will be used as sub-variables to measure the dependent variable of student class engagement (cognitive engagement, emotional engagement and behavioral engagement). The paper uses action research as a research method and non-randomized control group and experimental group are used for comparison. In addition, quantitative and qualitative data are used to measure and analyze the effects on student class engagement, self-efficacy and motivation before and after the organizational development intervention. The results of post-ODI stage shows that the experimental group improved significantly in four variables (social skills, cognitive operation, affective coping, and integrative motivation), and there is a positive correlation between self-efficacy (social skills, cognitive operation, and affective coping) and motivation (integrative motivation) on student class engagement, while the instrumental motivation remained basically unchanged. There is no significant improvement for the control group between pre-ODI and post-ODI stages without any interventions. The implication of this study is that self-efficacy and motivation can be used to improve student class engagement, and in order to achieve sustainable change, further actions should be carry out to have a greater impact on the long-term development.

**Keywords:** student class engagement, self-efficacy, motivation, organization development intervention, change

## Introduction

“Higher Education in the 21st Century: Vision and Action” (1998) points out: in today’s ever-changing world, there is a perceived need for a new vision and paradigm change of higher education, which should be student-oriented. The World Conference on Higher Education (1998) requires universities and colleges focus on the needs of students and take the students as the main and responsible participants in education reform. It is necessary for students to participate in major issues of discussion, assessment, curriculum evaluation and so on. Only by understanding the significant needs and behaviors of students, the student-centered model will come true, and the learning quality can be improved.

It is obvious that the focus of higher education in all countries has shifted from teaching to learning (European Commission, 2014; Temple, et al., 2014). The study of the Management Center of American Colleges and Universities also shows that students’ skills and temperament have been greatly improved in the process of active engagement, and their learning quality has also been enhanced. It can be seen that an important criterion for measuring the quality of higher education is student’s learning engagement. Effective engagement of college students in a classroom is the basis for promoting personal growth and development. Wu (2000) once stressed that if educators wanted to achieve the goal of students’ growth and development, they should strengthen the power of class engagement. Without input and participation, it is impossible to have quality and gain. Therefore, the study of students’ learning engagement is of great significance in promoting their personal development and improving the quality of higher education.

With the rising and strengthening of the experiential learning approach and student-centered concept, undergraduate education and teaching quality evaluation also pay more attention to student engagement. Many studies have historically indicated strong correlations of self-efficacy and motivation on student class engagement (Chen, 2004; Strayer, 2012; Sui, 2015; Wolfe, 2001). These strong correlations are embodied in all aspects of teaching. Engaged students are more able to cope with academic stress, and easy to be motivated (Lewis, Scout & Malone, 2011), which will lead them to have a sense of well-being and reduce the feeling of burnout in the future (Ahola & Hakanen, 2010).

The study of the relationship of self-efficacy and motivation on student class engagement is not only a theoretical combing and exploration, but also a diagnosis and guidance of the reality of undergraduates. Both of them have strong meanings and values in theory and practice. At the same time, it can also provide decision-making reference and practical guidance for the development of students and the improvement of the

quality of higher education. Therefore, how to improve self-efficacy and motivation and then to enhance student class engagement is the main direction of current educational research.

### Background of the Focal Organization

Zhejiang Yuexiu University of Foreign Languages, is a full-time undergraduate college approved by the Ministry of Education. The college is located in Shaoxing, a historical and cultural city. ZYUFL was founded in 1981. After decades of development, it was approved by the Ministry of Education in 2008 and upgraded to an undergraduate university.

ZYUFL as an emerging private university has achieved a great development recently, and be confronted with challenges that may pose a threat to its development in the future. Under the background of the popularization of higher education, ZYUFL is faced with the imperious challenge of how to improve and enhance the ability of students to upgrade the quality of teaching and core competitiveness. Obviously, the improvement of the quality of personnel training not only depends on the enhancing of education quality but also depends on the degree of student class engagement and performance.

### Organizational Assessment

The SWOTAR analysis of ZYUFL obtained through the “Medium and Long Term Development Plan (2016-2030) of Zhejiang Yuexiu University of Foreign Languages”, the “2017 Annual Report of Zhejiang Yuexiu University of Foreign Languages”, and the meeting minutes of the Council. Currently, Good location and rich experience in language teaching, inspiring leadership, experienced instructors, international cooperation and abundant teaching resources are significant strengths of ZYUFL. However, the vague understanding of the course objectives lead to the fossilization of the learning approach by student in ZYUFL. They are more concerned about the passing rate of examination, such as Language Testing Band 4, 6, and 8, and pay little attention to the practical application of language ability. Moreover, the low confidence in communication makes students always keep silent in the classroom, and work alone. They have fixed mindset concerning learning process and are used to adopt mechanical memory. As the external environment is changing all the time, there are many opportunities for students and ZYUFL which need to be captured by aligning the strength of itself. Therefore, it is

necessary for ZYUFL to improve the comprehensive strength continuously to adapt to and meet the needs of higher education, and be remaining competitive among the comprehensive universities and normal universities subordinated to the ministry of education. In such circumstances, teachers should strengthen the application of student-centered approach that enable the university to increase the quality and standards in the aspect of graduate production. Students will focus on “learning how” rather than “knowing what”. This is the way to help them develop their initiative and creativity and become a lifelong learner.

### The Statement of the Research Problem

Upon reviewing the current situation and need for action research as described in the previous sections, the action research focuses on improving student self-efficacy and student motivation in order to enhance student class engagement through the organizational development interventions (ODIs) for ZYUFL in China.

### Research Objectives

- (1) To diagnose the current situation of the focal organization on student class engagement, self-efficacy and motivation.
- (2) To design and implement an appropriate organizational development intervention for improving student class engagement, self-efficacy and motivation.
- (3) To determine the differences between pre-ODI and post-ODI of student class engagement, self-efficacy and motivation.
- (4) To investigate the relationship of self-efficacy and motivation on student class engagement.

