



# The Application of PAD Class in Advanced Chinese Comprehensive Course

## —An Experiment Using SPSS Software

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**Abstract.** The PAD Class is an innovative teaching model proposed by Professor ZHANG John Xue-xin from Fudan University in 2014, which is composed of three parts: presentation, assimilation, and discussion (PAD), with the key idea of allocating half of the class time to teacher's presentation and the other half to students' discussion. At present, few Chinese language teachers introduce it to TCFL (Teaching Chinese as a Foreign Language), especially to Advanced Chinese Comprehensive Course (ACCC). Our study aims to prove its feasibility and superiority by conducting a one-semester teaching experiment in four parallel classes of 100 junior foreign students who all passed the new HSK5 before. To ensure that the levels of the four classes are almost the same, we rank the students according to their scores, and divide them into four classes in the order of 1, 4, 5, 8... and 2, 3, 6, 7... (each class has 25 students). We experiment with PAD class in Class A1 and Class A2, but inherit the traditional teaching model in Class B1 and B2. Afterwards we input their HSK scores into statistics software SPSS22 with the results of  $P = 0.763$ , indicating that the division of these four classes is scientific. Experiment result shows that teaching effect of experimental classes is dramatically better than that of non-experimental classes. PAD class can greatly stimulate learning interest of students, and enhance their initiative and self-confidence, and promote all-round development of their language abilities. It is proven to be an effective teaching model for ACCC with diverse merits.

**Keywords:** PAD class · feasibility analysis · experiment of comparison · studying effectiveness

## 1 Introduction

There are more courses, larger vocabulary and more cultural knowledge in the advanced Chinese learning stage, compared to the elementary and intermediate Chinese learning stage, which places greater demands on foreign students who bear a heavier studying burden as well. In addition to further comprehensive development of languages skills, students at this stage correspondingly need to enhance their self-study ability and to develop cooperation skills and critical and creative thinking. These factors should be comprehensively considered to judge the learning effectiveness of students.

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However, the real teaching situation of advanced Chinese comprehensive course is not quite optimistic. Foreign students have a high degree of dependence and infatuation on electronic products. Many of them tend to spend a large amount of time on mobile phones even in class, occupying a large part of time that should have been spent on study. Our survey shows that their average learning time is less than 2 h after class everyday, and sometimes is even less than 30 min. Consequently, they focus on looking up dictionaries instead of concentrating on listening and thinking in class, and they feel helpless in face of many unfamiliar advanced Chinese words and cultural background knowledge, expecting teachers to explicate them one by one. However, the fact is that students still pay more attention to mobile dictionaries even with the help of teachers' meticulous explication, ignoring teachers' remind of diversion from dictionaries to class, which directly lead to the lack of interaction between teachers and students. This contradictory reality is seriously inconsistent with the teaching principle of "concisely present but fully practice" that has long been admired in the field of TCSL. In addition, the completion of off-class assignment by students is not quite satisfactory. Students' enthusiasm of learning is not high either, only 12.5% of the whole students have the habit of active preview (according to our survey). There is little interaction and mutual assistance among students, and the phenomenon of temporary preparation for exam is extremely serious. In a word, many students are short of the habit of autonomous learning and courage of overcoming difficulties in study, causing the failure to develop their self-learning abilities, let alone the development of other high-level skills.

In order to change this terrible situation, teachers tried every means to mobilize and encourage students to study and also slow down their teaching pace and lower the teaching requirements and expectations, but still gained the non-ideal teaching effect.

In recent years, PAD class teaching model is becoming more popular with numerous advantages, which coincides with the teaching principle of "concisely present but fully practice" (Huiyuan Yang, 2007:87) [1] and can effectively change the embarrassing circumstance of advanced Chinese teaching.

## 2 Brief Introduction of PAD Class

PAD class is a new teaching pattern invented by Professor Zhang John Xue-xin from the department of Psychology of Fudan University in 2014. Its core thought is that the half time of the whole class (usually 50 min) is spent on presentation by teacher, the other half is spent on interactive learning among students. It is composed of three parts: presentation, assimilation, and discussion. The most innovative element is the separation of presentation and discussion, allowing students to independently study in their free time after class in order to achieve personalized absorption of content of the next lesson, and then back to classroom to conduct effective discussion in the next class. The part of assimilation usually happens after class. The first half of each class is used to discuss the content of the previous lesson. Therefore, this kind of discussion is called "discussion in next class" (Zhang. J. X. X, 2014:7-12) [2].

