Influence of Students’ Learning Style and Performance in the Comprehensive English Class

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Abstract

The purpose of this research was to improve Chinese university students’ performance in four aspects, namely sense of responsibility, academics in students’ grades, engagement and self-esteem by using student-centered learning approach at a University in China and quantitative and qualitative measurements. Changing students’ learning style was implemented with careful consideration. With that in mind, new English language learning process and teaching model were designed in order to improve the teaching and learning quality. Quantitative measurements was used for data analysis. The research instruments included a set of ten-item questionnaire as well as one open-ended question. In order to obtain the qualitative data, focus group interviews was done in team basis.

Keywords: learning style, students’ performance, English language learning and teaching

1. The Challenge – The Problem for Change

Against a background of accelerating speed in the current society and turbulent environment, Chinese higher education plays a significant role among Chinese teachers, students and parents’ lives. Due to the large population, Chinese policies, which are totally different from other countries, need to be implemented and examined during each Chinese students’ learning stage. Unlike in other countries, there are two learning stages in China, including high school entrance exam and college entrance exam. The first one is the public examination called “Zhongkao”, which is for middle school students who are around fifteen years old. These students are required to take the senior high school entrance examination before entering high schools, there are more than ten thousand candidates for an entrance examination in Zhejiang Province (Chan, 1999). The second examination is “Gaokao”, which is the current Chinese entrance examination for higher education, and considered as one of the most effective and balanced educational systems. “Gaokao” means higher education institute enrollment examination. It selects talents when the high school students enter into universities under competitive circumstances (Liu, 2007).

Chan (1999) believes that a great number of Chinese students are able to pass the “Gaokao” because the Chinese government prioritizes cultivating cultural values and enhancing skills for the people in both rural and urban areas. According to the Table 1, it shows that the increasing rates of university enrollment and acceptance from 1992 to 2014. During the year of 2007 and 2009, the number of applicants reached the highest rate. Besides, the enrollment rates constantly increased during these years, especially in 2014. The largest acceptance rate was 76% in 2013. The figures indicate that a larger number of senior high school students have been enrolled in universities.

Nevertheless, there is a problem of Chinese education overemphasizing on the preparation for these two big aforementioned exams, rather than on quality-oriented education. Consequently, students’ creativity and learning motivation have been stifled and decreased in comparison to foreign educational models which advocate innovation, learning autonomy and diverse values, all of which become important pillars of economic development (Liu, 2007; Chan, 1999). In contrast, China lacks innovation when developing its economy. Another current issue is that when Chinese students graduate from high schools and finish the college entrance examination, they are usually less motivated and confident to learn at universities, including in Zhejiang Yuexiu University of Foreign Languages (ZYUFL).

According to Wang (1999), most Chinese university students have greatly focused on English reading and writing, but less on the oral practice. In the second language (L2) classroom, Chinese university students are disinclined to interact with teachers and classmates, as found in Comprehensive English classroom in this study. That is, they become accustomed to the traditional way of learning, which is a book-centered and lecture-dominated approach (Liu &
Littlewood, 1997). Regarding English language teachers at Chinese universities, they usually use the whole-class teaching method due to the large class sizes, where their main responsibilities are typically to teach vocabulary and grammar; subsequently, students have limited opportunity to speak (Wen & Clement, 2003). Hence, Comprehensive English teaching and learning methods should be changed to enhance students’ learning style and improve their performance in the aspects of engagement, sense of responsibility, self-esteem and academics.

Table 1. The Numbers of Chinese Applicant, Enrollment and University Acceptance

| Year | Applicant (Million) | Enrollment (Million) | Acceptance Rate (%) |
|------|---------------------|----------------------|---------------------|
| 1992 | 3.03                | 0.75                 | 25%                 |
| 1993 | 2.86                | 0.98                 | 34%                 |
| 1994 | 2.51                | 0.9                  | 36%                 |
| 1995 | 2.53                | 0.93                 | 37%                 |
| 1996 | 2.41                | 0.97                 | 40%                 |
| 1997 | 2.78                | 0.1                  | 36%                 |
| 1998 | 3.2                 | 1.08                 | 34%                 |
| 1999 | 2.88                | 1.6                  | 56%                 |
| 2000 | 3.75                | 2.21                 | 59%                 |
| 2001 | 4.54                | 2.68                 | 59%                 |
| 2002 | 5.1                 | 3.2                  | 63%                 |
| 2003 | 6.13                | 3.82                 | 62%                 |
| 2004 | 7.29                | 4.47                 | 61%                 |
| 2005 | 8.77                | 5.04                 | 57%                 |
| 2006 | 9.5                 | 5.46                 | 57%                 |
| 2007 | 10.1                | 5.66                 | 56%                 |
| 2008 | 10.5                | 5.99                 | 57%                 |
| 2009 | 10.2                | 6.29                 | 62%                 |
| 2010 | 9.46                | 6.57                 | 69%                 |
| 2011 | 9.33                | 6.75                 | 72%                 |
| 2012 | 9.15                | 6.85                 | 75%                 |
| 2013 | 9.12                | 6.94                 | 76%                 |
| 2014 | 9.39                | 6.98                 | 74%                 |

