Research on the Cultivation of Compound English Talents Based on "Gold Class & Flipped Classroom"

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Abstract: With the in-depth development of economic globalization in the direction of informatization and knowledge, a large number of compound English talents who have an international vision and fulfill the expectation of international exchanges and cooperation in a larger and deeper field will be cultivated for China's opening to the outside world. The new leap is of great significance. In this context, in addition to speeding up the construction of "Double First-Class", local universities should make great efforts to transform in all respects as well. In this paper, English majors from a normal university in Ganzhou City are taken as the research object, and the feasibility of the "gold class & flipped classroom" model for the cultivation of interdisciplinary English talents and some urgent problems to be solved have been discussed.

1. Introduction

As a popular major, English major has more than hundreds of thousands of graduates every year. English has become an international language for several decades, it has penetrated all walks of life in society. In addition, with the development of artificial intelligence, "low-level" English majors will gradually be eliminated. In the future, "English & professional" talents with high-tech or science and engineering backgrounds will have advantages in the job-hunting markets. However, with the exception of a few English ace professional universities dedicated to the cultivation of elite foreign language talents (humanities and general education talents), most local colleges and universities have limited the training standards for English majors due to the lack of teachers, the low quality of students and the restrictions of school conditions. Talent positioning and students' learning ability requirements are not clear, resulting in the considerable differences of students' English proficiency. Only a small number of graduates are directly qualified for translation and management in foreign affairs, medical treatment, technology and other fields. It is very essential to help English undergraduate graduates stand out from the competition among previous graduates and overseas students. If we want to cultivate top-notch English talents who can not only serve the development of the regional economy, but also devote themselves to the integration of our country's economy with the new world economic situation, the most important thing at present is to adapt to local and school conditions, and explore an approach that is suitable for local education. We should make an utmost effort to explore a new path which is in line with the characteristics of local schools, that is, to move closer to the direction of practical and compound English talent training[1]. The thorny problem we are facing now is to change the many problems existing in the current

curriculum construction, return to the authenticity of teaching, and create an efficient classroom.

2. Analysis of the Current Situation of Local English Major Course Construction

2.1 The Irrationality of the Curriculum Structure

According to the requirements of the "English Teaching Syllabus for Colleges and Universities" on the setting of professional English courses in colleges and universities, "The total teaching hours of professional courses for English majors in 4 years are 2,000-2,200 hours, and the English majors offered by each school should not be less than 2,000 in principle. Class hours, generally do not exceed 2,200 class hours." Colleges and universities must complete a certain amount of class-hour tasks and arrange for professional courses. There are often theoretical courses that emphasize "listening, reading, writing, and translation", while providing students with very little time for quality development, professional practice, and opportunities to "speak" English; professional elective courses are mostly English language Literary, not practical, which can not fulfill social demands for applied English talents at high levels.

2.2 Lagging of Course Content

We can take the English textbooks used by undergraduate colleges and universities in Jiangxi Province ("New Vision University English" series) as a case analysis. Although the text types are diverse and cover a wide range of topics, the selected materials are mostly foreign original textbooks, newspapers and magazines in the early 21st century, and the information content seriously out of date. "Why not choose more popular science articles in professional journals in teaching? Let college students learn the methods of scientists to solve problems while learning languages, improve scientific research capabilities and increase relevant scientific knowledge" [2]. Although college students read and study a lot of classic literary works that will help to improve their humanistic quality, they lack the challenge of acquiring the latest information, knowledge and thinking ability.

2.3 Less Targeted Professional Courses

Specialized knowledge learning and skill training courses offered in the fundamental phase of the four-year undergraduate course, such as audio-visual, oral, and English writing courses, are limited to cultivate students' comprehensive English ability and are aimed at the cultivation of general-purpose English talents. The relevant professional knowledge courses set at the senior level, such as "International Trade Practice" and "Introduction to International Business" , are also unable to realize an organic combination of theory and practice due to teachers' inexperience; ESP courses, which are relevant to students' future employment, are extremely limited in numbers[3]. This will inevitably result in a narrow scope of future employment for students, and they can only engage in simple foreign trade, basic education and other fields.

