The Application of Mirror-image Approach in Language Teaching

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Abstract—**Mirror-image language learning approach offers a vivid drilling for students to practice by themselves after class and valid language input for students to learn more by themselves. The approach follows the four steps. Firstly, teachers audio tape students' spoken English in class, individual or paired. That may include student's question-answering, conversations and discussions. Secondly, teachers listen to them carefully and mark those mistakes and mispronunciations. Thirdly, teachers send those audio materials back to the students involved and ask the students to listen to them carefully and correct mistakes, try to avoid them and improve fluency. Last, teachers select the audio materials of high quality to send them to students in class and ask the students to learn. The advantages of the approach are self-evident. Students can get to know exactly their mistakes and correct them. Data shows it is more effective than teacher's correction in face. At the same time, students are quite interested to listen to such listening materials since they are produced either by themselves or by their friends. At last, the approach offers teachers an effective way to supervise students' learning after class.**

Index Terms—**Language learning, mirror-image approach.**

I. INTRODUCTION

How can the two-hour class efficiently be extended into the after-class hours? Teachers have spent efforts on improving the self-learning efficiency after class, the effect is not satisfying. This is mainly because students are lack of supervision and motivation as well as diversified study methods for self-learning after class. To solve it, we not only have to investigate the special characteristics of our students, according to which a more suitable teaching method is designed, but also have to ensure the feasibility of the method to guarantee that students can and will do it after class by themselves. Hence, "mirror-image language learning approach" is developed for oral-English learning and teaching to build a personalized studying platform for students.

II. BRIEF INTRODUCTION TO MIRROR-IMAGE LANGUAGE LEARNING METHOD N

This process is defined as "mirror-image language learning approach" in that we collect students English-speaking recordings to provide a mirror, through which students' self-correction, self-regulation and self-evaluation have been realized. The mirror provides not only the full view of one's own English speaking skills, but also the image of proficient speakers' oral English recording for appreciation and imitation.

This process has increased students' interest and motivation in autonomous study and provided those with materials of autonomous study, namely providing each of them with one mirror which they can either look at themselves in it or appreciate other's images in the mirror. Looking at themselves in the mirror helps students to find their mistakes and correct them and meanwhile enhance confidence by comparing and discovering their progress made by unremitting efforts. Appreciating others' English speaking recordings helps both laggard students find suitable model to imitate and the excellent progress. It is a means for students to practice based on a better knowledge fo themselves.

As we can see, this method builds a personalized study approach for students on the basis of computer and network technologies. Students can make correction on their own through such a mirror which offers materials and methods for autonomous English learning process. Students scarcely practice oral English after class and their practice of listening comprehension lacks efficiency for being short of motivation and regulatory system. Through this method, their interest in listening to English can be enhanced by listening to the audio tapes of their own or their students and teachers. Besides, they can compare and learn from others' speaking. Therefore, "mirror-image language learning approach" has enriched the autonomous learning.

III. THEORETICAL APPLICATIONS

A. The Application of the Self-efficacy Theory

"Mirror-image learning" , was initially put forward by Professor Yang Yonglin from Foreign Language Department in Tsinghua University as a teaching model of writing [1].

Self-efficacy theory is the kernel of the motivation theory which is put forward by Albert Bandura in his social learning theory research. It has been defined as the belief that one is capable of performing in a certain manner to attain a certain set of goals [2]. Studies show that self-efficacy influences students' study behaviors in multiple dimensions. First it influences students' choice of behavior, the effort they make and their perseverance in the face of difficulties. Strengthening students' self-efficacy has been one of effective measures for the current teaching reform. A new measure for improving oral English self-efficacy has been

produced in the practice, namely the "mirror-image learning" which is conducted through recordings of students' speeches in class. The approach is designed to widen students' channels of obtaining knowledge and information, develop their participating consciousness and perseverant learning habit, and inspire their spirit of exploration, innovation and independence, so as to improve their ability of oral expression, intensify their interest in English study, build their confidence and continuously enhance their oral-English self-efficacy.

Self-efficacy, as an active judgment of one's ability and self-awareness, comes from the experience or information generated by interactions between the individual and the environment. According to the social learning theories, there are mainly four ways of the self-efficacy formation: the experience of success or failure, the experience of replacement, speech persuasion, and emotional reaction [3]. Through mirror-image learning, learners can take advantage of the experience or information obtained in the previously mentioned four ways to improve their oral English self-efficacy, adjust their study habits and methods.