Source: Chinese Ministry of Education (2015)

1.1 Chinese Context

Chinese higher education has continuously developed and changed. Especially since the implementation of the reform and opening-up policy, it has made a significant achievement (Liu, 2007). Higher education in China has geared towards students’ professional disciplines in the future. Its strategies focus on decentralizing education, quality assurance and accreditation, while the development of higher educational institutions have continually proven to be effective (Chan, 1999; Liu, 2007). As the Chinese educational system plays a significant role, China is advancing into a healthy and stable system.

What’s more, Chinese higher education has a positive influence on its economic growth, scientific progress and social development. It emphasizes that cultivating a growing body of well-rounded talents and qualified experts are beneficial to Chinese modernization. China also demonstrates a great demand for better regulations on a number of excellent research work, teaching resource and experience, and even acquiring social changes and technology. Based on those facts, the country’s rising comprehensive national power and good reputation, China has attracted a number of international students who come from foreign countries, and the figure continues to rise rapidly. On the other side, a lot of Chinese wealthy families send their children to go abroad in order to receive high-quality education. Beautiful campus environment, unusual and high-quality teaching approaches and a good environment for learning English, have contributed on a growing number of Chinese students to further their further education (Pan, 1990), especially in the United States, United Kingdom, France, Germany and other developed countries. Therefore, many Chinese students and parents emphasize that the importance of learning English. Even though Halyer (2011) and Ellis (2012) reckon that speaking is crucial for university students with speed of globalization, most Chinese university students still give more emphasis on English reading and writing, but less on the oral practice (Pan & Block, 2011).

However, there are several challenges for Chinese higher education. China has a long history, and its traditional education system has a deep influence on Chinese students and teachers. Confucian ideals have been kept in mind for the general
Chinese mindset for the past 2500 years (Sun & Kang, 2015). For example, a huge number of Chinese students are supposed to use rote-learning, which has a bad influence on building creative thinking patterns and making critical judgments (Chan, 1999; Matsuda, 2003). Also, most of the university students lack real-world experience during their middle and high school; it is subsequently difficult for them to smoothly adapt to university life and a global society. With these facts, Sun and Kang (2015) point out five characteristics of Chinese students’ thinking and behavior in the table as follows:

Table 2. Five Points of Chinese Students’ Thinking and Behavior

| (1) Focus on consciousness of concrete thoughts |
| (2) Lack of ability of creating abstract thoughts |
| (3) Stress on details instead of universal |
| (4) Emphasis on practicality |
| (5) Care for harmony, stability and collectivism. |

Source: Sun, Q., & Kang, H. (2015). Infusing work-based learning with Confucian principles: A comparative perspective. *Higher Education, Skills & Work-Based Learning*, 5(4), 323-338.

At Chinese universities, most English teachers appear to use whole-class teaching as a main approach in the L2 classroom (Liu, 2007). Students subsequently become used to the whole-class learning style by listening to what their teachers’ say and taking notes. As a result, they usually keep quiet, are slow to respond to teachers’ questions, and may even have no motivation for the class participation (Hall & Walsh, 2002). Consequently, there is little interaction among students in the L2 classroom at Chinese universities.

Moreover, the teaching methods of Chinese university teachers are not effective. They tend to overlook the development of students’ speaking competence, while the methods of pair/group works are rarely utilized (Pan & Block, 2011). Pan and Block (2011) also believe that they typically wish to know students’ linguistic progress. Cortazzi and Jin (2002) suggest that language teachers usually only focus on explaining the meaning of words rather than helping students to improve their communication ability in the L2 classroom. Table 3 summarizes the information in the aspects of teaching and learning in the L2 classroom between Asian and Western countries as follows.