2.4 Lack of Development of Students' International Vision

Compared with students of other majors, English majors have a superior language advantage and encounter the smallest language barrier for zero-distance "dialogue" with the world. However, among English majors, few take the initiative to acquire the world political and economic development situation, foreign local culture and customs. English majors not only want to cultivate the English language skills, but also have to understand the diversified thinking patterns of foreign

countries and the cultural heritage behind the English language.

3. Ways to Create English "Gold Class"

In response to a series of problems in the curriculum of English majors, local colleges and universities ought to accurately recognize changes, respond scientifically, and actively seek changes. Local colleges and universities can make full use of local characteristic culture, economic resources , internal or external software and hardware resources. It's also a good way to seek cooperation from enterprises and conducting horizontal alliances with other local universities is also very helpful. Specific measures are as follows.

3.1 Adjust the Professional Curriculum and Training Direction

A. Local normal universities are mainly responsible for delivering specialized talents for basic education and teaching. In addition to offering courses in the direction of "English & Education". Local normal universities could encourage students to choose other humanities and social sciences or science and engineering courses across majors, and guide students to purposefully transform into multi-disciplinary (comprehensive) education talents.

B. The curriculum of English majors (business English majors, English translation majors) of local comprehensive colleges and universities should not only highlight the importance of "translation" and "business", but also take into account the interests and specialties of other intermediate English-speaking students. Strengthen the linkage and cooperation between colleges and enterprises, and take actual job needs as training goals. Taking Ganzhou City as an example, some dual-degree school-based courses with regional characteristics such as "English & Navel Orange", "English & Opera", and "English & Red Culture" have been offered to guide them to develop into specialized English talents.

3.2 Realize the Sharing of Regional, Internal and External Curriculum Resources

A. In addition to allowing teachers to take part-time courses across schools, colleges and universities can also exchange some teaching hardware equipment, and seek cooperation with enterprises to develop and build a batch of high-quality online teaching resources applications or websites that can be used across platforms and can be shared with each other. Teachers and students with similar academic background learn from each other while providing feedback and suggestions for revision.

B. Departments of universities (such as science and humanities) can offer some undergraduate courses to each other, expand students' knowledge and form cross-disciplinary cultural awareness.

3.3 Improve Teachers' Comprehensive Literacy Ability

A. The teaching quality of teachers should be regarded as a rigid assessment index, we need to change the "thesis-only" and research-based teacher assessment mechanism; teachers might have certain requirements for their own professional level.

B. Teachers' personal behaviors play a highly exemplary role for students. Teachers had better establish the correct values and have higher professional ethics requirements for themselves than ordinary professions.

C. With the rapid development of education informatization, in addition to changing the single teaching mode in the past, teachers are also facing the impact and challenges brought by informatization teaching, and actively master various teaching live broadcast platforms (such as

Tencent Conference, Ding Ding) and micro-course recording screen software (such as FSCapture recording screen, Camtasia Studio), make good use of some high-quality course resource dissemination and management platforms (such as: China University MOOC, Super Star Learning). But it needs to be pointed out that the application of educational technology cannot replace the important role of teachers, nor can it replace the emotional experience and interactive communication between teachers and students. What foreign language teaching reform should strive to achieve is "the deep integration of teachers and information technology, the symbiosis of explicit and implicit courses, enhance the personalized learning experience of students, and improve the quality of teaching" [4].

3.4 Establish a Scientific Curriculum Evaluation Mechanism

A. The dynamic nature of the evaluation process: students are always the main body in the process of dynamic development, and each evaluation of the teacher is not a value judgment on the student's learning achievement. Instead, it aims to help students find and solve problems, promote students' long-term learning progress as well.

B. Diversification of evaluation content: Teachers should include the students' emotional attitudes, learning strategies and spirit of cooperation into their assessment scope, instead of just focusing on students' final academic achievements.

C. The openness of the evaluation subject: the evaluation subject is no longer just the teacher, but the peers, group members and students themselves can also be the subject of the evaluation. The student's self-reflection is a key factor in learning progress.

