

An Experimental Study of Teaching English Writing with OBE in Chinese Senior High School*

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Abstract—Writing is a distinctly important language output skill. Students can organize and process the learned language knowledge through writing to realize the re-creation of knowledge. Writing is the best performance of students' comprehensive use of language ability and it plays an essential role in language instruction. The Outcome-Based Education originated in the United States in the 20th century. It is represented by Spicer, based on the four basic principles of clear objectives, expanded opportunities, high expectations and reverse design. In order to solve the unfavorable tendency of the separation of learning and use in instruction in China, this study attempts to apply the instruction model based on OBE to a unit teaching referring to an eight-week experiment for eight teaching hours. The research subjects are senior students of two classes in Grade 2 of a middle school in Henan Province. After collecting data, the qualitative and quantitative analysis have been carried out with SPSS 17.0. Meanwhile, students and teachers are surveyed and interviewed before and after the experiment to show their psychological feedback and actual changes during the teaching experiment with OBE. Through research and experiments, the following findings are obtained: First, in view of current conditions of English writing instruction in Chinese high schools, the English writing instruction model with OBE can help students improve their abilities of language production. Second, compared with the traditional English writing teaching mode, it can stimulate students' interest in learning and applying language, and reduce their negative emotions such as anxiety, passiveness and helplessness.

Index Terms—outcome-based education, English writing teaching, senior high school, experimental study

I. INTRODUCTION

The Outcome-based Education (OBE) has gradually captured the attention of domestic researchers and educators after being certified by engineering in Europe and the United States. Exploring OBE's concepts and instruction methods can authentically and effectively improve the quality of classroom teaching. Regarding OBE, many scholars have systematically studied it in recent decades. For example, Linda A. Suskie conducted in-depth study of learning effectiveness of education in terms of preparatory work before learning effectiveness, selecting the conditions and requirements of assessment tools and assessment results of learning effectiveness; E. Grady Bogue and Kimberly B. H. conducted detailed analyses and research on the methods of assessing student learning effectiveness in Quality and Accountability in Higher Education; Banta TW.'s Assessing Student Achievement in General Education Assessment Update Collections focuses on the effectiveness of OBE in general education and professional education and analyses of how to perform the assessment was made.

In recent years, OBE has also attracted widespread attention from Chinese scholars: Cheng Tiantian (2016) analyzed the construction of the instruction guarantee system from the perspective of OBE. Through extensive investigation and summary, she understand the operation of the existing undergraduate instruction quality assurance system and the existing problems; Li Huiju and others (2016) studied the reform of the instruction mode of a professional course from the perspective of learning effectiveness education; Song Xiaozhong (2017) expounded the meaning of the OBE, analyzed the current situation of college oral English instruction in China, and focused on three aspects: increasing attention, strengthening educator construction, and changing traditional instruction methods; Zou Xingju (2017) took "Internet+" as the background, applied online and offline instruction strategies, and took the supervision of schools and departments as its guarantee system. With comprehensive assessment and diversified evaluation systems in various ways, the SC-OBE teaching model will be gradually implemented in business English teaching.

This research focuses on the application of OBE to the instruction design of high school English writing, and attempts to apply experimental teaching practices to experimental classes. At the same time, it collects, summarizes and

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analyzes students and teachers' feedback and suggestions in practical teaching about OBE. The significance of this research is mainly reflected in the two parts: philosophy and practice. As far as the philosophy is concerned, the research applies OBE to the veritable instruction environment through practice and continuously adjusts the instruction design of the preset mode, thereby enriching the philosophy and promoting it further.

II. LITERATURE REVIEW

A. Basic Principles of OBE

Spady & Marshall (1991) indicated that the basic principle of OBE is that all learners can succeed. The basic assumption is that all students are talented and excellent, and school is an institution that guides students to find ways to achieve results. Guided by this principle, Spady (1994) proposed the outcome-based education pyramid (The pyramid system of OBE, see Figure 1). The pyramid consists of one paradigm, two key purposes, three key premises, four operating principles, and five generic domains of practice. These factors work in concert to promote student learning success.