### Research Questions

- (1) What is the current situation of student class engagement, self-efficacy and motivation of the focal organization?
- (2) What are the appropriate organizational development interventions to improve student class engagement, self-efficacy and motivation?

(3) What are the differences between pre-ODI and post-ODI of student class engagement, self-efficacy and motivation?

(4) What is the relationship of self-efficacy and motivation on student class engagement, ?

### Research Hypotheses

H1o: There is no significant difference between pre-ODI and post-ODI on student class engagement, self-efficacy and motivation.

H1a: There is a significant difference between pre-ODI and post-ODI on student class engagement, self-efficacy and motivation.

H2o: There is no significant relationship between self-efficacy and student class engagement.

H2a: There is a significant relationship between self-efficacy and student class engagement.

H3o: There is no significant relationship between motivation and student class engagement.

H3a: There is a significant relationship between motivation and student class engagement.

## Literature Review

### Organizational Development

According to Ahmad (2007), an organization is a system that is connected by a number of elements in a certain manner, including structure, task, people and technology. Organizational Development is a process of making planned changes in an organization by utilizing the techniques and theories of behavioral science. The development of the organization focuses on the process of improvement, such as effective communication, problem solving, participation in decision-making, conflict resolution, power sharing and career design process.

### Lewin's Model of Change

Lewin (1992) developed a change model involving three steps: unfreezing, changing and refreezing. A simple and practical method for change management is introduced in this model. People who involved in change can better understand the process and characteristics of the various stages by dividing the change into three stages, so as to take appropriate strategies to manage change.

According to Lewin (1992), the first step in the model of change is “unfreezing the existing situation or status quo”. In this stage, the organization should understand and recognize the need for change, and be willing to break the status quo and create a new model. And then, it is the time for “moving” when people have “unfrozen”. The core of “moving” step is to help people adapt to temporary imbalances and to move towards the goal of change. When people accept change and create a new behavior model gradually, they enter into the “refreezing” step: the reform of the “institutionalized”. The specific performance is presented here, such as the new organizational structure, and the release and implementation of the new management system.

### Organizational Development Interventions

According to French and Bell (1999), organizational development intervention refers to the process of systematic improvement of organizational deficiencies and the adoption of various interventions for members and groups of organization.

### Appreciative Inquiry

According to Schuman (2012), AI is a paradigm of change, which searches for the best part of individual or organization through questioning actively, and ultimately realizes the sustainable development of individual and organization. It emphasizes the positive aspects and potential of the organization, rather than the weaknesses and loose points, in order to achieve the common development of individuals, groups and organizations.

### SOAR

Strengths, opportunities, aspirations, results (SOAR) analysis is a strategic planning tool that focuses an organization on its current strengths and vision of the future for developing its strategic goals (McLean, 2017). It engages all levels and functional areas of an organization, and more focuses on “what is currently done well”, rather than perceived threats and/or weaknesses.

### Coaching and Mentoring

The coaching and mentoring refer to “a continuous two-way process”, and they are aimed to enhance people’s performance, improve their working relationships, and develop their abilities or manage their careers (Garvey, Stokes & Megginson, 2009). During the process, learners can change their goal according to the real situation. The mentor can help them gain a deeper understanding of their experiences through observation and reflection.

### Goal Setting

Locke and Latham’s (2002) goal setting theory states that external stimuli (such as rewards, job feedback, and supervision pressure) can affect motivation through goals. The goal can transform people’s needs into motivation, make people’s behaviors work in a certain direction, and influence the persistence of the behavior. During the process, people compare their own behavioral results with established goals, and make adjustments and corrections in time so that they can achieve their goals.

### Team Building

Team building refers to a series of structural optimization and team incentives to maximize team performance and output (Tuckman & Jensen, 2010). Team building should be an effective communication process. In the process, participants can increase mutual trust, and are willing to explore the core issues that affect the team’s ability to perform outstandingly.

### Student Class Engagement

Student class engagement refers to “a student’s willingness, need, desire and compulsion to participate in, and be successful in the learning process” (Bomia et al., 1997). Kuh (2003) proposed a comprehensive definition that emphasizes the mutual responsibility of students and institutions in promoting engagement in terms of cognition, emotion and behavior.

Behavioral engagement is regarded as the extent to which learners are actively involved in course activities, such as attention, participation, involvement, and effort in academic activities (Fredricks et al., 2004). Kindermann (1993) believes that emotional engagement is related to student’s feelings of belonging, values, happiness, and anxiety. Any of these factors will affect the degree and duration of learners’ engagement in academic learning. In addition, cognitive engagement refers to the motivation of learning and the use of strategies in the learning process (Ge & Ifenthaler, 2017). It also includes reflections on the learning process and results. Students with a high level of cognitive

engagement have shown a strong sense of curiosity and greater efforts in learning.

All in all, integrating behavioral, emotional, and cognitive engagement to describe student class engagement will be more abundant than those of a single component.

### Self-efficacy

Self-efficacy is the beliefs, judgments, or subjective self-feeling that an individual has at the level at which he or she can complete the behavior before performing an action (Bandura, 1994). It determines the effectiveness of an individual's response to or handling of internal and external environmental events. People who have high level of self-efficacy take a positive attitude towards the challenge and regard it as an opportunity to gain new experiences, while those with low self-efficacy will avoid making choices that exceed their own abilities, and they will adopt evasive attitudes when faced with challenges (Feltz, Short, & Sullivan, 2008).

Gaudiano and Herbert (2007) designed a survey scale (Self-efficacy for Social Situations Scale) to assess self-efficacy from three dimensions, namely, self-efficacy for social skills, self-efficacy for cognitive coping and self-efficacy for affective coping. Based on the discussion above, it is clear that self-efficacy for social skills, self-efficacy for cognitive operation and self-efficacy for affective coping are three significant dimensions for student self-efficacy assessment.