To be more specific, the three parts of PAD class can be subdivided into five links: presentation, independent study, independent homework, group discussion and whole-class communication. According to the actual situation of teaching, sometimes a simplified

form of “discussion in next class”—“discussion in class” can be used. These two forms can also be applied together to flexibly cope with changing teaching situations. The PAD class requires teachers to concisely teach and to leave more blanks for students to study and absorb independently after class and then to fully discuss in the next class. The assignment that is needed to be completed by themselves is called “PAD assignment”, and it is finished in the form of discussion in class which includes three steps: *demonstrate to group members, test teammates, and help each other*. Teachers answer the common questions and then comment on students’ discussion performance afterwards. In terms of marks assessment, PAD class attaches great importance to procedural evaluation, highlighting ordinary performance rather than terminal tests which are admired by traditional teaching model (Zhang. J. X. X, 2017:4–28) [3].

Based on the learning theory of behaviorism, cognitivism, and constructivism, as well as developmental teaching theory, structuralist teaching theory, PAD class is an advanced teaching model with conspicuously scientific characteristics, which truly reflects and implements the idea of “student-centered”. Nowadays, numerous cases of PAD class have been extensively applied in different disciplines from Elementary schools to Universities in China and they are proven to be extremely effective as well. The related research results are fruitful, with more than 1,600 papers published and 17 series of books published. Its idea is consistent with that of TCSL (Teaching Chinese as a Foreign Language), hence it’s worth being applied to the practice of TCSL, especially to ACCC.

### 3 Analysis of Feasibility for Application of Pad Class in ACCC

#### 3.1 PAD Class Coincides with the Basic Law of TCSL

TCSL requires teachers to follow the principle of “concisely present but fully practice”, that is, to explain key core knowledge succinctly, and to spend a lot of time on motivating students to conduct diverse exercises to improve their comprehensive skills. Huiyuan Yang (2007:87) [1] advocates that the practice time for students in comprehensive and oral courses should not be less than 60% and 70% of the entire class respectively. However, the fact is that very few teachers of TCSL can strictly implement this principle, even if the teachers of Elementary Chinese can rarely successfully carry out this principle, let alone the ACCC teachers. The essence of PAD is fundamentally compatible with the principle of TCSL, which can largely improve teaching effect.

Take the ACCC with two class periods as an example, except for the first class taught by teachers, each class period is almost all given to students for group discussion and interaction with others (one class period lasts for 50 min, but 43 min is allocated to students), more than half of the second class period is also distributed to students for individualized assimilation and group discussion in class (nearly 32 min). Teachers only need to offer timely instructions and guidance (it is also regarded as “concisely present”). In general, time for students to practice accounts for more than 70% ( $75/100 = 75\%$ ). Obviously, PAD class provides students with extremely sufficient training opportunities (“fully practice”).

### **3.2 PAD Class Can Not Only Comprehensively Improve Language Skills of Students, but also Fully Stimulate Their Learning Enthusiasm and Initiative, and Effectively Improve Their Four Core Qualities**

The idea of core qualities of 4C originated from the United States and it includes four aspects: collaboration, communication, creativity, and critical thinking. Since students can be trained in various skills such as listening, speaking, reading and writing in PAD class, comprehensive language skills are widely improved. Due to the implementation of individualized teaching in PAD class, students' enthusiasm and initiative can naturally be mobilized. After class, students are free to choose their time to study independently. In terms of the same content or problems, their understandings demonstrate characteristics. Because of the moderate difficulty of the assignment, everyone has room to present, and there is no standard answer, therefore, everyone's homework is distinct and unique. Their subjective initiative has been greatly released as well. They can demonstrate their advantages by presentation to others, and achieve mutual interaction with teammates in the process of testing others and gaining help from others. Their awareness of cooperation, skills of communication and cooperation have been unconsciously and gradually improved in the process of frequent interaction and cooperation within groups. They absorb content of lessons independently after class, and show their comprehension in the PAD assignments, and pose their own questions, which is beneficial to forming their own opinions, and developing logical thinking ability. Their critical thinking and creativity will be simultaneously developed during the debate with classmates, and under the timely and appropriate guidance from teachers. As a matter of fact, these core 4C qualities are the most required ones for students at advanced level, which will make contribution to their acquisition of Chinese language.