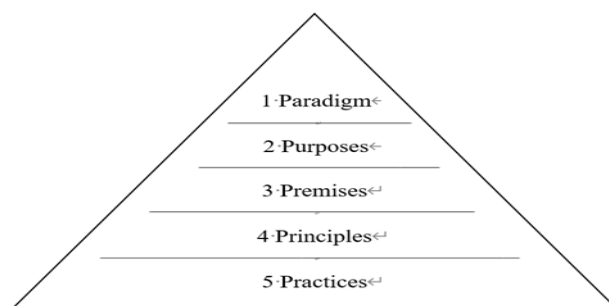


Figure I. THE PYRAMID OF OBE

The purpose of OBE is to establish a blueprint of results, create successful situations and opportunities, and reflect the philosophical thinking that all students can achieve success. The three premises of OBE are as follows: (1) All students can succeed, but not the same way of learning on the same day; (2) Successful learning experience helps further learning; (3) School-controlled learning conditions can directly affect students' successful learning. Four operating principles of OBE are: (1) clarify students' graduation achievements; (2) expand learning opportunities; (3) high expectations; (4) downward design. These four principles are at the core of OBE philosophy. These four principles are coordinated to help teachers and students succeed. It is worth noting that the continuous, systematic, creative, and simultaneous application of these four principles will directly improve the efficiency of the entire system. And the five generic domains of practice of OBE are listed below: (1) Define results: The implementation of education and instruction with OBE must definitively define the outcome, and include core results and specific results; (2) Curriculum design: OBE emphasizes that the curriculum should integrate achievement objectives, instruction activities, and evaluation, and emphasizes integration with life situations; (3) Instruction activities: What do students learn in instruction with OBE? What can students do? It focuses on ability development, encourage thinking, evaluation, and feedback; (4) Multi-evaluation: OBE emphasizes multi-evaluation, and the evaluation results emphasize the improvement of evaluation achievement standards, rather than the comparison of outcomes among students; (5) Decision process: OBE emphasizes that all students have access to successful opportunities for learning and teacher guidance, giving students the ability to set objectives in a number of stages to achieve success.

B. Previous Researches and Application of OBE in China

In recent years, Chinese scholars have paid more attention to OBE. For example, Shen Tianen & Steven Rock (2016) introduced the philosophy of OBE in detail which included the contents that it was originated from the concept of educational objectives, competency-based education, proficient education, standard reference evaluation and higher education input-process-output theory. And further enriched and perfected the outcome-based design proposed by Li Zhiyi in the field of engineering education, and designed a set of outcomes oriented instructional design concept consisting of three parts: instruction outcome circle, education quality inner circle and education quality outer circle. Gong Jianmin (2016) analyzed the quality of college graduates, proposed that the exertion of outcome-based education is an inevitable choice to improve the quality of highly effective personnel, analyzed the difficulty of implementation, and put forward a reasonable implementation strategy. He Jing, Kong Fanzheng and Wang Lin (2018) expounded the essence and significance of the philosophy and characterized this philosophy based on the perspective of scientific practice results and made some more scientific, reasonable and effective contributions to the implementation of OBE. Song Xiaozhong (2017) expounded the meaning of the OBE, analyzed the current situation of college oral English instruction in China, and focused on three aspects: increasing attention, strengthening educator construction, and changing traditional instruction methods. It put forward effective measures of college English teaching mode based on OBE. Zou Xingju (2017) took "Internet+" as the background, applies online and offline instruction strategies, and takes

the supervision of schools and departments as its guarantee system. With comprehensive assessment and diversified evaluation systems in various ways, the SC-OBE teaching model will be gradually implemented in business English teaching, in order to eventually cultivate compound foreign language talents with English and proficient business skills.

In general, although the researches on the concept and practice of OBE started later than western countries, it has broadened the perspective and scope of research. Dialectically analyzing the basic concepts of western reign countries and combining with domestic actual conditions, the forms are also diverse, which is very inspirational for future research.

III. INSTRUCTION MODEL DESIGN

A. Key Elements of OBE Instruction Model

In the philosophy of OBE, the curriculum instruction model is centered on students' intended learning outcomes. Chandrama Acharya (2003) summarized the basic framework of the implementation of the OBE instruction model into four key essentials: Defining, Realizing, Assessing and Using.

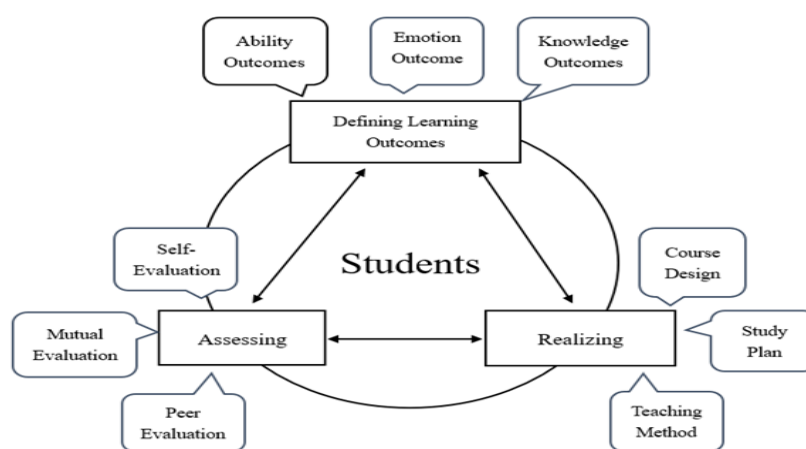


Figure II. The OBE Application Cycle

Under the OBE, the curriculum instruction model is centered on students' intended learning outcomes, so that the instruction emphasizes the transformation of educational philosophy and students' learning-oriented instead of teaching-oriented. At the same time, the teaching objectives are transformed into the learning outcomes that students should achieve, consequently students' learning creativity and internal motivation will be inspired. The educator's focus is to be a qualified navigator, and to elaborately construct each instruction process according to the learning outcomes to help students acquire veritable abilities. According to the four steps of Acharya's implementation of the basic framework of the instruction model with the OBE, the construction of this instruction model should contain the following elements: define students' outcomes, design instruction activities, develop evaluation methods and form an application cycle.