In general, people with high self-efficacy tend to work harder than others with low self-efficacy and will insist on working harder for longer periods of time.

### Motivation

Motivation can be defined as “a state of cognitive and emotional arousal, a state which leads to a conscious decision to act and give rise to a period of sustained intellectual and/or physical effort” (Williams & Burden, 1997, p.123). According to Gardner and Lambert (1972 cited in Xu 2008), there are two types of motivation: integrative and instrumental motivation.

Integrative motivation refers to individuals have a strong interest in language learning and hope to integrate into the culture of the language they are learning. People who have integrative motivation can enjoy the fun of learning a foreign language, and easily master it. Furthermore, instrumental motivation emphasizes that the purpose of



learning is to gain economic benefits or other profits, such as working in a foreign company, studying in English countries, and so on. Learners with instrumental motivation focus on the actual value and benefits of learning a new language.

Moreover, integrative motivation is the most important motivation for learning a target language, and it also has the greatest impact on the degree of learning engagement (Crookes & Schmidt, 1991; Ellis, 1997; Taylor et al., 1977).

### Theoretical Framework

According to the literature review, student self-efficacy and student motivation can be applied to measure student class engagement. The sub-variables of measuring student self-efficacy are adopted from Bandura’s Social Cognitive Theory, namely, social skills, cognitive operation and affective coping. College Academic Self-Efficacy Scale can be applied to assess student self-efficacy in these factors. Figure 1 shows that the two dimensions of student motivation are integrative motivation and instrumental motivation. Attitude/Motivation Test Battery is an effective tool to measure student motivation in the two aspects. The theoretical framework mainly adapts from Kahu’s engagement framework to assess student class engagement in three aspects: emotional engagement, cognitive engagement and behavioral engagement.

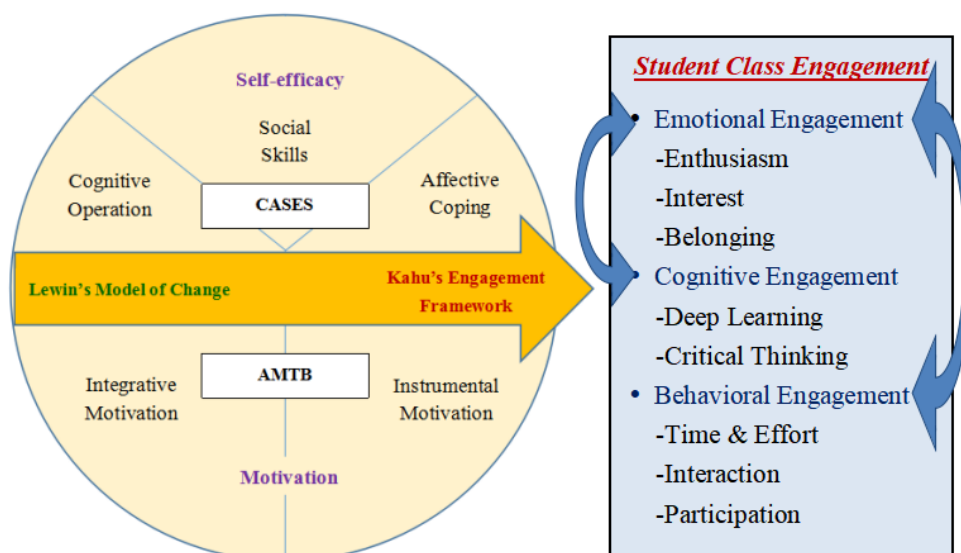


Figure 1. Theoretical Framework

### Conceptual Framework

Based on the literature review above, this research aims to enhance student class engagement by improving students’ self-efficacy and motivation through organizational development interventions. Figure 2 shows that student self-efficacy and student motivation are the independent variables and students class engagement is dependent variable. Social skills, cognitive operation and affective coping are three sub-variables can be used to assess student self-efficacy. Students’ motivation also includes two sub-variables, namely, integrative motivation and instrumental motivation.

Therefore, organizational development interventions were conducted to improve students’ self-efficacy and motivation, in order to enhance students class engagement.

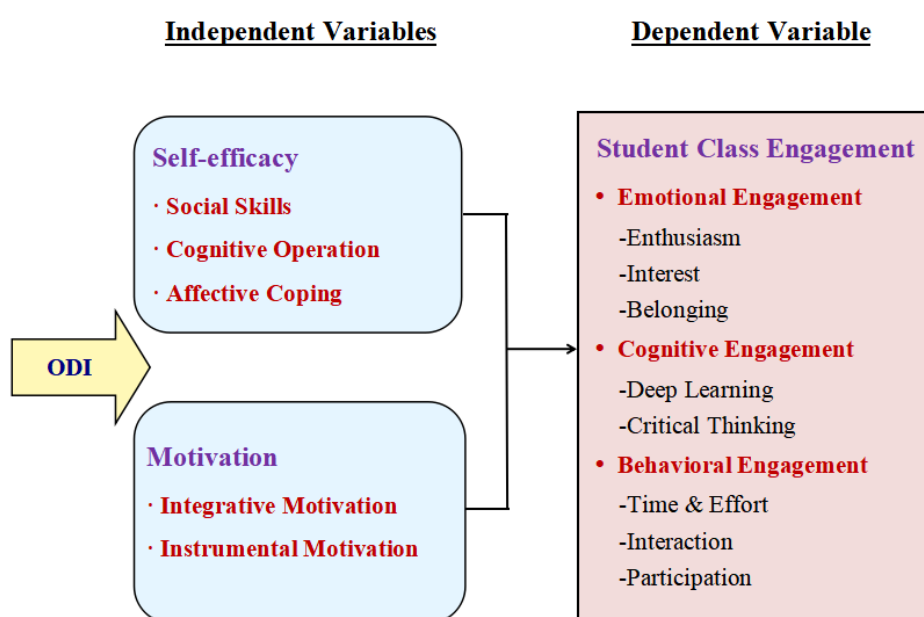


Figure 2. Conceptual Framework

### Action Research Framework

This research mainly focused on improving student class engagement for enhancing student self-efficacy and student motivation. The action research employed the quantitative and qualitative methods at pre-ODI and post-ODI phases. The action research framework included three stages: pre-ODI, ODI, and post-ODI.