### **3.3 PAD Class Possesses the Superiority of Lower Threshold, Less Investment, and Easy Implementation, and Has the Hardware and Software Conditions for the Application and Promotion of TCSSL**

Unlike Flipped Classroom and MOOC, which mainly rely on modern technology, multimedia technology is not a prerequisite for the implementation of PAD class. In terms of cost of investment, the cost of PAD class is much lower. Teachers do not need to adjust the teaching content and schedule, and do not need to invest funds and equipment. They only need to change the teaching process. Thus, it is extremely easy to learn to conduct PAD class. Besides, its threshold is particularly low, which is also one of the important reasons for its quick and wide spread in a short period of time. Meanwhile, it has no requirement for background, level, learning ability and motivation of students. Those students who lack motivation, initiative and solid foundation are in the desperate need of PAD class.

At present, there are few researches on the application of PAD class in TCSSL. They are Wei Wei (2020:12–40) [4], Chaonan Zhang (2020:18–42) [5], Yue Yu (2019:97–98) [6], Yilin Chang (2019:1–35) [7], Yi Huang (2019:170–171) [8], Saijun Wang (2019:155–156) [9], Changjun Zhang (2017:61–68) [10]. Only Changjun Zhang (2017:61–68) [10] shared many practical cases of PAD, but most cases are mainly about Elementary and Intermediate Chinese courses. Unfortunately, there is no case of PAD class in Advanced

Chinese Comprehensive course so far. Different from those researches above, our article mainly focuses on the study of the teaching reform of Advanced Chinese Comprehensive Course for the foreign students of Information Engineering University of PLA. We first adopt this empirical approach to prove the superiority of PAD class in ACCC through the comparison between experimental classes with PAD class and traditional classes with traditional teaching model.

## 4 Experiment on the Application of Pad Class in ACCC

### 4.1 Experiment Design

#### 1) Experiment Subject

In order to test the actual teaching effect of PAD class in ACCC, we conducted experiment for one semester in four classes of 100 junior foreign students. They all passed the new HSK5 before they are divided into different classes. To ensure that the levels of the four classes are almost the same, we rank the students according to their scores, and divide them into four classes in the order of 1, 4, 5, 8... and 2, 3, 6, 7... (each class has 25 students). We experiment with PAD class in Class A1 and Class A2, but inherit the traditional teaching model in Class B1 and B2. Afterwards we input their HSK scores into statistics software SPSS22 with the results of  $P = 0.763$ , indicating that the division of these four classes is scientific. The actual teaching effect of one semester of ACCC in the experiment classes and the traditional classes is compared to verify the effectiveness of the PAD class.

#### 2) Teaching Content and Teaching Length

The teaching content of these classes is identical, and all the textbooks used are "Advanced Chinese Jiaocheng" (Shude Ma, 2013:1-237) [11]. According to the teaching arrangement, the first lesson "Hutong Culture", the second lesson "Ordinary People", the fifth lesson "Urban Fans of Drama" and the tenth lesson "Medicine" are required to be taught in the first semester. There are 96 class periods in one semester, including 3 times of this course per week, 2 class periods for each time, and each class period lasts for 50 min.

#### 3) Teaching Objective

Our teaching objective is to motivate students to master the knowledge points of the language learned, to understand the historical and cultural knowledge, and to be able to use the learned content to express or write their viewpoints skillfully.

### 4.2 Experiment Process

The teaching process of the traditional class will not be detailed here. The teaching process of the experimental classes is as follows (we only take the 3<sup>rd</sup> and 4<sup>th</sup> class periods as an example).

1) *Review*: Review what students have learned in the last class (for approximately 15 min). The specific process is as follows.

a) Retell and review in groups (10 min): *Students of each group work together to retell the general content of the previous lesson in the form of group cooperation, and to review the main knowledge points.*

b) Test by teachers (5 min): *Teachers randomly examine students (2 min) to check their mastery of the learned by diverse ways, and students answer (2 min), then teachers supplement some points accordingly (1 min).*

2) *Group discussion*: Students of each group discuss the words, language points and cultural knowledge of paragraph 1 to paragraph 3 and answer the questions of this lesson (30 min). Group members ask each other some questions about words' meanings, usages, synonyms' differences and paragraph meaning, and then answer those questions. Then they demonstrate what they have learned well to members and consult with each other about what they do not comprehend in order to get assistance. After this, representative of each group reports their accomplishments and pose their questions to the whole class. At last, teachers respond to the common questions and remind them to pay attention to the knowledge points that they did not notice, and summarize the content of this part.