B. Define Students' Outcomes

In the hypothesis of the OBE, output learning outcomes will serve as the driving force and objective of language learning. Compared with input learning, English learning through output can guide students to improve understanding and produce learning outcomes and emphasizes the output function, such as enhancing efficiency, attention, hypothesis testing, and metalanguage. In the OBE, the function of the instruction subject is to replace the educator's "one-way output" with "learning for the practice," and transforming the instruction objectives to learning outcomes that students should achieve, so that students' creativity and internal motivation are inspired. The setting of the students' intended learning outcomes is related to the choice of course content and teaching strategies, the positioning of teacher and student roles, the choice of teaching activities and the formation of evaluation. According to the OBE, combined with the core competence of English discipline, this study divides the indented learning outcomes of high school English writing courses into the following points.

TABLE I.
THE INTENDED OUTCOME FOR HIGH SCHOOL ENGLISH WRITING COURSES

	Ability to use complex grammar and vocabulary correctly
Linguistic Competence	The content of the article is closely related to the main points, the logic is smooth, and the framework is complete. Effective use of linking components between sentences Able to express views accurately and smoothly Innovative and practical
Thinking Qualities	Desire and ability for lifelong learning Thinking is logical, critical, innovative and original Ability to use English for multiple thinking
Cultural Awareness	Humanistic and concerned about human survival and development Positive psychological qualities, self-confidence and optimism Able to understand the cultural connotation of each country Awareness and ability to communicate across cultures
Learning Ability	Independently acquire, collect, process and use information Autonomous learning, cooperative learning, inquiry learning Ability to reflect and continuously improve Proficiency in learning strategies such as metacognitive strategies, cognitive strategies, and resource management

C. Design of Instruction Process

(1) Clear outcomes and guidance: Before teaching a new lesson, the teacher guides students determine the level of knowledge and ability to be used after the lesson, decomposes the intended results outcomes one by one, designs the introduction content before the lesson, connects the intended results outcomes with the lesson content, and organizes students to complete the previous autonomous learning. Teachers collect materials and organize, and in accordance with the specific content of the teaching implementation, to develop a study guide for students in advance, to provide students with the necessary conditions for self-study.

(2) Autonomous learning and communication: Students' self-directed learning and group collaboration can prompt students to supervise, guide and correct each other, and promote progress together. Therefore, according to the requirements of the intended outcomes and the guidance study-plan, in the process of autonomous learning and practice, students discuss and give feedback to the group members in a timely manner, analyze the problems and difficulties, and then summarize the questions raised, share and discuss among groups.

(3) Autonomous output and application: According to the initial self-study results, students write and conduct self-evaluation and mutual evaluation of the first draft against the expected outcomes, and evaluate and improve in the first round. Then, students discuss and sort out the existing problems that cannot be solved, and summarize them in a group.

(4) Troubleshooting and raise expectations: The teacher answers the questions that the student encounters, and then the teacher extends the learning and explains the problems. Teachers set challenging requirements that can motivate students for deeper learning, because high expectation is one of the principles of the OBE. In contrast to the intended outcomes, the teacher uses a more consistent writing product as a reference, and gives students the opportunity to use the previously learned problem solving methods for secondary improvement and modification.

(5) Evaluation and promotion: The teacher collects, reviews, and analyzes the outcomes that the students have perfected for the second time, points out and corrects the problems existing in the students' response. And the teacher gives directional guidance and specific operation plans for the next improvement of the students.

D. Develop Teaching Evaluation

The design of teaching evaluation should adopt multiple evaluation system, and students' assessment outcomes should be grasped from multiple perspectives, such as students' ability of self-learning, finding and solving problems, innovation, teamwork, and evaluation of output, etc., test and evaluate students' learning outcomes from multi-dimensional angles. Therefore, teachers should formulate and improve the evaluation system with OBE, and comprehensively evaluate the comprehensive quality and practical ability of students. The teacher should formulate comprehensive and detailed assessment rules that can measure students' substantive and conceptual knowledge and ability to apply. The performance of the students is divided into different dimensions and different levels, and the descriptive language of each dimension and level must be clear, specific and measurable. The teacher should develop and firmly implement evaluation standards to assess students' ability levels as comprehensively and accurately as possible. This is both an assessment of student abilities and an evaluation of the teacher's phased teaching effect.

E. Form an Application Cycle

Refer to the basic framework for integrating the instruction model of OBE implemented by Chandrama Acharya (2003): Defining, Realizing, Assessing and Using and CDIO model: Conceive, Design, Implement and Operate for instruction model design. The application part has two kinds of connotations at the same time, on the one hand, the students actually apply what they have learned to real life, and let the students use what they have learned to solve some

practical problems; on the other hand, educators and institutions use the evaluation results of students' intended outcomes, and appropriately adjust and improve curriculum settings and instruction strategies based on feedback from the evaluation results to form a continuous optimization and perfect application model cycle.

IV. RESEARCH DESIGN

A. *Research Objects*

The research objects of this study are 134 students from a middle school in Henan Province. The two classes are as the control class and the experimental class and use the traditional English writing instruction mode and the instruction mode under the OBE respectively to teach.

B. *Research Instruments*

In this thesis, three research instruments are included. They are questionnaire, interview and test.

(1) Questionnaire

The Senior High School English Writing Survey Questionnaire's structure, questions and answers of this research is mainly guided by Professor Chen Jianlin of Shanghai International Studies University. The questionnaire consists of a total of 12 questions, which are divided into three main dimensions.