The purpose of pre-ODI stage was to identify and confirm the problem of the focal organization. When the problem was confirmed, survey questionnaires, interviews and observation were implemented in pre-ODI stage with the permission of the president of ZYUFL and English College who provided full support to all the research processes.

As for interventions, various activities carried out by researcher both on individual

and team levels to improve students’ self-efficacy and motivation in order to enhance student class engagement.

The post-ODI stage included the measurement of the impact of ODIs. The same questionnaire used in the pre-ODI phase employed at this stage. The post-ODI phase compared the results between pre-ODI and post-ODI on student self-efficacy, motivation and engagement. Moreover, monthly meeting was applied to reinforce learning goals and receive individual and group feedback.

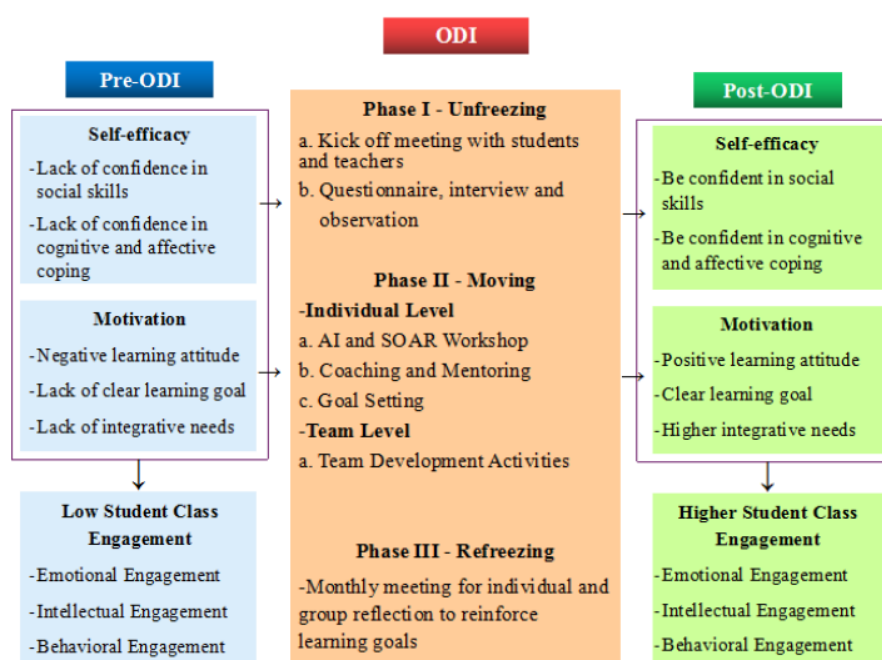


Figure 3. Action Research Framework

### Research Methodology

#### Pre-ODI Stage

The pre-ODI stage identified the problem in the organization through both qualitative and quantitative methods. Observation, questionnaire and interview were three research methods used together to collect data. The researcher as a consultant held a kick-off meeting with all students of the class, to make them understand the concepts of students’ self-efficacy, motivation and student class engagement. Meanwhile, the preliminary assessment results also were informed to students to make them aware of the need for change. In these meetings and discussions, the consultant and all students decided on what should be done to make the situation better, so as to enhance self-efficacy, motivation and student class engagement.

### ODI Stage

Based on the results of the pre-ODI stage, the researcher conducted appropriate OD interventions for the focal organization. During March 2018 and June 2018, the researcher developed four-month OD interventions with the experimental group and the control group accepted customary training. The main purpose of OD interventions was to enhance self-efficacy and motivation, and then improved student class engagement. Thus, Appreciative Inquiry and SOAR, Coaching and Mentoring, Goal Setting, and Team Building were used at this stage as organizational development interventions.

Table 1.

*OD Interventions Design Program*

| Intervention  | Objectives   |
|---|--|
| <p><u>1. AI and SOAR Workshop</u></p> <ul style="list-style-type: none"> <li>-Introduction and workshop objectives</li> <li>-Change management and why</li> <li>-Appreciative inquiry concept</li> <li>-4D cycle</li> <li>-SOAR concept</li> <li>-To apply AI and SOAR in learning process</li> <li>-Summary and feedback</li> </ul>  | <ul style="list-style-type: none"> <li>✓ To change mindsets, and cultivate a positive way of thinking</li> <li>✓ To help members recognize their strengths, build self-efficacy, and how to apply these positive cores to play better in future learning</li> <li>✓ To engage everyone in the process and lead to a creative and cooperative learning</li> <li>✓ To cultivate motivation in learning</li> </ul>  |
| <p><u>2. Coaching and Mentoring</u></p> <ul style="list-style-type: none"> <li>-Introduction and workshop objectives</li> <li>-Social communication skills coaching</li> <li>-Presentation skills coaching</li> <li>-Presentation exercise</li> <li>-Mentoring for addressed learning problems</li> <li>-Questioning and answering techniques</li> <li>-Performance appraisal</li> <li>-Summary and feedback</li> </ul> | <ul style="list-style-type: none"> <li>✓ To gain knowledge and skills</li> <li>✓ To improve the ability to find and solve problems</li> <li>✓ To improve reflectivity and mindset</li> <li>✓ To improve mental health and self-efficacy</li> <li>✓ To strengthen communication skills and relationships</li> <li>✓ To improve positive attitude towards personal and professional development</li> <li>✓ To enhance self-management and self-learning</li> </ul>   |
| <p><u>3. Goal Setting</u></p> <ul style="list-style-type: none"> <li>-Introduction and workshop objectives</li> <li>-Goal setting concept</li> <li>-SMART goal setting</li> <li>-Goal setting exercise</li> <li>-Sharing the set goals</li> <li>-Summary and feedback</li> </ul>  | <ul style="list-style-type: none"> <li>✓ To help students to follow the SAMRT principle and develop a “specific, measurable, achievable, relevant, and time-bound” goal</li> <li>✓ To have a sense of achievement and improve self-efficacy</li> <li>✓ To be more active toward the direction of change and stimulate motivation</li> <li>✓ To concentrate their efforts on achieving better and faster development in certain occupational fields or in some aspects</li> <li>✓ To lay the foundation for future development</li> </ul> |
| <p><u>4. Team Development Activities</u></p> <ul style="list-style-type: none"> <li>-Introduction and workshop objectives</li> <li>-Team building concept</li> <li>-Team building process (forming, storming, norming, performing and adjourning)</li> <li>-Group presentation</li> <li>-Summary and feedback</li> </ul>  | <ul style="list-style-type: none"> <li>✓ To understand each other better and feel comfortable in the group</li> <li>✓ To increase motivation and build self-efficacy</li> <li>✓ To improve communication through conversations</li> <li>✓ To strengthen problem-solving ability through cooperation</li> <li>✓ To enhance engagement in the process of collaboration</li> </ul>  |

