

An Empirical Research on 3D to Reducing VLS Class Anxiety Ping XU

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Abstract. In this paper, the author introduced 3D interactive teaching method in the experiment and hoped to prove that this teaching method is a better choice for VAO(Visual Audio Oral) class if it can effectively reduce non-English students' anxiety of English listening and speaking learning. In the AVO class, the teacher applied 3D method to Experiment Class and the usual method to Control Class. the researchers individually held a test on the anxiety level by FLACS, the self-esteem level by SES, the achievements by test papers in three different stages. The results from data processing proved 3D teaching method is a better choice for the teacher and students. This paper is valuable in theory and academic practice.

Introduction

As the non-English students are from different areas, different family backgrounds and different English levels of high school, they showed very diverse English proficiencies at the beginning of the entrance to regular colleges. Under this circumstances, students are always easy to be nervous, worried, or even frightened with the high degree of anxiety when listening and speaking. To them, listening comprehension can be very stressful, and anxiety undermines listening comprehension.

It is proved by many researches that individuals who have a higher degree of anxiety are less successful language learners, a few studies have even found that there exists a positive relationship between anxiety and language learning, and anxiety has been found to have a positive influence on language learning.

- 3D interactive teaching method refers to Dialogue-method, Discussion-method and Debate-method. It is an interactive cooperative spoken English teaching and learning method and devised according to Krashen's SLA (second language acquisition) Theory and communicative approaches of teaching. 3D method theoretical foundation—affective Filter Hypothesis, Social Interdependence, Construction Theory.
- 3D methods, around students' language practice, aim at improving students' language communicative competence through dialogue, discussion and debate.

(1) Dialogue-method

The purpose of it is to master the dialogue competence on British and American daily life and job by practising situational dialogues. Makes the demonstration first, then the students make the imitation and memorize, then they practice the dialogue between the students, finally comes to the students demonstration. Students are often likely to have nothing to say or say nothing. The biggest headwind to speak is their own psychological barriers, lack of confidence or shyness. In the teaching activities, in view of the students' rich non-intellectual quality and sensitivity, teachers should create a comfortable and harmonious class atmosphere and often use encouragement type teaching. If the teacher could be tolerant of oral mistakes as well as pay attention to the language communicative function and be tolerant of oral mistakes, the students would like to speak in English easily without many restrictions. The joy experience of successful English expression will increase their strong desire and self-confidence for opening their mouths.

(2) Discussion-method

Discussion-method aims at improving the students oral expression abilities and foreign language communication fluency by way of group discussion on a social hot topic. The teacher presents the topic for discussion beforehand and requires the students to refer to the relevant materials, and understand the vocabulary. Considering the undergraduate upgrades' poor logical thinking abilities,



the teacher can select consciously the topic that will contribute to develop the students' inductive learning abilities. The students should reflect about the topic under the teacher's guidance. After the discussion, one member of each group reports the group's points and the teacher must fully affirm the students' discussion results and properly point out their limitations. In the group discussion, some students may talk so much that the rest of the group can't get a word in edgeways and just listen silently. In order to avoid it, the teacher can arrange the students to do the role play. The students should concentrate on how to express their ideas around the theme. At the same time, the teacher may appoint some students for the special mission in addition to actively discussion For example, some are responsible for ensuring no digression; Some responsible for guidance and encouraging active participation, Some responsible for summarizing the points at intervals and put forward new problems to make the discussion further development. Once the students in the group have had their own task, their participation consciousness would increase and the discussion would be carried out very well.

(3) Debate-method.

This method intends to develop the students' critical thinking and the accuracy of foreign language communication in group debate with the teacher's proper guidance. Moreover, it is helpful to train the students' thinking ability of dialectics and logic, including analyzing problems from various perspectives, transposition thinking and scrutiny of the problem with the developing view in accordance with the changing time. After the debate, students will have more clear and comprehensive views on this topic, and they can comprehend by analogy when meet any other problems. In practice, the students can be divided into two inter-opposite groups. A motion is raised in advance, as well as some relevant words and phrases, for the students to prepare in their spare time. Finally, after the debate is finished in class, the teacher comments on the both sides.