(2) Interview

In order to avoid the adverse effects of subjective impressions on the research results and to make up for the limitations of the questionnaire survey, during the research process, the researcher selected some students and their teacher in two classes to conduct interviews. The intention is to understand more clearly the status of teaching and the demands of teachers and students.

(3) Pre-test and Post-test

In order to comprehend the changes in students' writing abilities after teachers used the writing instruction mode with OBE, two writing tests were performed during the experiment, which were pre-writing tests and post-tests at the end of the experiment. The researcher calculated and counted students' writing scores as experimental data. They mainly divide the total score of 25 into five levels based on grammar and vocabulary application, content, and structure of the composition.

C. *Research Procedures*

The first stage of experiment is to make some preparation. The researcher consulted an amount of literature of the OBE and its development proposed by Spady W.D, and combed the research and application of the philosophy at home and abroad. Through researching the literature, we can comprehend the research development and current situation, clarify the research content and research ideas, and provide the theoretical basis for exploration research. It lays the foundation for the construction of a conceptual framework and the follow-up high school English writing instruction model, and proposes feasible solutions and suggestions for this research.

The second stage is the implementation of OBE. Before the experiment, a self-made questionnaire was used to survey 134 students. The first questionnaire survey can acquire the current situation of English writing instruction, select statistics and analyze of the survey results, and find out the main problems. At the same time, five students from the experimental class and the control class were randomly selected and their English teachers were interviewed. The researcher first acquired the demands and acceptance of English writing instruction from the perspective of students, then comprehended the difficulties and problems encountered in English writing teaching from the perspective of educators, and analyzed the causes of these issues. In addition, the researcher observed the educator's instruction situation and students' learning situation and made detailed records throughout the entire process of English writing teaching of OBE. It assists the conclusion and cause analysis of the questionnaire results, and provides an intuitive reference for formative evaluation.

After the experiment, all the students of two classes are tested and the data are collected as the post-test results. Teachers focus more on the vocabulary, language use, organization, content and mechanics. Subsequently, the researcher conducted a questionnaire survey again after the experiment. Finally, the results are compared and analyzed to verify the effectiveness of the OBE in guiding high school English writing teaching and to try to construct a new writing instruction model.

V. RESULTS AND DISCUSSIONS

A. *Results of Questions*

134 questionnaires of each pre-survey and pro-survey were issued and recovered.

(1) Pre-survey

In September 2019, in order to know more about current conditions of English writing learning of high school students, the researcher conducted a questionnaire survey on a total of 134 students as a research sample. Because the results of the control class and the experimental class are deeply uniform, they are comprehensively analyzed. The questionnaire is divided into three parts, which are designed for "student's writing attitude", "student's evaluation of

current English writing lessons” and “student writing skills application and self-evaluation”. Specific survey results are as follows:

1) Student’s Writing Attitude

TABLE II.
QUESTIONNAIRE ON ENGLISH WRITING IN HIGH SCHOOL

	A completely consistent	B basically consistent	C not sure	D seldom consistent	E completely not
1. I enjoy English writing courses and the writing process.	8%	12%	20%	34%	26%
2.I have difficulty in English writing and I am dissatisfied with the outcomes.	36%	42%	12%	6%	4%

The first dimension is “student’s writing attitude”, which includes two small questions, Questions 1 and 2. Through the analyses of the survey data, it can be seen that: the results of the first question reflect most students are lack of enthusiasm, indifferent, and have negative feelings towards English writing; the answers to the second question fully show that most students think English writing is difficult. This set of data shows that most students face varying degrees of fear when writing, and therefore lack confidence and motivation in English writing.

2) Student’s Evaluation of Current English Writing Lessons

TABLE III.
QUESTIONNAIRE ON ENGLISH WRITING IN HIGH SCHOOL

	A completely consistent	B basically consistent	C not sure	D seldom consistent	E completely not
3.I think there are currently less writing arrangements in English courses.	44%	30%	20%	4%	2%
4.I hope to get more guidance and help from my teacher in English writing.	38%	36%	22%	4%	0%
5.I think the current mode of English teaching can stimulate my interest in English writing.	2%	8%	18%	46%	26%
6.The teacher has taught me specific knowledge about English writing framework, content and language use.	6%	14%	42%	22%	16%
7.The teacher’s correction of my English composition can help me a lot.	12%	16%	34%	20%	18%

The second dimension is the “student’s evaluation of the current high school English writing class”, which includes Q3 to Q7. The description and analyses of the survey results are as follows: In question 3, the answers objectively reflect problems such as insufficient time scheduling for writing instruction and inadequate attention to writing tasks. A total of 74% of students in the Choice A and Choice B to Question 4 are desperate to be instructed by teachers in English writing, and 22% of students expressed uncertainty about the current demand for teacher guidance. Only 10% of the students in the result of Question 5 gave affirmative answers, which is enough to prove that the current teaching mode of writing fails to stimulate students’ writing interest. Question 6 shows that 42% of students are confused about whether the teacher taught the basic contents and methods of English writing in detail, while 38% of students hold a negative answer. This shows that the current teaching of writing in high school English courses is obviously insufficient. As the choice of Question 7 indicates, students have a more even distribution of positive and negative attitudes towards teacher evaluation and composition review. However, it is worth noting that more than 60% of the students still expressed uncertainty and negative attitude towards using the current composition grade pattern to improve English writing.