Post-ODI Stage

At the post-ODI stage, the same survey tools were used again to collect the data and compared with the data of the pre-ODI stage to find out whether student self-efficacy, student motivation and student class engagement were improved through the interventions or not. In addition, monthly meeting was held for students to receive individual and group reflection for further improvement. Based on these results, the

consultant improved the action plan to enhance self-efficacy, motivation and student class engagement.

### Follow-up Section

In order to make the change become permanent, monthly meeting was held after each workshop (Saturday of the last week of each month) to receive reflection of individual and group. The section was designed to help students remove bottlenecks to performance and ensure problems didn't get left unaddressed.

Information such as the agenda, time, and content of the meeting were informed to the students in the first phase of the interventions, and the team leader was assigned as the speaker of the group meeting. There was an opening speech by the researcher to introduce the basic information about the meeting, and then the meeting was held among groups. Team members followed the items to conduct the discussion and reflection. During the process, the researcher went to each group to listen to their discussions. At the end of group discussion, each group selected a representative to present the results of their discussions. Finally, the researcher summarized the meeting and provided coaching and mentoring for any development or performance improvement needs.

### Subjects of Study

According to "purposive sampling" method in qualitative research, two parallel classes of Junior from the English major with similar academic performance of compulsory courses in the fourth semester of ZYUFL were chosen as the target groups. In this research, the target groups were separated into two groups. One was randomly appointed as the Experimental Group (EG), and the other was the Control Group (CG). There were 33 participants each in the experimental group and control group. All participants in each group were aged between 20-21.

### Research Instruments

Both qualitative and quantitative methods were employed in this study. The research instruments included classroom observation, interviews, and questionnaires. Based on the good level of English of participants, all the research instruments were conducted in English and they had been tested prior to the actual data collection process. The same set

of questionnaire, interview questions and observation scale were used to measure pre-ODI and post-ODI stage.

In order to check the reliability of the questionnaire, the research conducted a pilot test with 30 students from a third parallel class (the same major and year), and a total of 25 valid questionnaires were involved in the analysis of results. Cronbach's alpha was computed by software SPSS (24.0) to assess the internal consistency of the questionnaire that was made up of Likert-type scales and items. Cronbach's Alpha was reported at 0.901, which indicated a high level of internal consistency for the whole scale.

### Data Collection and Analysis

A mixed method of quantitative and qualitative research was employed in this study. Observations, interviews, and questionnaire were used to collect data for further analysis. These methods of data collection were issued twice, both pre-ODI and post-ODI stages, in order to determine whether there was any difference made by the ODI in student class engagement, self-efficacy and motivation.

The purpose of this study was to explore the impact of self-efficacy and motivation on student class engagement through the planned ODIs. Based on the purpose of the research, research questions and hypotheses were developed to explore the relationship between the selected variables. Self-efficacy and motivation were independent variables that affected students class engagement.

Mean, standard deviation, Pearson correlation analysis, individual/paired sample t-test and multiple linear regression analysis were used to analyze the data collected from the pre-ODI and post-ODI phases, in order to test the research hypotheses.

### **Analysis of Findings**

Analysis of Impacts of ODIs and Differences Between Pre-ODI and Post-ODI on Self-efficacy, Motivation and Student Class Engagement for Experimental Group and Control Group

This section presents a summary of the findings of evaluations on ODIs and difference between pre-ODIs and post-ODIs on student class engagement, self-efficacy and motivation for both experimental group and control group. Independent/paired sample t-test, Pearson correlation analysis and multiple linear regression analysis are used to test the hypothesis 1-3.

Table 2.