B. The Application of Self-monitoring Strategy

Self-monitoring strategy refers to the strategic appliance of a variety of specific learning strategies by an individual in the learning process [4]. It plays a decisive role in all of the learning strategies. It can stimulate and promote attention in students, while maintaining a good mood and a high motivation level.

Another important aspect of self-monitoring is the self-evaluation, which emphasizes that on the basis of student-centered teaching, students will evaluate their language skills systematically. It has combined the internal evaluation and the external evaluation, focused on the evaluation of the learning strategy, literacy ability, logical thinking, learning process and that of the attitude toward emotion and behavioral ability. Self-evaluation provides students with the opportunity of a continual process of reflection, continuous improvement and constant self-improvement, in order to obtain a comprehensive and correct evaluation, and ultimately to form an autonomous learning pattern and habit.

It was justified that self-monitoring strategy was effective in improving foreign students' English writing skills by professor Yang. But is it suitable and applicable for Chinese students in their oral English ability? To answer the question, the following experiment has been conducted. First, students' speeches in class were recorded. And them, they were carefully analyzed to detect problems existing, which then will be returned to students so that they can re-check the material to spot the mistakes and correct them.

IV. PRACTICE OF THE METHOD

A. Subjects

All the 124 graduates students involved in the practice. They had the same class experiences, text books, teacher and class duration to guarantee the similar external factors for all the subjects. They fall into two classes, namely, experimental class and control class.

B. Procedures

We first investigated the students on their attitudes about study habits in class and out of class. After recording students' speeches or dialogues in class, teachers first analyzed them and then gave them back to students, encouraging them to correct mistakes on their own and then point out their weakness.

This approach was applied in March 2010and lasted 20 weeks. Post test was conducted on students in experimental classes and in control classes, so as to reach an objective evaluation of "mirror-image language learning approach".

C. Result One

So far, the 20-weeks' practice has proven that "mirror-image language learning approach" is a method that promotes interactions between students and teachers, shortens the distance between them and improves both interest and efficiency of autonomous learning. Learners can be improved on the oral expression of self-efficacy from the experience or information reflected from the "mirror". It in turn will help students to change in their mental status and attitude, so as to promote change in learning behavior.

According to our questionnaire, we found that (1) 67.7% of the students do not want to be corrected by teachers in public, (2) 91.5% of the students study language alone after school, (3) 77.6% of the students paid little attention to their pronunciation, regarding learning English as memorizing words. However, as we all know that language is a communication tool. Unwilling to face problems in pronunciation and not to improve language ability in interactive exercise will not lead to significant progress by leaps and bounds. But we can not solve the problems brought about by the learning strategies of students by the scarce opportunity to practice in the classroom. Hence, we make use of the opportunities for students to speak English in class to make recordings, which have offered students the chance to do self-examination, self-assessment, self-correcting, and ultimately achieving self-identity. In this way, we can provide them scientific materials and methods for their after-school learning.

In the beginning of the attempt of the mirror pedagogy, students responded to it warmly. According to the survey, 79% of the students were ashamed when they heard their own recording for the first time, while there are 82% of the students who were very willing to listen to their own recording, which can be seen from the passionate letters of surprise and gratitude coming from students. (Teachers send the recording by e-mail to students, students have all replied after receiving.) There are 69% students who often listen to their speech recordings; 44% of students believe that their can hear their progress; 64% of the students think that when hearing the recordings of some excellent students, students can learn. It can be seen from the above data that, after the implementation of the mirror approach, students' self-learning out of class has been diversified and the learning efficiency has been improved. 62% of the students have made progress in speaking speed and richness of expression; when the recordings of outstanding students are

sent as samples for learning and appreciation, those outstanding students themselves have also gotten a deeper recognition and self-identity, and improved self- enthusiasm and motivation, while setting their goals to a higher level than merely passing the exam and coping with the class.

D. Result Two

The following two analyses have also been made to prove that the method can improve students' English speaking skills.

The three classes, ABC, being applied the mirror-image method, were the experiment classes, while the other three classes, DEF, being applied the traditional methods of teaching, were control classes. After setting a topic (e.g. talk about the advantages and disadvantages of taking airplane) to carry out oral activities in all the classes at the same time, students were selected randomly to speak and were recorded. The statistics are as follows: the average speed of speaking of the experiment classes at the end of the academic year is 59 words / min, and that of the control classes is 52 words/ minute. According to mathematical statistics, there were significant differences between the two groups of samples. In other words, after an academic term of teaching practice, the students' speaking speed in experiment classes has significant improvement.