3) Student Writing Skills Application and Self-evaluation

TABLE IV.
QUESTIONNAIRE ON ENGLISH WRITING IN HIGH SCHOOL

	A completely consistent	B basically consistent	C not sure	D seldom consistent	E completely not
8.When writing, I am able to use newly learned words, sentence patterns and grammars.	8%	16%	22%	32%	22%
9.While writing, I was able to smoothly and independently collect materials and build frameworks.	6%	12%	22%	38%	22%
10.I think I have a insufficient ability to use English language and cannot express my ideas accurately.	46%	28%	12%	8%	6%
11.I am familiar with how to accumulate English writing materials and skills.	4%	8%	18%	44%	26%
12.I think I have difficulty in writing composition for constructing framework and content compilation.	28%	34%	16%	12%	10%

Through Question 8, it can be seen that about 24% of the students are able to contact and use new vocabulary, sentence patterns and grammar in their own writing process, while 76% do not use and are uncertain. Moreover, most students fail to translate the newly acquired knowledge into the output of language use. The data of Choice A and Choice B of Question 9 are 6% and 12% respectively, which means that only 18% of the students can independently complete the pre-writing preparation activities such as material collection, preparation, and frame construction before writing. In Question 10, Choice A is 42% and Choice B is 28%. A total of 70% of students clearly believe that their English language ability is insufficient, which affects the expression of their own ideas, resulting in unsatisfactory outcomes. From the Question 11, it can be seen that only 12% of students are familiar with the daily accumulation of writing materials and the skills needed in English writing. Question 12 reflects that 62% of students lack textual knowledge and scarcely know how to organize the structure. The statistics explicitly suggests that students are lack of the ability in creating and researching contents.

(2) Pro-survey

At the end of the first round of questionnaire survey, the researcher carried out eight implementations of the teaching mode of English writing based on the OBE for the experimental class. However, an open question was added to the experimental class, that is, "Would the new writing instruction model help you, and if so, in which aspect?" After the completion of the course, the researcher conducted a questionnaire survey again to the students of the two classes, distributed 134 questionnaires, and recovered all copies. The statistical records are summarized as follows:

1) Student's Writing Attitude

Comprehensive analyses of the data results of the two questionnaires are as follows: A large proportion of students in the experimental class had a new understanding of writing, which inspired their writing expectations, made they pay attention to writing tasks, and made they have a certain degree of confidence in their own outcomes. The reason lies in the influence of the teaching principles and practical emphasis of the OBE. On the one hand, the setting of the intended outcomes in this philosophy is the key to determining the teaching and learning effects of a writing course. The ultimate objective of instruction is to help students acquire the ability that can ultimately be used in practice. It advocates decomposing a large task into several operational subtasks which can be completed step by step. The reduction in task difficulty helps students overcome psychological anxiety to some extent. On the other hand, the OBE advocates that educators help students take an active part in the lesson. Teachers can provide inspiration and scaffolding to students in the writing instruction. The teaching mode with OBE highlights the subjective status of students in the curriculum, and empowers students to find their own learning approaches and learning rhythms for their own situations.

2) Students' Evaluation of Current English Writing Lessons

TABLE V.
QUESTIONNAIRE ON ENGLISH WRITING IN HIGH SCHOOL-THE CONTROL CLASS

	A completely consistent	B basically consistent	C not sure	D seldom consistent	E completely not
3.I think there are currently less writing arrangements in English courses.	42%	32%	16%	6%	4%
4.I hope to get more guidance and help from my teacher in English writing.	38%	36%	22%	4%	0%
5.I think the current mode of English teaching can stimulate my interest in English writing.	2%	6%	20%	44%	28%
6.The teacher has taught me specific knowledge about English writing framework, content and language use.	6%	16%	46%	20%	12%
7.The teacher's correction of my English composition can help me a lot.	14%	16%	32%	20%	18%

From the perspective of students' demands, we analyze students' evaluation of writing lessons. Based on the classroom observations and comprehensive analyses of the Question 4 and Question 7 of the two survey data, the researcher believes that most students want guidance and help from teachers and teachers' evaluation of outcomes and can actively participate in the instruction of English writing with OBE. The reason is that in the process of implementing this mode, teachers can understand the students' demands in advance, and help students to divide the intended outcomes. From the perspective of teacher-student relationship, students feel that teachers' attention and care, then students will tend to actively cooperate with teachers in teaching work. From the perspective of humanism, the harmonious teacher-student relationship will inevitably promote effective teaching.