*Independent Sample T-test for Experimental Group and Control Group at Pre-ODI*

| <b>Variables</b>        | <b>Groups</b> | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> | <b>Std. Error Mean</b> | <b>Sig. (2-tailed)</b> |
|-------------------------|---------------|----------|-------------|-----------------------|------------------------|------------------------|
| Cognitive Engagement    | CG            | 33       | 15.94       | 2.904                 | .506                   | .711                   |
|                         | EG            | 33       | 15.70       | 2.352                 | .409                   |                        |
| Emotional Engagement    | CG            | 33       | 34.18       | 5.865                 | 1.021                  | .777                   |
|                         | EG            | 33       | 32.48       | 4.938                 | .860                   |                        |
| Behavioral Engagement   | CG            | 33       | 15.88       | 3.471                 | .604                   | .208                   |
|                         | EG            | 33       | 16.09       | 2.517                 | .438                   |                        |
| Social Skills           | CG            | 33       | 15.79       | 3.407                 | .593                   | .373                   |
|                         | EG            | 33       | 15.12       | 2.571                 | .448                   |                        |
| Cognitive Operation     | CG            | 33       | 23.12       | 5.320                 | .926                   | .709                   |
|                         | EG            | 33       | 22.70       | 3.721                 | .648                   |                        |
| Affective Coping        | CG            | 33       | 9.82        | 2.844                 | .495                   | .211                   |
|                         | EG            | 33       | 9.06        | 1.936                 | .337                   |                        |
| Integrative Motivation  | CG            | 33       | 32.79       | 7.258                 | 1.263                  | .244                   |
|                         | EG            | 33       | 31.12       | 3.698                 | .644                   |                        |
| Instrumental Motivation | CG            | 33       | 18.85       | 4.494                 | .782                   | .707                   |
|                         | EG            | 33       | 18.52       | 2.333                 | .406                   |                        |

Table 2 shows the comparison between mean and S.D. of experimental group and control group at pre-ODI from cognitive engagement, emotional engagement, behavioral engagement, social skills, cognitive operation, affective coping, integrative motivation and instrumental motivation. The two classes have similar values in each variable. The



scores ( $P > 0.05$ ) of Sig. (2-tailed) indicates there is no significant difference of experimental group and control group at pre-ODI. The result indicates that the level of student class engagement, self-efficacy and motivation of experimental group and control group are very similar.

Table 3.

*Paired Sample T-Test for Experimental Group Between Pre-ODI and Post-ODI*

|        | <b>Variables</b>   | <b>t</b> | <b>df</b> | <b>Sig.<br/>(2-tailed)</b> |
|--------|--|----------|-----------|----------------------------|
| Pair 1 | Cognitive Engagement 1 &<br>Cognitive Engagement 2       | -3.369   | 32        | .002                       |
| Pair 2 | Emotional Engagement 1 &<br>Emotional Engagement 2       | -3.886   | 32        | .000                       |
| Pair 3 | Behavioral Engagement 1 &<br>Behavioral Engagement 2     | -4.471   | 32        | .000                       |
| Pair 4 | Social Skills 1 &<br>Social Skills 2                     | -3.569   | 32        | .001                       |
| Pair 5 | Cognitive Operation 1 &<br>Cognitive Operation 2         | -3.803   | 32        | .001                       |
| Pair 6 | Affective Coping 1 &<br>Affective Coping 2               | -4.403   | 32        | .000                       |
| Pair 7 | Integrative Motivation 1 &<br>Integrative Motivation 2   | -3.398   | 32        | .002                       |
| Pair 8 | Instrumental Motivation 1 &<br>Instrumental Motivation 2 | -.794    | 32        | .433                       |

Notes: 1: pre-ODI, 2: post-ODI

It can be seen in Table 3, there is a significant difference of experimental group between pre-ODI and post-ODI for the first 7 pairs ( $P < 0.05$ ). It is worth mentioning that there is no significant difference of instrumental motivation between pre-ODI and post-ODI ( $P > 0.05$ ). The result indicates that the level of student class engagement and self-efficacy of experimental group has been improved with designed interventions by researcher. However, designed ODIs has a significant impact on integrative motivation and it does not seem to have much effect on improving instrumental motivation.

Table 4.

*Paired Sample T-Test for Control Group Between Pre-ODI and Post-ODI*

|        | <b>Variables</b>   | <b>t</b> | <b>df</b> | <b>Sig.<br/>(2-tailed)</b> |
|--------|--|----------|-----------|----------------------------|
| Pair 1 | Cognitive Engagement a &<br>Cognitive Engagement b       | .498     | 32        | .622                       |
| Pair 2 | Emotional Engagement a &<br>Emotional Engagement b       | -.324    | 32        | .748                       |
| Pair 3 | Behavioral Engagement a &<br>Behavioral Engagement b     | -.101    | 32        | .921                       |
| Pair 4 | Social Skills a &<br>Social Skills b                     | .659     | 32        | .515                       |
| Pair 5 | Cognitive Operation a &<br>Cognitive Operation b         | -.077    | 32        | .939                       |
| Pair 6 | Affective Coping a &<br>Affective Coping b               | .291     | 32        | .773                       |
| Pair 7 | Integrative Motivation a &<br>Integrative Motivation b   | .610     | 32        | .546                       |
| Pair 8 | Instrumental Motivation a &<br>Instrumental Motivation b | -.099    | 32        | .922                       |

Notes: a: pre-ODI, b: post-ODI

Table 4 shows that there is no significant difference of control group between pre-ODI and post-ODI ( $p > 0.05$  for each variable). The result indicates that the level of student class engagement, self-efficacy and motivation of control group is almost constant without any interventions.

H1o: There is no significant difference between pre-ODIs and post-ODIs on student class engagement, self-efficacy and motivation.

H1a: There is a significant difference between pre-ODIs and post-ODIs on student class engagement, self-efficacy and motivation.

According to the analysis of sample t-test on the research variables student class engagement, self-efficacy, and motivation, it shown that there is no significant difference of experimental group and control group before ODI, and there is a significant difference of experimental group between pre-ODI and post-ODI. However, without any interventions, the control group does not have a significant change between pre-ODI and post-ODI. There is an impact of ODIs between pre-ODI and the post-ODI on student class engagement, self-efficacy and motivation. Therefore, H1o is rejected and H1a is

accepted.

### Analysis of Relationship of Self-efficacy and Student Class Engagement

Table 5.