3D method insists that try to reduce teacher talk time in class and increase student talk time. Let the students become the main body in oral English teaching activity and the leading role of language practice for oral English teaching. The teacher must ensure that the students have enough time and a lot of opportunities to speak and practice more. In order to control the teaching process effectively, teachers should be good at enlightenment, guidance, and skillful intervention at the right time

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The purpose the study is to find the answers to the following questions by applying 3D teaching method into VAO class:

- (1). Is there any significant correlation between non-English students' listening and speaking achievements and foreign language learning anxiety?
- (2). Can 3D teaching method help reduce non-English students' anxiety and increase their self-esteem in VAO class? Is the help significant?
- (3). Can 3D teaching method have more effective influence on the improvement of non-English students' listening and speaking proficiency? Is the influence significant?

In order to explore the effect of 3D, the author will employ quantitative analysis in the research. An experiment will be carried out in real VAO class which will involve one experimental class to which 3D is applied, and one control class to which the traditional VAO teaching method is applied. Through comparison of the subjects' performance, oral test scores and listening test scores in the two classes, the author expects to find the answers to the main research questions listed above.

Research Design

The 3D teaching should give the VAO class the characteristics of English and communication.



English teachers should give their lessons with 3D method as much as possible, make an effort to create a relax and harmonious atmosphere for language learning, and encourage students to join in actively.

The classroom activity should suit the ages of the students, their competence and interest, make them feel the challenge, satisfy their competition consciousness and sense of success, and keep the exciting spot for learning. The classroom teaching technologies need to be various and situational. The teacher should adopt different approaches, select pictures and video materials full of knowledge and interest to facilitate teaching, create an almost true or realistic communicative situation, strengthen the signal input for the second language, and apply the vocabularies and expressions what the students have learned into real life. The teacher should set a communicative task, e.g. imitating a debate, introducing a famous team to the audience by interview, etc. The teacher should mainly encourage students in the teaching, allow them to make mistakes, urge them to speak bravely, praise them as much as possible, and correct their mistakes by repeating what they have said.

In order to turn the previous teaching and learning experience and theories and the fruit of teaching reformation into the productivity of class teaching, this research applies the discussion teaching theory to the foreign language VAO teaching in colleges and universities. The 3D teaching method has the influence on anxiety, self-esteem and achievements of the college students, so it supplies the foundation to explore the college English class-teaching model fitting for the students' mentality, psychological character and overall developing level.

- 1. The subjects were 188 non-English students in Nanyang institute of Technology, selected from the year 2016. 96 students who are majored in chemical engineering and food were appointed respectively to be the experimental class to which 3D English teaching techniques were applied; 92 students who are majored in communication were appointed for the control class to which 3D English teaching techniques were not applied. The numbers of girls and boys in the experimental class are 32 and 64; the numbers of girls and boys in the control class are 24 and 77.
- 2. The researcher adopted some instruments in the experiment: (1) Foreign Language Classroom Anxiety Scale (FLCAS) is a measurement of foreign language learning anxiety designed by Horwitz et al. (2) Self-esteem scale (SES) is designed to assess individual overall sense about self value and self-acceptance. (3)The examinations in this experiment included oral test and listening test.

The pre-oral test and pre-listening test were given to both EC and CC in the first week respectively. The post-oral test post-listening test were given to both EC and CC in the last week respectively.

- 3. All the experimental data were processed by SPSS.
- 4. The experiment lasted 15weeks and was conducted in the VAO class (two periods each week) from February 29th to June10th, 2016. And it was carried out in three stages: pre-test stage, implementation and post-test stage.

In the pre-test stage, the subjects were asked to take the pre-test at the beginning of the first week, including pre-questionnaires of FLCAS and SES to investigate their anxiety and self-esteem levels in VAO class, pre-oral test and pre-listening exam to investigate their oral and listening proficiency. The subjects took the questionnaires and examination papers individually with the companion of the researcher in order to avoid the unexpected. All the subjects handed in questionnaire and examination papers, thus the data collection rate was 100%. We did a comparison of the results by Independent Sample Test by SPSS software.

In the Implementation stage Both experimental class and control class were taught by one same teacher in accordance with the syllabus and teaching plan. The teacher employed the usual teaching method in control class. 10-30 minutes 3D teaching techniques is included in class for the experimental group each time. While in corresponding time the students in the control class are required to study in the usual way.