3) Students' Self-evaluation in the Writing Process

According to Question 8, the proportion of students who can use new vocabulary in writing is 52%, which is higher than the pre-survey data 28% and higher than the control class's 24%. It can be seen that apart from the pre-writing input materials provided by the teachers, students would like to link and apply the newly learned vocabulary to writing, and can choose the content of similar teaching materials when writing. Question 9: Based on the survey results and classroom records, it is clear that with the OBE's instruction mode, students are more explicit and pay attention to the use of writing skills. It is embodied in students' selective practice during writing, recognizing new words and complex sentence patterns and grammar through writing, and in enhancing their memory and proficiency in using words and

grammar. From the perspective of students' learning effects, the proportion of students who think that their language application ability is incompetent in Question 10 accounts for 32%. And they also believe that incompetent language application ability affects their accurate expression of ideas. It can be seen that the English writing instruction with OBE can help students expand the vocabulary reserve and application ability to varying degrees. In Question 11, the data clearly show that the English writing instruction mode with OBE can lead students to strengthen the learning and accumulation of language materials and can also promote writing, form a virtuous circle of knowledge input and output. For the Question 12, the data reflects that after this stage of practice, about 48% of students have basically eliminated most of the confusion in English writing. By analyzing the data of the last three questions, the obvious data changes in the experimental class fully demonstrate that the English writing instruction mode with OBE can effectively help students to improve significantly in terms of material accumulation, framework construction and content writing. At the same time, students' self-evaluation ability has also been improved, they can clearly understand their strengths and weaknesses, and can dynamically monitor and evaluate the changes in their own development.

For the open question in the second round of questionnaire "would the new writing instruction mode help you, and if so, in which aspect?", all 65 students in the experimental class expressed their thoughts. About 48% of the students think that the most helpful aspect is that they have sorted out the learning approaches of English writing, especially the acquisition and accumulation of language materials. About 22% of the students affirmed the positive impact of the OBE's instruction mode on their language use, including emotional attitudes and skills improvement. Meanwhile, two thirds of students mentioned that this mode can help them reduce writing anxiety and increase writing confidence.

B. Results of Test

This research test includes pre-test and post-test. 65 students in the experimental class and 69 students in the control class all participated in the two tests. The composition of the pre-test is selected from the college entrance examination English writing simulation task related to the current semester teaching contents. The topic is "assuming you are Li Hua, who studies in an international middle school and you decide to participate in the presidential election of the Student Union. Please prepare a speech, about 100 words". The scores are strictly in accordance with the English composition grading standards for the college entrance examination. They are mainly divided into five levels for grammar and vocabulary use, content and article structure, with a total of 25 points.

(1) Paired Sample T Tests

In order to investigate the changes in the performance of the experimental class and the control class in the context of their own instruction mode, the researcher used paired sample T test to compare students' writings before and after the experiment to confirm which teaching method is more helpful for students in English writing instruction.

TABLE VI.
PAIRED SAMPLES TEST OF CONTROL CLASS

Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig.
			Lower	Upper			
-.10145	.45842	.05519	-.21157	.00867	-1.838	68	.070

a. Group = CC

The table above is about the paired sample T test results of the control class in the pre and pro tests. As shown in the results, the overall average score of the control class after the eight times' teaching experiment in the pre-test improved by 0.10145 points, correspondence significance $P = 0.070 (> 0.05)$ and $T = 1.838$. The data show that after eight times of the teaching process of "assigning composition-grating score-simple comments" in the traditional English writing teaching mode, the control class did not significantly improve in grades. It is also worth noting that the standard deviation of the pre-test data of the control class is 1.969691, which is almost the same as the post-test result of 1.93994, indicating that the traditional instruction mode is not helpful in reducing the difference in student performance.

TABLE VII.
PAIRED SAMPLES TEST OF EXPERIMENTAL CLASS

Pair	Pre-test - Post-test	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig.
					Lower	Upper			
1		-2.56923	1.90369	.23612	-3.04094	-2.09752	-10.881	64	.000

a. Group = EC

According to the data, after the eight times' teaching experiment of the English writing instruction mode with OBE, the overall average score of the experimental class improved by 2.56923 points, correspondence significance $P = 0.000 (< 0.05)$ and $T = 10.881$, it shows that the experimental class improved significantly. At the same time, the researcher found that the standard deviation of the student's performance during the pre-test was 2.48476, and this digit is reduced to 1.78428 of the post-test, which indicates that while the overall performance of the students' composition improved, the instruction mode with OBE can help students with more incompetent levels better.

(2) Independent Sample T Test

The following is a test of the difference in results between the control and experimental classes before the experiment. It shows that before the experiment of the instruction mode design in the two classes, the overall average level of the students is almost the same. It complies with the principle of statistical sampling and can be used as a reasonable sample for this experiment.

TABLE VIII.
INDEPENDENT SAMPLE T TEST OF PRE-TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means			95% Confidence Interval of the Difference			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pre-test	Equal variances assumed	3.673	.057	.243	132	.808	.09454	.38835	-.67365	.86272
	Equal variances not assumed			.242	122.790	.809	.09454	.39087	-.67917	.86825

The following is a test of the difference in results between the control class and the experimental class after the experiment. As can be seen from the following table's results, there is a significant difference between the two classes in the overall average score of the students in the post-test ($t = 7.308$, $P < 0.05$), indicating that the results of the two classes have been significantly different after the experiment. The post-test score of the experimental class (18.9385) is significantly higher than that of the control class (16.5652). At the same time, the researcher find that after teaching experiment, the standard deviation of student performance in the experimental class (1.78428) is lower than that in the control class (1.97394). It can be shown that compared with the traditional English writing instruction mode, the instruction mode with OBE can better help the class reduce the difference in students' grades.