Table 3. Information in the Aspects of Teaching and Learning in the L2 classroom between Asian and Western Countries

| Continents | Country | Management in the classroom | Teaching Approach | Relationship between student and teacher | Teacher’s role | Student’s attitude |
|------------|---------|-----------------------------|-------------------|------------------------------------------|---------------|-------------------|
| Asian Country | China/ Japan/ Korea | Strict rules | Whole-class teaching (Liu, 2007) | Teacher is the symbolic of knowledge. Students respect teachers (Liu, 2007; Chan, 1999). | Authoritarian (Liu, 2007) | Passive |
| Asian Country | Singapore | Flexible management | Teacher-centered teaching (Harmer, 2007) | Teacher gives learning space for students (Liu, 2006). | Mentor (Harmer, 2007) | Active |
| Western Country | British/ United States | Flexible management | Differentiated instruction (Ellis, 2008; Ellis, 2012) | Teacher creates chances and students can challenge teacher (Harmer, 2007; Ellis, 2012). | Facilitator (Harmer, 2007) | Active/High enthusiasm |

Another challenge of Chinese higher education is the increasing number of unemployment among Chinese graduates. Due to the expansion of Chinese universities and institutes over these years, a lot of Chinese students access to higher education after they finish the College Entrance Examination. As graduates search for a job in the talent market, the rate of unemployment is obvious. The specific reasons could be economic recession, education-policy making and changes in the higher education and economic development (Halyer, 2011).

The university should help students to create career planning and cooperation between colleges and enterprises. The ultimate goal for higher education is not only to improve students’ overall performance, including responsibility, engagement, self-esteem and academic, but it is also critical to change university students’ learning style as well in order to improve the quality of learning.
2. Literature Review

2.1 Learning Style

Shah and Hawk (2007) suggest that several learning style have been widely utilized over the past twenty-five years among instructors and students; in terms of different personalities and proficiency levels. Students appear to use different learning approaches because a single teaching method does not satisfy all students’ needs anymore. Shah and Hawk (2007) also believe that learning style is the broad study of one’s personality. Learning style can be branched out into dispositional traits and characteristic adaptions, which have different points and can be classified by humans learning characteristics.

Advocators of learning style assume that adult students tend to learn in different ways; thus, instructors should research on a wide range of pedagogical approaches and students’ preference for learning, and then implement student activities in order to achieve the efficient learning outcomes. The teacher is not always aware of student learning style, which should be depended on teacher’s professional knowledge, preferences or dispositions (Claxton & Murrell, 1987). Moreover, Kolb and Kolb (2011) suggest that the theory of learning style is based on learner’s learning preferences, and used in the different stages of the learning cycle. Taking account of different genetic information, educational background and the challenges of the current environment, Kolb and Kolb design four methods in choosing learning styles. Kolb (1984) states that learning styles describe different learning orientations in which people experience from the four modes of the learning process. Learning is the crucial factor for human development and the way in which people learn to decide the course of human life. Kolb (1984) emphasizes that an individual’s learning style is affected by personality type, educational level, current occupational title and role, surrounding environment and career selection.

Kolb (1984) defined four learning styles that combine with different learning methods: diverging, assimilating, converging and accommodating. Figure 1 shows Kolb’s learning style model.

![Kolb's Experiential Learning Cycle](source)

Specifically, people who prefer a divergent style tend to have CE and RO learning abilities. Divergers have traits of being imaginative, emotional and show a great interest in people and arts. They have an enthusiasm of appreciating culture and collecting relevant information. People who prefer the divergent style are likely to work in groups, listen to peers’ views and get the valuable feedback. Divergers are also good at analyzing situations from different perspectives and producing new ideas from the changed environment (Kolb, 1984).

People with the assimilating style usually have RO and AC capabilities. People who possess the assimilating style generally have abilities in creating theoretical models and using the inductive way. Hence, they will have a critical idea on lecture and reading, investigate analytical frameworks and thorough thinking through a formal learning (Kolb, 1984).
Learners with converging style have AC and AE learning competences. They have an aptitude for identifying practical uses for ideas and theories. In formal learning, convergers prefer to think in a deductive way and work with practical experience, new ideas and simulation (Kolb, 1984).