4. Exploration of School-Based Practice of "Flipped Classroom"

High-quality curriculum is ultimately achieved through efficient classrooms. As an emerging product of educational informationization, flipped classrooms have unmatched advantages that traditional classrooms don't have. Compared with the traditional classrooms, which are completely dominated by teachers, the flipped classroom has realized the reverse innovation of the teaching process and the role conversion of teachers and students. At the same time, it frees up a lot of classroom time and maximizes the initiative to students.

4.1 Bloom's Hierarchical Classification Theory of Cognitive Objectives

In the 1990s, Lorin Anderson, a student of the famous American educational psychologist Benjamin Bloom, updated the system on the basis of Bloom's cognitive object classification theory to "remember, understand, use, analyze, evaluation and innovation." Bloom's Taxonomy outlines how to guide students from the bottom of the pyramid (the lowest cognitive level stage) to the top of the pyramid (the highest cognitive level stage). The disadvantage of the traditional "teacher-centered" classroom is that it blindly instills theoretical knowledge into students. When students are busy receiving "feeding", they lack the time for brainstorming and the opportunity to communicate with teachers and peers, As a result, a large number of students stay in the recognition, understanding or simple application stage, only a very small number of students with strong independent learning ability can reach the top of the pyramid (see Figure 1).

In order to avoid such undesirable learning consequences, the flipped classroom skillfully placed low-level cognitive tasks before the class to be completed by the students themselves. The teacher turns to focus on in-depth dialogues with the students, cultivate students' practical problem-solving ability. These will help most students get rid of the low-level cognitive dilemma, advance to the high-level cognition stage and maximize educational equity.
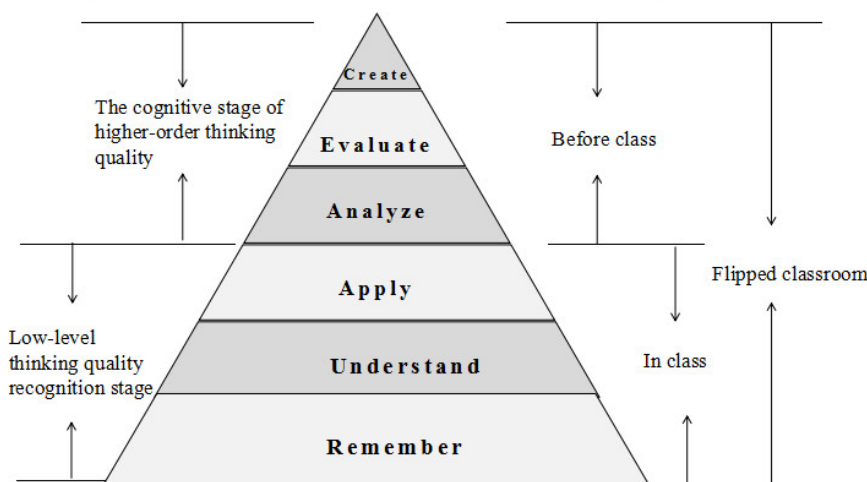
Fig.1 Bloom's Hierarchical Classification Theory of Cognitive Objectives

4.2 Student Needs Analysis

In order to prove whether "flipped classroom" in English teaching is effective or not, in September 2019, the author conducted a "flipped classroom" experimental study on junior English majors in Gannan Normal University through classroom observations, questionnaire surveys, and interviews. Two of the three classes were chosen as the experimental class , the remaining class was assigned as the control class. The experiment lasted one semester. Besides, we opened a new "English & Navel orange" course as a double degree course by making use of the research advantages of the navel orange college of the school. The short-term effect was to reserve translation volunteers for the upcoming "Ganzhou International Navel Orange Fair" series of activities, students could also get more oral communication opportunities with foreigners. In the long run, local colleges and universities cultivated high-quality foreign language talents, which could also play a positive role in promoting the Gannan navel orange brand and increase the export rate of navel orange.

Before the flipped classroom, we had done an online questionnaire against the 60 students who participated in the experiment abojhut the "flipped classroom acceptance", and recovered 56 valid questionnaires. The questionnaire adopts the Likert scale, and a total of 5 declarative items are designed. The 5 options for each item are "completely consent, rather consent, neither opposite nor consent, completely opposite and rather opposite."