TABLE IX.
INDEPENDENT SAMPLE T TEST OF PRO-TEST

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Post-test	Equal variances assumed	2.798	.097	-7.286	132	.000	-2.37324	.32571	-3.01754	-1.72895
	Equal variances not assumed			-7.308	131.781	.000	-2.37324	.32473	-3.01560	-1.73089

From the comprehensive analyses of the pre-test and post-test data of the experimental and control classes, the researcher mainly found that the effect of the teaching experiment with OBE is most obvious in the second grade (16-20 points) and the third grade (11-15 points). The experimental class had a total of 35 students in the second grade before the teaching experiment, and the number increased to 52 after the experiment. A total of 24 students received the third grade, which sharply decreased to 5 after the experiment. The data can clearly prove that in the instruction of English writing with OBE, the number of students who converted from low scores to high scores increased significantly.

In summary, after two writing tests (i.e. pre-test and post-test), a comparative analysis of each group of data and a comparison of the averages of the whole class, we can see that the teaching mode with OBE of the English writing course for senior high schools can help students better absorb and produce second language knowledge, and the writing quality of all students in the experimental class was improved to varying degrees. Since most of students in current day-to-day learning are in a non-linguistic environment, this mode is driven by the intended outcomes and can help students actively input a large number of language materials, including vocabulary, grammar and reading materials. In this way, to a certain extent, students' language sense is enhanced, the negative transfer of students' mother tongue is overcome, and the frequency of students' Chinglish expressions is reduced.

C. Results of Interview

Before and after the experiment, the researcher interviewed the teacher of the experimental and control classes. Before the experiment, the teacher focused on vocabulary, grammar and reading instruction. In order to complete the teaching schedule, they had to drastically reduce the time for writing teaching. Generally speaking, after completing the teaching contents of each unit, the writing part is left to the students for homework. However, in the process of grading the compositions, the teacher found that most students did not take it seriously, and they wrote the compositions just to complete the homework. In addition, teacher's evaluations of students' compositions are often not timely, and most of the evaluations are mostly rough comments or simple scoring, and the students' writing levels have not improved. After trying to understand the OBE, the teacher combined his own teaching experience and several senior English teachers discussed and analyzed the current conditions of instruction and the operating steps of the philosophy.

After eight times of experiments of the English writing instruction mode with OBE, educators clearly stated in interview that this model can help teachers and students balance time and efforts in vocabulary, reading and writing. It can greatly improve students' passive acceptance of teachers' knowledge points and skills teaching in traditional teaching model. Teachers fully affirmed the OBE's instruction mode in terms of intended outcomes setting, student interaction activities, and teachers' construction of supports. In the teaching procedure with OBE, students were encouraged to participate in designing and teaching activities to gradually achieve productive tasks, which reflects the difference from the traditional instruction model. The teacher could obviously feel that the vocabulary of most students is rising rapidly. And students have courage to try instead of feeling resisted and fear. Students' attitude has transformed from perfunctory to serious and positive while they are writing. In the process of reviewing students' compositions, the teacher found that students made significant progress in the use of new words and grammar, frame construction and contents.

VI. CONCLUSION

A. *Research Findings*

This research is the initial application of the OBE in senior high school. From the feedback from the three perspectives, namely observers, students and practical teachers, it is confirmed that compared with traditional instruction model, OBE has its distinct characteristics and effects. The following are my findings as far as the results and discussion of the study are concerned.

(1) Clarity and specificity of the intended learning outcomes

The clarity of the intended outcomes forms the basis of the OBE, avoiding the helplessness and distraction of students in learning and performing tasks due to the ambiguity of the targets. The clarity of the intended outcomes helps to achieve its guidance, instruction and review functions. Thereby clear and specific expectations help students to promote the acquisition, maintenance and application of knowledge and skills, at the same time, it also helps teachers to reasonably choose teaching methods and students to choose learning approaches.

(2) Diversity and Facilitation of Evaluation

The OBE adheres to the principle of "downward planning and upward implementation". Evaluation and assessment not only have the functions of detection and screening, but also have the functions of guidance and promotion. After the teacher and course designers evaluate the students' achievements, they can adjust and improve the curriculum settings and instruction strategies appropriately according to the feedback of the evaluation outcomes. At the same time, students adjust their learning strategies and directions according to the results of evaluations and assessments, and evaluation and assessment can guide students toward the intended outcomes. In the OBE, evaluation is not a staged end of teaching and learning, but one of gradual stimulus and correction approach, thereby it helps students to develop a virtuous circle of continuous improvement of students' ability.

(3) Authenticity and Effectiveness of Capacity Improvement

Spady W. D's research results show that after completing the learning tasks, the knowledge and skills learned by students should be able to solve problems in real life, otherwise, learning is meaningless. The OBE horizontally decomposes the intended outcomes into core competence goals, and then decomposes them into specific competence goals. Around the specific competence goals, the course contents are selected and organized, replacing the traditional subject-based curriculum design thought that only systematically links subject knowledge. Compared with traditional instruction mode, this model can really help students to gain their abilities more effectively.

B. *Advantages of the Application of OBE to High School English Writing Teaching*

Firstly, the OBE adheres to the student-centered concept, and focuses on cultivating students' practical application and comprehensive development capabilities. The teaching objectives, teaching contents, teaching procedures, teaching methods and strategies are all set to meet the real needs of students in future society and life. In the teaching procedure with OBE, educators not only pay attention to students' scores, but also focus on training students' other skills such as listening, speaking and reading, as well as the ability to use English for communication in real life. No matter in class or extra-curricular activities, students have more opportunities to learn and practice and master the corresponding abilities.