Learners with accommodating style have CE and AE learning abilities. Accommodators have a manifest trait of drawing on lessons from their hand-on experience. They tend to involve themselves in a challenging situation and learn from practical knowledge. They are also specialized in taking risks, doing field work with groups, designing different solutions and choosing appropriate ones to apply in projects (Kolb, 1984).

Based on these four learning styles in an experiential learning model, Kolb (1984) indicates that a balancing learning style should be combined with AC and CE, and AE and RO. He also believes that each student should have a clear understanding of their learning style to improve learning effectiveness, rather than using their natural modes. Students are also advocated to develop their own learning style instruments. Effective instructors should use different learning styles to choose learning activities and pedagogical approaches, enhancing students’ quality of learning and letting them experience a diversity in teaching ways. In other words, Kolb (1984) points out that differing learning styles facilitate teachers to implement different interactive activities. Students will also recognize that teachers try their best to satisfy their individual needs when teachers use different learning approaches. The most important part for teachers is that they can make an adjustment of learning and teaching approaches in terms of information from the whole class learning style profile, course to course and across the semester (Kolb, 1976). Specifically, instructors should broaden students’ learning style and abilities by using various learning activities and advocating them to choose appropriate approaches. Fully utilize learning style instruments gives an opportunity for students and instructors to have a deep reflection in choosing learning activity and making the learning process effectively (Kolb & Kolb, 2005).

2.2 The Relationship between Learning Style and Culture

As aforementioned, learning style can be affected by certain variables, such as gender, educational background and culture, etc. Learning style categorizes how an individual learns and gains information in different ways, such as performing and reflecting, seeing and hearing, memorizing and visualizing, interpreting reasonably and logically (Claxton & Murrell, 1987). Students’ learning style profile can be indicated by their learning preferences, aiming for individual’s advantages as well as their inclination to give rise of obstacles during the learning process. Types of learners can be classified as active and reflective learners, sensing and intuitive learners, visual and verbal learners, sequential and global learners (Gündüz & Özcan, 2010).

Gündüz and Özcan (2010) maintain that active learners are likely to contact with the external worlds through the discussion, test and explanation, while reflective learners require knowledge, and manage learning by introspection. In other words, active learners and reflective learners can be named as extrovert and introvert persons. As for sensing learners, they tend to engage with learning as observers, and collect information by sensing, whereas intuitive learners learn by raising indirect perception and unconscious thinking. In Kolb’s experiential learning model, concert experience and abstract conceptualization are two poles, which are relevant with sensing and intuition (Karahoca, Karahoca & Yenemy, 2010). For visual learners, they learn by seeing charts and films; however, verbal learners are assisted by words and spoken explanation. Sequential learners mainly use linear steps while global learners used to learning in jumps, and engage in random learning. Due to different learning styles, pedagogical approaches should be varied in order to adapt to the changing factors. Failure of learners may emerge as a mismatch between the individual learning style and the teaching style of an instructor.

Culture has been explored in two fields, including Anthropology (Hall, 1976) and Psychology (Triandis, 1995). These scholars maintain that culture is composed of shared beliefs, values, attitudes, identifies and other important events that arise from common experience of collective people who transmit the information to generations. Ladd and Ruby (1999) maintain that students’ cultural characteristics and their learning style should be closely considered during the teaching due to China’s long history and cultural background as well as Chinese students’ different learning styles. Hence, Chinese teachers should try using new teaching styles.

According to Hunt (1991), Westerners advocate active experimentation (AE) and make a balance between feeling CE and thinking AC. They emphasize learning by the action skills that are identified both the analysis and intuitive experience. However, a significant number of Chinese students think textbooks function as teachers and authorities (Hinkel, 1999). They undoubtedly reckon from a textbook is correct.

In summary, various factors lead to different learning styles, so learners learn in different ways. In order to deal with different learning styles, teachers should use a variety of teaching methods.

2.3 Learning Process

It has been well recognized that a university is a learning organization (Senge, 1990). Senge (1990) illustrates that a
learning organization is the place where people devote themselves to achieve the best results, where a series of new thinking patterns and models emerges, where the collective spirits are gathered, where learners are cooperating with each other and getting well-rounded performance. He also claims that it is a place to pool learners’ commitment and abilities to learn at all levels. Regarding various behaviors and beliefs that are beneficial to the organization’s development and growth. Argyris (1991) states that people usually have a mental map to guide their action, and the process includes three crucial steps: having a plan, implementing the required ways and looking back to their actions. Interestingly, it is also believed that the mental map lead an individual in the right way than the theories. However, Argyris argues that there is no split between theories and mental map. Both of them are useful in a learning organization. Stern (2003) believes that people need to learn fast to get a sustainable and competitive advantage in order to adapt to the changing complex world. Thompson (2004) states that when people engage with learning, it consists of several activities in the process. The process can be presented in individual’s head and designed by organization’s rules, which could be large or small, authoritarian or flexible.