Table 1 a Survey Of students' Acceptance of Flipped Classroom Effects

Survey question	Options				
	completely consent	rather consent	neither opposite nor consent	rather opposite	completely opposite
You have heard of flipped classroom and are interested in this teaching model.	40%	32%	27%	1%	0%
Do you think flipped classrooms are more effective than classrooms that focus on "teaching" by teachers?	42%	26%	30%	2%	0%
Do you think the flipped classroom is conducive to the cultivation of	37%	45%	18%	0%	0%

independent learning ability?					
Do you think the course "English & Navel Orange" is suitable for flipped classroom?	29%	33%	37%	1%	0%
Through the study of this course, it will be helpful to your future work and study.	30%	35%	30%	5%	0%

According to the above questionnaire survey results, 72% of the students have heard of and were interested in this teaching mode, 28% of the students were not familiar to flipped classroom. Compared with the traditional classroom teaching model, 68% of the students supposed that flipped classroom is more advantageous,   32% of the students adopted a wait-and-see attitude. As far as the improvement of students' autonomous learning ability is concerned, 82% of the students held that the effect of flipped classroom is more significant, while another 18% of the students thought it had no obvious effect. Regarding the in-depth integration of the course "English + Navel Orange" with the flipped classroom, the students' perception of the impact of this course on their future employment, more than half of the students were optimistic.

4.3 The Teaching Process of the Flipped Classroom

The teaching process was mainly divided into three stages. A. stage one, the teacher selected lesson types and made instructional videos before the class; the students watched the video independently (knowledge input) . B. Stage two, the teacher answered the students' questions during class; students displayed their learning results in groups; the teacher and students evaluated whether the groups have reached the set learning objectives (knowledge output and timely feedback). C. Stage three, After class, the student groups modify the assignment and complete another related but more difficult assignment (in-depth transfer of knowledge) [5].

Table 2 Teaching Process Of Flipped Classroom

Teacher's preparations and students' self- learning (stage one)	
Learning objective	Students find out the current situation of the industrial development of Gannan navel orange and the bottlenecks encountered in its in-depth development.
Video content	Teachers use Camtasia or FSCapture screen recording tools, combined with PPT courseware to produce micro-videos on the industrial development process of Gannan navel oranges, the environmental advantages of the production area, the types of navel oranges, the cultivation management methods, the nutritional value of the navel oranges, and the marketing strategies. the videos are embedded with advanced test questions; the micro-video are uploaded and shared on the QQ group.
Tasks accomplished	Students use mobile terminal devices such as mobile phones , tablets to independently complete the micro-video learning; conduct in-depth thinking and data collection for the difficult problems in the advanced exercises; communicate and discuss online with teachers and classmates through QQ group or WeChat group ;Sort out the important and difficult knowledge and expand it appropriately.

Implementation phase (stage two)	
Questions inquiry	Teachers and students determine the inquiry questions together : the teacher puts forward some questions based on the key and difficult points of the teaching content; the students come up with some unresolved difficulties after watching the videos.The two aspects are combined to determine the topics for classroom inquiry. Students work in groups (3-5students) to complete different inquiry questions assigned by teachers. The group members conduct the information gap and opinion gap.
Group report	Representatives of group show the problem-solving strategies like "How to enhance the brand culture and brand competitiveness of Gannan navel orange" during class. It will help improve

	students' courage and skills in making presentations.
Evaluation and feedback	Evaluation can be carried out from multiple dimensions, such as students' problem-solving ability, their presentation skills.Each group can write down the feedback and correct them.
Summary	The teacher points out the strengths and weaknesses of each group, summarizes the key knowledge that needs to be mastered in this lesson and the difficulties should be overcome;the teacher assigns a task that is related to the topic of this lesson but is more difficult; informs the learning plan for the next lesson and what the students need to watch for the next class.
Expansion Phase (stage three)	
deep transfer of knowledge	Each group completes the assignment modification work , uploads and keeps it on the QQ group folder ; group members search and organize the information on the expansion tasks assigned by the teacher.