The teacher divided the experimental class into 12 groups after considering the students' differences in proficiency levels, that is, the members' proficiencies in the group must differ from



one another. Each group had 8 members. A leader of was appointed by the teacher for each group as recommended.

In the 15th week, the post-test stage, the testees are tested by FLCAS as pre-test before exam. Then the researchers once again give a post-test on the anxiety level by FLCAS, the self-esteem level by SES, the achievements by VAO exam paper like the pre-test.

After all of the 188upgrade undergraduates have finished pre-test and post-test, we adapted SPSS statistics software to analyze the experimental data.

Data Analysis

Comparison between Two Classes before Experiment

In order to verify the reliability of the experiment, we make homogeneous comparison on anxiety and self-esteem level, achievements for experiment and comparison group before experiment. The variance analysis shows:

- (1)Before the experiment, there is no obvious difference in anxiety level between experiment and comparison group (F A=0.305, P=0.131>0.05)
- (2)Before the experiment, there is no obvious difference in self-esteem level between experiment and comparison group (F self-esteem=0.009, P=0.157>0.05)
- (3)Before experiment, there is no obvious difference in achievements between experiment and comparison group (F oral=0.001, P=0.158>0.05, F written=3.270, P=0.079>0.05, F total=1.543, P=0.080>0.05)

The results show that it is reasonable that the two classes were selected as the subjective is reasonable.

Variable	Group Type	N	Mean	Std. Deviation	F	P
A	Experimental class	90	36.33	3.918	0.305	0.131
	Control class		35.08	3.385		
В	Experimental class	90	29.58	2.630	0.009	0.157
	Control class		30.43	2.688		
С	Experimental class	90	32.17	2.581	0.001	0.058
	Control class		31.33	2.749		
D	Experimental class	90	33.30	3.164	3.270	0.079
	Control class		32.17	2.438		
Е	Experimental class	90	65.17	5.416	1.543	0.080
	Control class		63.43	4.919		

Table 1. Pre-Test Comparison between Experimental and Control Class

Comparison between the Two Groups before &after Experiment

After experiment interference of 15 weeks, paired sample T was made check on experimental and control class. The results are as follows:

Comparison on Experimental Group before & after Experiment

(1) Comparison of anxiety on experimental class before& after experiment

For the class that adopts 3D method, the anxiety drops remarkably before and after experiment (T A=6.837, P=0.000<0.01).

(2) Comparison of anxiety on experimental class before& after exam

The anxiety changes obviously before and after exam, it drops obviously after exam, (T A=18.351, P=0.000<0.01).

(4) Comparison of self-esteem on experimental class before& after experiment

^{*}significant difference p<0.05

^{* *}greatly significant difference p<0.01

⁽A: Anxiety; B: Self-Esteem; C: Oral Score; D: Listening Score; E: Total Score)



For the group that adopts 3D mehtod, the self-esteem level changes greatly; it rises obviously after experiment, (T SE=-23.266, P=0.000<0.01).

(5) Comparison of achievements on experimental class before & after experiment

For the group that adopts 3D mehtod, the achievements change greatly (T oral=-23.731, P=0.000<0.01, T written=-17.997, P=0.000<0.01, T total=-21.266, P=0.000<0.01).

Table 2: Comparison in pairs of anxiety, self-esteem and achievements on experimental class before and after experiment (Paired Samples Test)

Variable	Group Type	N	Mean	Std. Deviation	T	P
	Pre-test	90	36.33	3.918	6.837	.000
A	Post-test		40.40	4.125		
В	Pre-test	90	29.58	2.630	-23.266	.000
	Post-test		34.38	2.133		
С	Pre-test	90	32.17	2.581	-23.731	.000
	Post-test		39.73	3.336		
D	Pre-test	90	33.30	3.164	-17.997	.000
	Post-test		38.00	3.693		
Е	Pre-test	90	69.47	5.416	-21.266	.000
	Post-test		78.25	6.020		

(A: Anxiety; B: Self-Esteem; C: Oral Score; D: Listening Score; E: Total Score)

Comparison on Control Class before &after Experiment

Table3. Comparison in pairs of anxiety, self-esteem and achievements on control class before and after experiment. (Paired Samples Test)