In addition, Kolb (1976) states that when managing the learning process and achieving the individual and organizational learning performance, one should have a clear objective that undertakes as consciously and elaborately as managing profit and productivity. The most important point is that leaders and organizational members should spare time to learn from the experience and make a summary of all events.

When dealing with complex situations, especially when confronting with people, there exists a mismatch between the consequence of strategies and the theories-in-use. Hence, Argyris and Schön (1974) state that these two responses can be found in the field of single- and double-loop learning. Figure 2.6 presents the single-loop and double-loop learning.

![Learning Diagram](image)

**Learning**

Figure 2. The Single-Loop Learning and Double-loop

Source: Argyris & Schön, (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.

Argyris and Schön (1974) believe that learning is a process that involves identification and correction of problems. In the actual learning organization, most professionals are good at single-loop learning, as they spend a lot of time in pursuing the academic credentials, acquiring a number of curricular disciplines and using these disciplines into the real field to solve the problems. But some experts are always successful in doing what they did; they rarely practice failure. Hence, they have no experience in learning from failure. If single-loop learning strategies go wrong, they tend to criticize and even “blame” other people. When the company calls on employees to learn together, it is a good chance to increase motivation, and it is also easy to develop learners’ autonomy if people have the right attitude and faithful commitment; the company can draw on this opportunity to create a new structure, build organizational culture and plan long-way visions and facilitate committed employees (Argyris, 1991).

Double-loop learning is more creative and reflective. Reflection is the basic element in double-loop learning, and it involves the consideration of assumptions behind the situation happened or the ideas discussed of the organizational norms and values. Specifically, the social structures are useful for their development, and the processes are not confirmed right away (Stern, 2003). The application of double-loop learning usually happens when organizational practitioners make decisions under an uncertain, complex and changing environment. By reflecting the inner structure of organization, OD practitioners can change the conventional methods and adapt their behavior in accordance to the values and theories; double-loop learning facilitates human agents to adapt to the chaotic environment by using the organizational ability within the organizational learning. In addition, Argyris (1991) believes that effective double-loop learning is the reflection of one’s thinking, which follows cognitive rules that occur in the brain and the explanation of reasons when they take initiatives in implementing actions.
It is better for companies to learn how to deal with the dilemma if it happens; managers and employees should work on their behavior. In order to achieve organizational learning and long-term improvement programs, it is also necessary to teach them how reason their behaviors in effective ways rather than using defensive reasoning which may hinder organizational learning. The aim of organizational learning is to produce new knowledge and innovative ways to promote continuous organizational development (Argyris, 1991). Meanwhile, double-loop learning can stimulate OD practitioners to generate new organizational knowledge; as a result, it can combine with learning in the organizational model, which helps to run the organization smoothly. As such, there is a positive relationship between organizational learning and its performance (Senge, 1994; Mabey & Salaman, 1995; Goh, 1998).

Overall, in the different levels of an organization, human agents should make full use of high professionals with technical and well-developed ability working together and effectively, build a positive relationship with customers and clients, and frequently have a reflection on daily practices and change their organizational routines (Argyris, 1977).

2.4 Student Engagement, Academic Achievement, Sense of Responsibility and Self-Esteem

In this research study, the researcher investigates students’ performance from four aspects, namely, student engagement, academics, sense of responsibility and self-esteem. These four constructs are highly correlated among Chinese universities and are the key indicators. As discussed in previous chapters, this part also illustrates other theories regarding these four aspects to support the reasons that why the researcher chooses these elements as indicators of students’ performance.

Hu and Kuh (2001) state that student engagement is related to student effort to engage in educational oriented activities, which is conducive to the desired outcomes. Similarly, higher education research suggests that student engagement usually connects with high-quality learning outcomes (Krause & Coates, 2008). However, others suggest that student engagement reflects the learning process that instructors try to engage students in the process of accumulating learning experience (HEFCE, 2008).