3) *Study new content in the second-class period*: Teachers concisely elaborate on the difficult points of paragraph 4 to paragraph 6 (15 min). Then students are required to study the 4<sup>th</sup> paragraph in the form of PAD model in class independently to comprehend the meanings of words and paragraphs (15 min). Subsequently, they are given 15 min to conduct group discussion by explaining the meanings of words to members, making sentences using those words and testing and assisting each other. Afterwards, each team presents their result of discussion and poses questions (2 min) to classmates or teachers to get answers (2 min). The last part is the summary and assignment by teachers (1 min).

### 4.3 Experiment Result

By comparison, the differences between the experimental classes and the traditional classes are shown in four aspects.

#### 1) Teaching Progress

After one semester, the experimental classes completed the learning tasks ahead of teaching schedule, while the traditional classes barely finished the task. Apparently, the teaching progress of experimental classes are faster than the traditional ones.

#### 2) Contrast of time length for speech of teachers and students

It can be clearly seen from the above Table 1 that proportion of students' speech length in the experimental classes is significantly longer than that in the traditional classes. PAD class is dedicated to stimulating students' learning enthusiasm and enhancing their initiative, hence, teachers are required to leave more time for students to conduct independent learning. In addition to independent learning time, students' speech time in experimental classes account for 75.7%, which fully complies with the teaching principle of "concisely present but fully practice".

#### 3) Comparison of learning effectiveness

These four classes all have mid-term exam and final exam in one semester. Additionally, we take a random test in order to reflect the real level of students, and the results are presented below (in Table 2).

**Table 1.** Contrast of Time Length for Speech of Teachers and Students

Class	Proportion				
	Proportion of Teachers' speech (%)	Proportion of Students' Speech Length (%)			
		Personal Speech	Collective Speech	Independent Learning	Total
Experimental classes	24.4%	30.1%	30.5%	15%	75.6%
Traditional classes	68.5%	31.5%	0%	0%	31.5%

**Table 2.** Comparison of Marks of ACCA

Class	Marks		
	Average Marks of Mid-Term Exam	Average Marks of Final Exam	Random Exam
Experimental classes	83.9	89.8	88.5
Traditional classes	74.7	73.6	73.4

Distinctly, the teaching effectiveness of experimental classes is remarkably better than that of traditional classes.

#### 4) Subjective evaluation from teachers and students

At the end of the semester, we conducted a questionnaire and interview with teachers and students. The feedback results show that 100% of students in the experimental classes highly praise PAD class, expecting to continue this teaching model. 100% say that they rarely watch their mobile phones in class, and 94% emphasize the great value of group discussions, which can arouse their interest in learning, and enhance their initiative and their ability of cooperation and improve their expression skills as well. 87.5% consider that their self-study ability has been improved and they are more willing to take the initiative to explore problems. 81.2% reckon that they have learned greatly from analogy, and 75% found that they have learned new perspectives and ideas from group members and have their critical thinking strengthened. After a semester of experiment, 70% of students in traditional classes expressed their desire to experience PAD class. 75% of them say they never preview and review, and 100% believe that the tasks of ACCC are seriously heavy, which means that there are few opportunities to practice in class. On the contrary, 100% of students in the experimental classes feel more stress-less and motivated in class because of PAD class.

All the teachers find that PAD class largely reduces the burden on them and stimulate students to speak more actively in class, forming more lively studying atmosphere. In a word, PAD class brings about a plenty of advantages for teachers and students and wins firm recognition from them.

## 5 Conclusion

Due to the small number of foreign students in our university, the participants in our experiment are not quite sufficient. Meanwhile, it would be better to obtain more scientific statistics if the period of experiment could be extended to one year. Nevertheless, this experiment still proves that PAD class conforms to the principle of “concisely present but fully practice”, which can successfully stimulate the interest of advanced Chinese students, and enhance their self-confidence, and improve skills of listening, speaking, reading and writing. In addition, PAD class can also strengthen 4C core skills. Moreover, it is conducive to reducing the time investment of teachers and students, lowering teaching costs, and improving teaching efficiency. Compared to the “Flipped Classroom”, MOOC, “Inquiry Learning”, “Autonomous classroom” and other models, PAD class has various advantages such as low threshold, less investment, and ease of use. It is completely applicable to the Advanced Chinese Comprehensive Course with high value of promotion.

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