Variable	Group Type	N	Mean	Std. Deviation	T	P
A	Pre-test	90	35.06	3.385	-9.124	.000
	Post-test		40.90	4.075		
D	Pre-test	90	30.43	2.688	-4.598	.000
В	Post-test		31.18	2.749		
C	Pre-test	90	31.33	2.581	-8.939	.000
С	Post-test		33.96	3.340		
D	Pre-test	90	32.17	2.438	-14.864	.000
	Post-test		35.90	3.342		
Е	Pre-test	90	63.43	4.919	-12.102	.000
	Post-test		70.63	6.720		
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^{*}significant difference p<0.05

(A: Anxiety; B: Self-Esteem; C: Oral Score; D: Listening Score; E: Total Score)

(1) Comparison of anxiety on control class before and after experiment

The anxiety changes obviously before and after experiment, (T A=-9.142, P=0.000<0.01).

(2) Comparison of anxiety on control class before exam and after-exam

The anxiety changes obviously before experiment-exam (T A=-23.033, P=0.000<0.01).

(4) Comparison of self-esteem on control class before and after experiment

The self-esteem changes greatly (T self-esteem=-4.598, P=0.000<0.01).

(5) Comparison of achievements on control class before and after experiment

The achievements improve greatly (T oral=-8.939, P=0.000<0.01, T written=-14.864, P=0.000<0.01, T total=-12.102, P=0.000<0.01).

^{* *}greatly significant difference p<0.01



Comparison between the Two Classes after Experiment

(1) Comparison of Anxiety between the Two Classes before Exam

The variance analysis result: A level differs greatly after experiment (F SA=0.277, P=0.017<0.05, F TA=2.329, P=0.920>0.05).

(2) Comparison of Anxiety between the Two Classes after Experiment

The variance analysis result: anxiety level differs greatly after experiment (F A=0.000, P=0.034<0.05).

(3)Comparison of Self-esteem between the Two Classes after Experiment

The variance analysis result: self-esteem level differs greatly after experiment (F self-esteem=0.016, P=0.000<0.01).

(4) Comparison of Achievements between the Two Classes after Experiment

The variance analysis result: achievements differ greatly after experiment (Foral=0.144, P=0.000<0.01, F written=0.525, P=0.009<0.01, F total=0.051, P=0.000<0.01).

Table 4 Homogeneous comparison between the two classes after experiment (Independent Samples Test)

Variable	Group Type	N	Mean	Std. Deviation	F	P
A	Experimental class	90	34.90	3.565	0.000	0.034
	Control class		36.58	3.388		
В	Experimental class	90	34.38	2.133	0.016	0.000
	Control class		31.18	2.275		
С	Experimental class	90	39.73	3.336	0.144	0.000
	Control class		33.98	3.340		
D	Experimental class	90	38.00	2.693	0.525	0.009
	Control class		35.90	3.342		
Е	Experimental class	90	78.25	6.020	0.051	0.000
	Control class		70.35	6.072		

^{*}significant difference p<0.05

(A: Anxiety; B: Self-Esteem; C: Oral Score; D: Listening Score; E: Total Score)

From the above analysis, we can conclude that 3D VAO teaching is superior to usual one at the aspects of effect on anxiety, self-esteem and achievements. After experiment, there are a great many differences in self-esteem, oral, listening and total records between the experiment and comparison group; Anxiety differs greatly before exam.

The research discovers that anxiety drops obviously after experiment. The anxiety level rises greatly before exam. This indicates that exam affects anxiety level greatly. But compared with the usual VAO teaching for the comparison class, the anxiety level for the latter is higher before exam, and the difference is great.

The research shows that self-esteem level rises obviously after experiment. Compared with the conventional VAO teaching for the comparison group, the 3D-VAO teaching affects positively on self-esteem of students, and the difference is great.

We can learn that 3D method for VAO teaching has great effects on the non-English students.

Conclusion

In summary, it has been demonstrated theoretically and experimentally that 3Dmethod has indeed greatly encouraged the degree of students' participation. The 3Dmethod in learning process has a significant positive effect on teaching VAO English teaching. Applying various 3D method techniques and hopefully many others to be developed by all of the educators in the future, we will have more and more students graduated with the capability of high communicative competence as demanded by their professions.

^{* *}greatly significant difference p<0.01



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