Coates (2009) offers some engagement scales, some of which are used as measures in this research study. They are: 1. Academic challenge, which measures how students challenge the assessment; 2. Active learning, which measures students’ high engagement in building knowledge; 3. Interaction between student and teacher, and between student and student as both of them are good for creating an emotionally supportive classroom climate (Battistich, Schaps & Wilson, 2004); 4. Enriching learning experience is a measure for in-class activities that support learning environment.

In a traditional University context, students usually master information during the lecture, and apply the resources and information learned in problem-solving, activities and assignments. However, the current student-centered learning approach changes this conventional method, by using flipped learning and team-based learning, and facilitating the learning process through the use of collaborative learning (Balan, Clark & Restall, 2015). Flipped learning focuses on student-centered learning approach in the classroom (Flipped Learning Network, 2014). As for team-based learning, it contains structured approaches and team building for in-class collaborative learning (Michaelsen & Sweet, 2008; Wallace, Walker, Braseby & Sweet, 2014). Students are responsible for their learning and learn from collaborative learning in teamwork; they can also get constructive feedback from the team contribution (Michaelsen & Sweet, 2008). From Prince’s (2004) perspective, by utilizing collaborative learning, students’ academic achievement, interpersonal relationships and student self-esteem can be enhanced because the core element of team-based learning is student activity and engagement during the learning process. Marton and Saljo (1997) also maintain that student-centered learning approaches stimulate students to have a deeper learning by themselves. Concerning the sense of responsibility in learning, it moves to a student-centered context. The student-centered approach gives students opportunities to take responsibility for their own learning when they participate in the learning process instead of passively taking notes or receiving information from teachers or textbooks.

3. Qualitative Data Collection and Analysis

3.1 Interview

Besides the questionnaire survey, the researcher designed the interview in collecting information in the Comprehensive English classroom. During the focus group interview, the researcher also chose students in both groups by using random technique. Table 4 describes the relevant information of interview groups.
Table 4. Pre-ODI-The Information of Interview Groups

| Research Method | Instrumentation               | Analysis Tool          | No. of Groups                                      | No. of Questions                                      |
|----------------|-------------------------------|------------------------|---------------------------------------------------|-------------------------------------------------------|
| Interview      | Open-ended and Structured     | Content Analysis       | Experimental group:                                | Five questions were closely related to their learning style and performance. The answers were also explained according to the WBL analysis. |
|                |                               |                        | Class A: six students                              |                                                        |
|                |                               |                        | Class B: five students                              |                                                        |
|                |                               |                        | Control group:                                     |                                                        |
|                |                               |                        | Class C: twelve students                            |                                                        |

**Question No. 1**

What kind of learning activities do you like in the Comprehensive English class? Why? (For example: traditional lecture, group discussions; role plays; story-telling; teamwork; presentations or reflections of the class etc.) Give an example of supporting reasons.

Based on question one, students discussed and completed this topic in the Comprehensive English class. According to COL students’ learning experience, they were used to having the traditional lecture, discussing with peers in group work, doing the teamwork, having presentation in front of the whole class and having the role play. However, they seldom had practiced story-telling and reflective learning. Analysis and discussion on students’ preference of learning activity are explained as follows.

It was reported that the traditional lecture was the least interesting way for students because it took a long time to sit row by row and took notes from what the teacher talked about. Regarding other activities, students showed different learning style preferences in both groups. Ten students stated that they liked group discussion, which because it gave them opportunities to get other classmates’ ideas and share experience with peers, to broaden their horizon beyond the textbook, as well as to improve their learning enthusiasm in a friendly learning atmosphere. Seven respondents illustrated that the teamwork with presentation was helpful for English learning, particularly in cultivating speaking and listening skills. By working together with team members, they shared and accumulated knowledge, solved problems together, helped each other to achieve the common goals and even tapped into an individual’s learning potential. Meanwhile, making a presentation provided learners a good platform for presenting themselves, developing their oral skill in English and receiving feedback from other groups and teachers. These respondents believed that it was beneficial for them in the long term in learning English. Another four respondents thought role play was interesting for them. They stated that it was relaxing to assign each student a specific role in learning English, which made it easy to understand the contents.