4.4 Analysis of Experimental Results

Before and after this experimental course, the instructor carried out a diagnostic evaluation and summative evaluation (by using a test method) on the two experimental classes and the control class respectively, the author used the "Chinese version of IBM SPSS Statistics 25.0" software to analyze the test scores as well. The analysis results showed that the average pre-test and post-test scores of the two experimental classes are 78.53/85.43; 78.43/85.33. The paired test result of class 1 is T=-7.645, and the significance probability corresponding to its T value is P=0. <0.05, reject the null hypothesis. The paired test result of the 2nd class is T=-8.801, and the significance probability corresponding to the T value is P=0<0.05, and the null hypothesis is rejected. That is to say, the average of the pre-test scores and post-test scores of experiment class 1 and class 2 were significantly different, and the post-test scores are significantly higher than the pre-test scores, indicating that the flipped classroom teaching effect is significant. The average scores of the pre-test and post-test of the control class that did not participate in the experiment were 78.97/79.57 respectively,   the learning results did not change much. Above all, we found that the students in the experimental class did not neglect their English majors because of the addition of one more "Navel Orange" professional course. on the contrary, students got more opportunities to express their opinions in English because of the flipped classroom, and their comprehensive ability to use English had also been greatly improved.

During the whole experiment process (mainly based on classroom observation), the author found that the phenomenon of students being distracted in class was less frequent, and they could follow the teacher's guidance and participate in classroom learning activities throughout the process. After this experiment, the author had conversations with the students and found that: A. Their understanding of flipped classrooms had changed a lot. 84% of the students believed that flipped classroom could arouse their learning interest, 16% of the students said that the new course itself was very professional, students had difficulty in learning some professional knowledge and terms. In addition to plenty of videos and documents were pushed by the teacher, the students needed to spend a lot of time studying.While the students' self-learning ability had increased, the academic burden had also increased correspondingly. This was not the original intention of the flipped classroom. B. some students reflected that the difficult problems encountered in online learning had not received timely evaluation and feedback from the teacher. C. Teachers' questioning skills needed to be improved. Asking questions was neither for the purpose of "difficult students" nor is it an interactive formalism. D. The teacher had to do many preparations for the new course , which was also a challenge for him(her).

Table 3 Analysis of Students' Achievement Before and after the Flipped Classroom

Paired sample statistics		average value	Number of cases	standard deviation	Mean standard error
experimental class 1	pre-test	78.53	30	3.391	.619
	post-test	85.43	30	3.059	.558
experimental class 2	pre-test	78.43	30	3.380	.617
	post-test	85.33	30	3.166	.578
control class	pre-test	78.97	30	3.917	.715
	post-test	79.57	30	3.617	.660

Table 4 Paired Sample Test

		Paired difference					t	Degree of freedom	Sig.(Double tail)
		average value	standard deviation	Standard error average	Difference 95% confidence interval				
					Lower limit	Upper limit			
experimental class 1	pre-test vs. post-test	-6.900	4.943	.903	-8.746	-5.054	-7.645	29	.000
experimental class 2	pre-test vs. post-test	-6.900	4.294	.784	-8.503	-5.297	-8.801	29	.000

5. Conclusion

Local colleges and universities should clarify their own positioning when setting up English majors and formulating talent training plans. They can not completely copy the advanced foreign language talent training model of Xiamen University or East China Normal University, which will result in bad results. Although Ganzhou is located at the south of Jiangxi Province , whose geographical location is not dominant. However, as a well-known old revolutionary area and a red cultural heritage and innovation area, it speaks for itself. With the inheritance and development of the "red tourism culture" in Ganzhou, the "special agricultural product" Gannan navel orange has gone out of the mountains to become a national geographic indication product.   In addition to the industrial deep processing in Longnan Economic Development Zone, Ruijin Economic Development Zone and Ganzhou High-tech Zone, as well as the vigorous development of strategic emerging industries such as Ganzhou Biopharmaceuticals, are all contributing to the rapid economic and social development of Ganzhou. Making good use of the advantages of local higher education resources and cultivating compound English talents, not only contribute to the development of the local economy, but also can be a "trump card" in the future.

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