*Pearson Correlation Analysis Between Student Class Engagement and Self-efficacy for Experimental Group at Post-ODI*

| <b>Variables</b>    |                     | Cognitive Engagement | Emotional Engagement | Behavioral Engagement |
|---------------------|---------------------|----------------------|----------------------|-----------------------|
| Social Skills       | Pearson Correlation | .543**               | .534**               | .750**                |
|                     | Sig. (2-tailed)     | .001                 | .001                 | .000                  |
|                     | N                   | 33                   | 33                   | 33                    |
| Cognitive Operation | Pearson Correlation | .508**               | .726**               | .601**                |
|                     | Sig. (2-tailed)     | .003                 | .000                 | .000                  |
|                     | N                   | 33                   | 33                   | 33                    |
| Affective Coping    | Pearson Correlation | .536**               | .589**               | .460**                |
|                     | Sig. (2-tailed)     | .001                 | .000                 | .007                  |
|                     | N                   | 33                   | 33                   | 33                    |

The statistical findings that shown in Table 5 support that all variables of self-efficacy (social skills, cognitive operation and affective coping) have a highly significant relationship with student class engagement on all variables (cognitive engagement, emotional engagement and behavioral engagement).

Table 6.

*Multiple Linear Regression Analysis Between Student Class Engagement and Self-efficacy for Experimental Group at Post-ODI*

① Variables Entered/Removed

| Variables Entered/Removed <sup>a</sup>          |   |                   |        |
|---|---|-------------------|--------|
| Model   | Variables Entered   | Variables Removed | Method |
| 1   | Affective Coping, Cognitive Operation, Social Skills <sup>b</sup> | .                 | Enter  |
| a. Dependent Variable: Student Class Engagement |   |                   |        |
| b. All requested variables entered.             |   |                   |        |

② Model Summary

| Model Summary   |                   |          |                   |                            |
|---|-------------------|----------|-------------------|----------------------------|
| Model   | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1   | .823 <sup>a</sup> | .677     | .644              | 5.58429                    |
| a. Predictors: (Constant), Affective Coping, Cognitive Operation, Social Skills |                   |          |                   |                            |

③ ANOVA

| ANOVA <sup>a</sup>  |            |                |    |             |        |                   |
|---|------------|----------------|----|-------------|--------|-------------------|
| Model   |            | Sum of Squares | df | Mean Square | F      | Sig.              |
| 1   | Regression | 1898.624       | 3  | 632.875     | 20.295 | .000 <sup>b</sup> |
|   | Residual   | 904.345        | 29 | 31.184      |        |                   |
|   | Total      | 2802.970       | 32 |             |        |                   |
| a. Dependent Variable: Student Class Engagement                                 |            |                |    |             |        |                   |
| b. Predictors: (Constant), Affective Coping, Cognitive Operation, Social Skills |            |                |    |             |        |                   |

④ *Coefficients*

| Coefficients <sup>a</sup>                       |                     |                             |            |                           |       |      |
|---|---------------------|-----------------------------|------------|---------------------------|-------|------|
| Model   |                     | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|   |                     | B                           | Std. Error | Beta                      |       |      |
| 1   | (Constant)          | -1.000                      | 10.129     |                           | -.099 | .922 |
|   | Social Skills       | 2.048                       | .726       | .375                      | 2.822 | .009 |
|   | Cognitive Operation | .993                        | .334       | .381                      | 2.977 | .006 |
|   | Affective Coping    | 1.272                       | .588       | .262                      | 2.162 | .039 |
| a. Dependent Variable: Student Class Engagement |                     |                             |            |                           |       |      |

Tables 6 (including ①, ②, ③ and ④) shows the relationship of self-efficacy and student class engagement at post-ODI stage. The result of ANOVA analysis ( $P < 0.05$ ) indicates that the estimated model can explain the relationship of social skills, cognitive operation and affective coping on student class engagement. R square value is .677, which shows that independent variables account for 67.7% of dependent variables. Furthermore, the result of coefficients analysis ( $P < 0.05$ ) shows the improvement of social skills, cognitive operation and affective coping cause the enhancement of student class engagement.

H2o: There is no significant relationship between self-efficacy and student class engagement.

H2a: There is a significant relationship between self-efficacy and student class engagement.

To test the hypothesis 2 whether there is a significant relationship between self-efficacy and student class engagement, Pearson’s correlation analysis and multiple linear regression analysis were used to determine the relationship of self-efficacy and student class engagement. The results show there is a strong and positive correlation between self-efficacy and student class engagement (Pearson’s correlation analysis:  $p < 0.05$ , multiple linear regression analysis:  $P < 0.05$ ). Therefore, H2o is rejected and H2a is accepted.

## Analysis of Relationship of Motivation and Student Class Engagement

Table 7.

*Pearson Correlation Analysis Between Student Class Engagement and Motivation for Experimental Group at Post-ODI*

| Variables               |                     | Cognitive Engagement | Emotional Engagement | Behavioral Engagement |
|-------------------------|---------------------|----------------------|----------------------|-----------------------|
| Integrative Motivation  | Pearson Correlation | .642**               | .651**               | .634**                |
|                         | Sig. (2-tailed)     | .000                 | .000                 | .000                  |
|                         | N                   | 33                   | 33                   | 33                    |
| Instrumental Motivation | Pearson Correlation | .558**               | .355*                | .485**                |
|                         | Sig. (2-tailed)     | .001                 | .043                 | .004                  |
|                         | N                   | 33                   | 33                   | 33                    |

The statistical findings that shown in Table 7 support that all variables of motivation (integrative motivation and instrumental motivation) have a significant relationship with student class engagement on all variables (cognitive engagement, emotional engagement and behavioral engagement).

Table 8.