![Figure 3. Pre-ODI-Students’ Learning Style with the Framework of WBL Analysis](image)

Regarding the WBL content analysis, students were in possession of four-quadrant in the whole brain when they were engaging in learning activities. To be detailed, students were good at learning in different thinking quadrants. In both groups, they had possessed the thinking lenses of “I-Preserve, I-Pursue, I-Explore and I-Control”. Moreover, based on the pie chart, 43.5% of respondents chose group discussion as their best learning preference, representing the “I-Preserve”. Several students stated that they enjoyed the teamwork with presentation as they could explore creative ideas with peers and had an opportunity to present their performance. The figure of these students accounted for 30.4%, which ranked the
second place among the learning activities. Next, the remaining learners were in the thinking quadrant of “I-Control” and “I-Pursue” who enjoyed the learning ways of role-play and lecture, which accounted for 17.4% and 8.7%, respectively.

![Figure 4. Pre-ODI-Learning Style of Students in Experimental and Control Group](image)

For Figure 4, it shows the overall respondents in the focus group by their learning preference according to the WBL content. In both groups, students showed the highest enthusiasm in the thinking quadrant of “I-Preserve”, which was in consistent with the quantitative data of students’ CE style. There were five students from the experimental group and four from the control group. Moreover, based on the data illustrated, two kinds of thinking quadrants “I-Preserve” and “I-Explore” dominated in these four areas. It was also in line with the students’ performance in engagement, which was the “I-Explore” learning preference. An interesting situation was that the same number of students was possessed in the “I-Control” quadrant.

**Question No. 2**

How well do you think you can learn and understand the content in the Comprehensive English class? Tell more about that in specific information.

Focusing on question no. two, students recalled their learning experience during the Comprehensive English class, which demonstrated various answers. Among these twenty-three students in the focus group interview, five students reported that they understood the contents in a high degree, which accounted for 21.7%. Fifteen respondents (65.2%) recognized that they learned and acquired the knowledge at a moderate level. However, only three students (13%) students could not understand the teaching content very well, which was at a relatively low stage.

![Figure 5. Pre-ODI-The Level of Understanding the Content in the Comprehensive English Classroom](image)

According to the demonstration from students’ feedback, most respondents believed that the teaching method was important. Particularly, according to the translation of the whole passage, the interpretation of words and phrases by the
teacher, and interesting stories from the text, students believed that they gained resourceful knowledge. In addition, most students were likely to work with group members because they learned from other students’ learning approaches, and feedback from peers helped them to get a better understanding of content, and had more opportunities to communicate with teachers and peers. Overall, students were enjoying the learning process by teacher’s summary and peers’ assistance.

![Figure 6. Pre-ODI-The Level of Understanding the Content and WBL Analysis](image)

In both groups, 86% of students understood the content through the help from group members and the feedback from teacher. It was beneficial for them to get the resourceful information from teacher’s interpretation and the valuable suggestions from peers. On the contrary, only three students (13%) used other ways to explore knowledge.

Question No. 3
To what extent do you think it will enhance your English learning skills (listening, speaking, writing and reading)?

Concerning the improvement of four English learning skills, students expressed opinions in a various way in the experimental and control group. Chinese university students usually had a long experience of learning English, which had laid a solid foundation for the further learning. First of all, a great number of students believed that speaking was the most important skill in learning English. Hence, twelve students (52.17%) illustrated that practice makes perfect in speaking. For example, it was necessary for them to participate in the English corner in spare time or make a dialogue with partners when the teacher gave an opportunity for them. Also, they described that it was better to record voice by using a recording device so that they would listen to their voices and revised it repeatedly.

What’s more, in order to strengthen listening skill, six students (26.09%) believed that watching an English-relevant movie or listening to music was greatly helpful for listening skill. It was also beneficial to practice speaking to learn several slangs or idioms. On the contrary, three respondents (13.04%) and two respondents (0.09%) showed that reading newspaper and articles regularly was useful for improving reading skill so that they would gradually mastered the skill of how to grasp the main idea and analyzed the structure logically. By reading English-relevant information regularly, they also reported that they could accumulate new vocabulary and enhance writing skill for an academic English essay. Finally, two students believed that they made a plan and were going to be persist in academic writing to fulfill their goals of being a good writer.

![Figure 7. Pre-ODI-The Ways of Improving English Learning Skills](image)
In summary, it can be found that most students believed that practicing English-relevant skills was the most significant factors on enhancing English ability. Also, this finding could boost Chinese students’ confidence if they consistently practiced so that they would gradually have courage to speak in front of the whole class and were not afraid of making mistakes. Looking back to students’ performance in the area of engagement which accounted for the greatest part among the four aspects, it could be concluded that students seemed to be participating in practicing English speaking, listening, reading and writing. It also implied that if the teacher applied the useful English learning approaches with students, they would be better in improving each English learning skill.