Second, we calculated mispronunciation of the two groups of samples on the same topic, 5.571 words, 8.333 words. The result is that there are still significant differences between the two groups of samples, which shows that students have significantly improved in their pronunciation by the use of the mirror pedagogy.

After analysis of the above data, we can see that the mirror-image method has significant impact on students' spoken English. The method has enhanced the enthusiasm of the students to learn English after school, enriched in content and form of their autonomous learning, and improved the efficiency of learning in classroom. Also, both students with learning difficulties and outstanding student can receive individualized teaching, without anyone's interest and confidence being stroked. Therefore, the effect has been recognized by students, which is also demonstrated by the student's progress.

V. DISCUSSION OF THE RESULTS

The approach is designed through "mirror-image" to widen students' channels of obtaining knowledge and information, develop their practice consciousness and perseverant learning habit, and inspire their spirit of exploration, innovation and independence, so as to improve their oral ability, intensify their interest in English study, build their confidence and self-efficacy.

A. Looking at Oneself in the "Mirror" to Reflect One's Own Weakness

First of all, "mirror-image learning" strengthens students' motivation of study. It has recorded in detail a student's progress in his oral English ability over the 20-week's period and provided laggard students with a real and close mirror-image for imitation. For the students, listening to their

English speaking in such an awkward way is really embarrassing. Yet it is through this mirror that they have a clearer awareness of their oral English and a stronger motivation in improving it.

It is through such a mirror that students can correct mistakes on their own and gain materials and methods for autonomous study. Rarely students practice oral English after class neither do listening exercises for lack of motivation and regulatory system. However, they all show strong interest in listening to their own recordings and have a deeper understanding and memory of their mistakes after listening to their recordings followed by teacher's instructions. Similar mistakes can be reduced in this way. Otherwise, students might have fossilized oral mistakes and stick to mistakes despite of teacher's repeated correction. Now, students know their mistakes and the gap between their level and the standard and thus have an opportunity to correct those stubborn mistakes.

Students enhance the sense of self-efficacy at the same time by analyzing their oral English abilities. With the materials and methods for autonomous study provided, students can work out their feasible goals and plans according to their own actual situations, making progress day by day. Furthermore, students may discover their progress by comparing their own recordings at different stages, thus reducing the frustration.

B. Appreciating Others' Images in the "Mirror"

The teaching method offers students a mirror to study and imitate, with the recordings of those who has better oral English ability being studied by those laggard students without hitting their confidence. There are numerous books and multimedia materials for oral English practice. They may neither match the class teaching programs or learners' English levels nor have any comparability or reference values. In contrast, the recordings of speeches from the top students in the same class are free of those problems and are suitable for those laggard students to refer to. Both the top students and laggard students deliver speeches on the same topic in class and therefore their recordings have comparability and reference values. The laggard ones can find exactly where their problems exist by studying and imitating the top students' recordings, producing a phenomenon called "mirror-image refraction", meanwhile they can work with peers to help each other make progress after class.

As for the top students in the class, the teacher may make a higher demand, offering them more challenging materials to study. Furthermore, the teacher should make a clear requirement about their speech fluency and choice of word or provide recordings of his (her) own to the excellent to study.

Through "mirror-image language learning approach", every student can find his own mirror in which they see their problems, their charm, and the gap from where they are to where they want to be and the progress they have made. They can better observe their efforts and progress in their oral English learning in a consecutive course of study.

VI. CONCLUSION

Students need to realize their weaknesses, while at the

same time, they are able to sense the progress brought by their own efforts. In this way, the students' feeling of self-efficacy will be enhanced, and they will be aware of their problems and mistakes. Self-evaluation is conducive to helping students to find their own innate talent and potential as early as possible. And based on that, they are able to make the best use of their advantages, and in a personalized, humane way, to provide for them a variety of support in learning. Thus, they will have some self-development, their confidence will be increased, and their will to overcome difficulties will be forged. On the whole, this method will prompt them to recognize their strengths and weaknesses in studying, to obtain the experience of success in learning, and to achieve a strong self-efficacy, thereby promoting autonomous learning.

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