*Multiple Linear Regression Analysis Between Student Class Engagement and Motivation for Experimental Group at Post-ODI*

① *Variables Entered/Removed*

| <b>Variables Entered/Removed<sup>a</sup></b>    |  |                   |        |
|---|--|-------------------|--------|
| Model   | Variables Entered  | Variables Removed | Method |
| 1   | Instrumental Motivation, Integrative Motivation <sup>b</sup> | .                 | Enter  |
| a. Dependent Variable: Student Class Engagement |  |                   |        |
| b. All requested variables entered.             |  |                   |        |

② *Model Summary*

| <b>Model Summary</b>   |       |          |                   |                            |
|--|-------|----------|-------------------|----------------------------|
| Model  | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1  | .721a | .520     | .488              | 6.69751                    |
| a. Predictors: (Constant), Instrumental Motivation, Integrative Motivation |       |          |                   |                            |

③ *ANOVA*

| <b>ANOVA<sup>a</sup></b>   |            |                |    |             |        |       |
|--|------------|----------------|----|-------------|--------|-------|
| Model  |            | Sum of Squares | df | Mean Square | F      | Sig.  |
| 1  | Regression | 1457.270       | 2  | 728.635     | 16.244 | .000b |
|  | Residual   | 1345.700       | 30 | 44.857      |        |       |
|  | Total      | 2802.970       | 32 |             |        |       |
| a. Dependent Variable: Student Class Engagement                            |            |                |    |             |        |       |
| b. Predictors: (Constant), Instrumental Motivation, Integrative Motivation |            |                |    |             |        |       |

④ *Coefficients*

| Coefficients <sup>a</sup>                       |                         |                             |            |                           |       |      |
|---|-------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model   |                         | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|   |                         | B                           | Std. Error | Beta                      |       |      |
| 1   | (Constant)              | 16.482                      | 10.091     |                           | 1.633 | .113 |
|   | Integrative Motivation  | 1.502                       | .381       | .662                      | 3.939 | .000 |
|   | Instrumental Motivation | .282                        | .555       | .085                      | .508  | .615 |
| a. Dependent Variable: Student Class Engagement |                         |                             |            |                           |       |      |

Tables 8 (including ①, ②, ③ and ④) shows the relationship of motivation and student class engagement at post-ODI stage. The result of ANOVA analysis ( $P < 0.05$ ) indicates that the estimated model can explain the relationship of integrative motivation and instrumental motivation on student class engagement. R square value is .520, which shows that independent variables account for 52.0% of dependent variables. Furthermore, the result of Coefficients analysis on integrative motivation ( $P < 0.05$ ) shows the improvement of integrative motivation causes the enhancement of student class engagement, but the result of coefficients analysis on instrumental motivation ( $P > 0.05$ ) shows the improvement of instrumental motivation cannot lead to the enhancement of student class engagement.

H3o: There is no significant relationship between motivation and student class engagement.

H3a: There is a significant relationship between motivation and student class engagement.

To test the hypothesis 3 whether there is a significant relationship between motivation and student class engagement, Pearson’s correlation analysis and multiple linear regression analysis were used to determine the relationship of motivation and student class engagement. The results show there is a strong and positive correlation between integrative motivation and student class engagement (Pearson’s correlation analysis:  $p < 0.05$ , multiple linear regression analysis:  $P < 0.05$ ). However, the relationship between instrumental motivation and student class engagement is not significant. Therefore, the integrative motivation variable of H3o is rejected and H3a is accepted,



while instrumental motivation variable of H3o is accepted and H3a is rejected.

### **Conclusions**

This study indicates that there is a significant relationship between self-efficacy and student class engagement as well as motivation and student class engagement. Specially, social skills, cognitive operation, affective coping, and integrative motivation have a positive impact on student class engagement.

The implementation of ODI in this study has a significant improvement on above four variables and a non-significant impact on instrumental motivation. The four dimensions of self-efficacy and motivation, (1) social skills, (2) cognitive operation, (3) affective coping, and (4) integrative motivation can be implemented as the main set of indicators to measure student class engagement.

The quantitative results of the experimental group shows that there are significant differences on self-efficacy (social skills, cognitive operation, and affective coping), motivation (integrative motivation) and student class engagement (cognitive engagement, emotional engagement and behavioral engagement) at pre-ODI and post-ODI stages. The average score of each variable increase after interventions, which is also supported by interviews with students and researcher's observation. Furthermore, there is no significant difference in the average score between the pre-ODI and post-ODI stages compared with the control group that did not receive any interventions.

In summary, designed ODI interventions have improved self-efficacy and motivation, thereby enhancing student class engagement.

### **Recommendation**

#### Recommendation for the Focal Company

SWOTAR analysis should be carried out regularly at all levels of ZYUFL, such as the entire organization, departments, teams, and individuals, in order to objectively and accurately analyze the current situation of them. The results of SWOTAR analysis can help people in the organization to identify existing problems, find solutions, and clarify future development directions. At the same time, it also helps top leaders to make the right decisions and plans.

The results of the study show that ODI has a positive impact on both self-efficacy

and motivation, while also increasing student class engagement. However, the current research is only concentrated on one experimental group of English majors, so it is necessary to extend the scope of the study to the entire organization to obtain a higher impact. In addition, the organization can also set up corresponding functional departments to carry out organizational development interventions regularly throughout the school, and form a new monitoring and evaluation system with the original department to ensure the sustainability and stability of the change.

### Recommendation for Further Research

The object of this study is a private university in Shaoxing City, and the research conclusion is more suitable for explaining the local university student class engagement in learning. In the future, research on student class engagement, self-efficacy and motivation should be carried out in other universities in different cities and regions, so as to further explore the impact of organizational development intervention on these three variables and enhance the applicability of research conclusion.

In addition to the personal factors of students, the influence of the curriculum, classroom environment, teacher teaching style, teaching methods and other factors on student class engagement should also be considered in further research, in order to expand the understanding of independent variables.

Due to the semester setting in ZYUFL, the organizational development only lasted for four months, and the duration was relatively short. Subsequently, purposeful organizational development interventions should be continued to maintain the existing changes. At the same time, intervention can also be extended to the level of teachers and leadership so that the three can be organically combined to achieve organizational change better.

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