**Question No. 4**
How do you feel when you collaborate with your team members? Explain clearly with reasons.

Focusing on students’ feeling towards the collaboration with team members, both group shared the similar opinions on it. Twelve respondents (52.17%) reported that they enjoyed the group work that designed by the teacher. Also, they recognized that they shared creative ideas and took the mutual responsibility. When some low-proficiency learners had problems in dealing with issues, high-proficiency students would likely provide assistance, which subsequently cultivated team spirit and built friendship. Eight students (34.78%) declared that they showed a moderate level of satisfaction. The reason was that they seemed to enjoy the learning process of working together. Each member had an equal opportunity to give opinions and received feedback not only from peers, but from the teacher as well. Finally, only three students (13.04%) stated that they were not happy in engaging with group work because were shy of speaking and afraid of making mistakes in front of the group members. Figure 8 illustrated the percentage of students’ feeling of happy, moderate and unhappy as follows.

![Figure 8. Pre-ODI- Feelings towards Collaboration with Team Members](image)

**Question No. 5**
Describe how you would apply your learning strategies in the actual life and the reason for it.

Regarding the learning strategies used in students’ life, all respondents gave a variety of answers. Eleven students (47.83%) reported that they gradually have an ability of problem solving by cultivating the spirit of cooperation in the Comprehensive English class. In the past, most of them liked learning by themselves. When they entered the university and did the learning activities in the Comprehensive English classroom, they started to engage with the interactive group cooperation. Also, they began to communicate with others in English. In group work, it was a good opportunity and platform for respondents to cultivate the abilities of decision making and problem solving by themselves. A lot of them also illustrated that they were not shy as they used to be and their confidence had been higher, which would be beneficial for them in the future professional career. Furthermore, only five learners (21.7%) showed that the strategies they learnt were good for building friendship. They realized how to keep a good relationship with others in the future life and job. The remaining seven students (30.43%) believed that the English learning approaches could be applied in their Japanese learning, which made the learning atmosphere more flexible and helped them to overcome the shortcomings in the collaborative learning. Figure 9 describes each part of students’ views of using learning strategies in life.
Overall, the qualitative data was reported and analyzed in the focus groups, which demonstrated that students were happy with their learning and got the resourceful information from both peers’ and teachers’ before ODI.

4. Summary of Research Study

In this research study, a number of learning activities were also designed and applied during the learning process. At the pre-ODI phase, the data indicated that students in both groups were in similar situation. At the post-ODI stage, there were significant differences between and within groups in each variable besides the RO learning style. According to the paired sample t-test, the most significant difference was the AE (doing by learning style). Students with this learning style were found to have the ability to learn from the “hands-on” experience. They also enjoyed implementing plans and got themselves involved in new and challenging experiences. However, RO learning style was found to have no significant difference. Due to the time constraint, teachers needed to ask students to do learning activities with ODI during the one and half an hour; hence, students should have a reflection after class. Besides, students’ learning styles were slightly changed after ODI. RO became the least preferred learning style whereas AE learning style was found to have high impact of ODI.

Additionally, ODI had a huge influence on students’ performance at the post-ODI phase. The experimental groups’ performance significantly increased whereas the control group’s reduced. Among the four aspects of performance, students’ academics were found to be the most highlighted aspect. Meanwhile, engagement had the similar result with their academics, which accounted for 80.50%. It indicated that students had a high enthusiasm in participating ODI activities, setting goals, doing project work and trying out different approaches to finish a project. Their sense of responsibility and self-esteem were also increased. Overall, the data showed that students’ performance was improved and they can master themselves in learning and life.

According to the overall data as described, it can be concluded that students with ODI experienced an inside-out transformation of learning process. Their learning styles were changed and performance was enhanced in four aspects, which implied that students with different learning approaches would lead to different levels of performance. In this research study, it focused on student-centered learning approach; therefore, the teaching approach emphasized on how to improve students’ learning so that they could gain a deeper understanding and reflected on how they experience the learning. Student-centered learning required the role of students on their own learning process whereas the role of teachers were facilitating, stimulating and supportive. Student-centered learning with Kolb’s experiential learning cycle arose through a cooperative learning environment. It was not only about what they learn, but also about how they learn. They experienced a holistic learning approach to human adaption by the transformation of learning and social experience into solid and concrete knowledge.

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