Secondly, the teaching objectives with OBE are clear and specific, which are helpful for teachers and students to actually implement and achieve them efficiently. The teacher's priority is to help students establish a series of the intended outcomes, to determine the objectives and abilities that students will achieve after learning. Each step has a clear objective, which virtually strengthens the sense of goal of teaching and helps improve the teaching efficiency of educators.

Thirdly, this philosophy has no absolute rules for teachers' teaching contents, teaching methods and strategies, and students' learning approaches. Educators can help and guide students to make full use of all resources to select, supplement and integrate teaching contents according to the intended outcomes. This is conducive to the exchanges and integration of inter-disciplinary and intra-disciplinary contents, and it is more conducive to the students' integration, understanding and control of knowledge. Flexible teaching concept also help teachers emancipate their minds, give full play to their vitality and creativity, make teaching activities lively, and further improve teaching and learning efficiency.

Finally, the assessment with OBE is more explicit, specific, and effective, which helps educators and students to

understand the actual situation of teaching and learning more clearly. Evaluation with OBE focuses on the evaluation of student abilities, encourages teachers to create a variety of evaluation methods and opportunities for students, and gradually guides students to achieve the intended outcomes. For students, self-evaluation in the class, mutual evaluation of students, and formative evaluation of the lesson can help them conduct self-examination in a timely manner, so as to timely make up for their weaknesses.

REFERENCES

- [1] Acharya, C. (2003). A new paradigm for learning. Centre for Development of Teaching and Learning. *Outcome-based education (OBE)*, 7, 7-9.
- [2] Bogue, Grady. (2012). Business, political & academic perspectives on higher education accountability policy. *College & University*, 87, 14-23.
- [3] Chen Ruixian. (2016). Research on Middle School English Classroom Teaching Model and Strategies on OBE. *English teacher*, 4, 31-33.
- [4] Cheng Tiantian. (2016). Investigation and Research on Teaching Quality Assurance System Based on OBE. *Modern SOE Research*, 22, 72.
- [5] Gong Jianmin. (2016). The Cause and Implementation Strategy of Outcome Based Education. *Journal of National Academy of Education Administration*, 6, 48-53.
- [6] Harden, R. M. (2002). Developments in outcome-based education. *Medical teacher*, 24, 117-120.
- [7] Kennedy, K. J. (2011). Conceptualizing quality improvement in higher education: policy, theory and practice for outcomes-based learning in Hong Kong. *Journal of Higher Education Policy and Management*. 33, 205-218.
- [8] Karim, N. A. H. A. and Yin, K. Y. (2013). Outcome-based education: an approach for teaching and learning development. *Journal of Research. Policy & Practice of Teachers & Teacher Education (JRPPTTE)*, 3, 26-35.
- [9] Li Huiju. (2016). Research on the Reform of College English Teaching Mode Based on the Combination of OBE Concept and Flipped Classroom. *Journal of Changchun Institute of Technology (Social Sciences Edition)*, 4, 132-135.
- [10] Suskie, L. (2007). Assessing Student Learning: A Common Sense Guide. *Teaching Theology and Religion*, 10, 114-115.
- [11] Sun Aijing, Wang Chunjuan and Ji Liping. (2017). Exploration and Practice of Evaluation on Teaching Quality Which is Based on OBE. *China Modern Educational Equipment*, 11, 49-52.
- [12] Shen Tian'en and Shen Liran. (2018). Definition, Measurement and Evaluation of Learning Outcome on OBE: Exploration and Practice in America. *Higher Education Exploration*, 12, 49-54+85.
- [13] Su Peng and Li Manli. (2018). The Construction Curriculum and Teaching General Education in Tsinghua Case: An Approach of Outcome Based Education. *Research in Higher Education of Engineering*, 2, 129-135.
- [14] Spady, W. G. and Marshall, K. J. (1991). Beyond Traditional Outcome-Based Education. *Educational leadership*, 49, 67-72.
- [15] Spady, W. G. (1988). Organizing for results: The basis of authentic restructuring and reform. *Educational leadership*, 46, 4-8.
- [16] Song Xiaozhong. (2017). Research on teaching model of college oral English based on the OBE concept. *Journal of Heihe University*, 8, 135-136.
- [17] Tucker, J. A. (1998). The Ideology of Outcome-based Education an Interview with William Spady. *Journal of Research on Christian Education*, 7, 5-18.
- [18] Trudy W. Banta. (2007). Assessing student achievement in general education: assessment update collections. New Jersey: John Wiley & Sons Inc.
- [19] Zhong Fangfang. (2018). Reform of the writing assessment method for English majors based on OBE. *Survey of Education*, 9, 110-113.
- [20] Zou Xingju. (2017). The Construction of the SC-OBE Teaching Model in Business English Practical Teaching. *Journal of Chengdu Normal University*, 11, 77-81.
- [21] Zhang Yue. (2019). Study on English Course Teaching Mode Based on OBE Education Concept. *Journal of Heilongjiang Institute of Teacher Development*, 1, 136-138.

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