Innovation and Practice on Teaching Method of Agronomy Specialized English Course

Ying LIU, Miao CHEN, Ying-bin XUE∗ and Yu-duan OU
Faculty of Agricultural Science, Guang Dong Ocean University. Haida Road #1, Mazhang District, 524088, Zhanjiang, Guangdong, P.R. China
∗Corresponding author

Keywords: Agronomy Specialized English, WeChat platform, Educational reform.

Abstract. There are several problems in the teaching of Agronomy Specialized English curriculum, and a few of solutions had been stated detailedly in this paper. With the help of the fast expansion and generalization of WeChat, we naturally think of introducing the WeChat platform into the teaching of Agronomy Specialized English curriculum. The educational reform of Agronomy Specialized English curriculum were explored smoothly, and a great deal of benefits of WeChat platform assistance teaching were gathered detailedly, in order to establish a theoretical basis for further utilization and generalization of WeChat platform teaching methods into other curriculums.

Introduction

"Agronomy Specialized English" is one of the major professional curriculums of agronomy. In addition to the English course, the course is closely related to the plant physiology, genetics and crop breeding and crop cultivation. Through the study of this course, students can understand the professional English vocabulary of agronomy, improve the ability of reading, writing and translation in professional English, and lay the foundation for the future production and research of agronomy.

By means of learning this course, students will master the professional vocabulary of crop breeding, crop cultivation and other aspects, learning the basic methods of searching, downloading and reading English literature, and at the same time grasping the basic approaches and techniques of English literature writing.

Because a large number of various information in multidisciplinary fields are contained in the Agronomy Specialized English curriculum. If only making use of the conventional teaching method, students may not be understand and master the teaching contents of the course well, resulting in extremely poor teaching efficiency. Meanwhile, because the various teaching conditions and teaching skills of teachers in different areas in China, the teaching effectiveness may be obtained with significant differences for the students in different colleges.

Now, the conventional model of teaching is one common methodology widely adopted in the teaching procedures of Agronomy Specialized English in a great amount of colleges in China, and usually more attentions are focused on the accumulation of knowledge and the building of knowledge base system for the students [1]. Whereas the conventional teaching method depends so much on the direct instruction from teachers that the students' subjective initiative cannot be fully activated [2]. Hence, it's hard for students to learn and master the knowledge by means of this conventional teaching model, and students may feel like reading ciphered codes and boring, so the contradiction of teaching and study comes out.

In the background of information technology, globalization and knowledge explosion, the conventional teaching modes cannot be satisfied for the needs of teachers and students absolutely, so that teachers’ innovative ability and ability to obtain information can still be improved necessarily. Therefore, teachers must to reinvent and build positively new teaching protocols and modes to increase the students' interest and improve teaching effect.
Beginning in 2011, a brand new on-line chat named WeChat has been created and distributed by Tencent [3]. There are numerous functions contained in this chat software, such as voices, texts, pictures and videos can be dispatched by this chat tool in real-time [4]. At the same time, it can be downloaded and installed in cell phones, and can be put to use by people at all times. So, in China the WeChat is popularized fleetly, particularly popular with young people [5]. Up to April 2017, users of WeChat have accrued more than 889 million, and most of them are college students (exceeding 90%) [6].

WeChat is a new kind of communication tool, which has turned into the most often used chat for Chinese college students and has irreplaceable position in their daily lives [7]. It enables us to find a new chances for online teaching, and it is possible to offer a novel teaching platform for mobile education. Therefore, many college students may obtain knowledge more easily in virtue of micro-learning and mobile education. Because there are so many useful functions in WeChat, that we can put into use WeChat to send lots of information, such as voice, text, video and pictures, to their friends. Meanwhile, some particular announcements can be released by WeChat, in order that a crowd of persons can focused on the correlative information and messages. Therefore, these characteristics of WeChat can be utilized by us in the teaching procedures of Agronomy Specialized English curriculum.

A novel teaching method of Agronomy Specialized English can be created by teachers and students via WeChat, in order that the enthusiasm and proactivity for college students to learn Agronomy Specialized English curriculum can be motivated absolutely. Whereafter, an autonomous learning environment will be established, which is a timely and greatly complement for colleges' courses teaching practice.

**Situation-analysis of Agronomy Specialized English Teaching Currently**

**Lacking of Real-time Interaction between Teachers and Students**

Communication and interaction between teachers and students are crucial importance for improvement of improve teaching effectiveness and quality. Teacher makes lecturing and students listen carefully in class, which is the conventional teaching mode we common adopted in China. Nevertheless, there are some questions needing to be answered, for example, those students all fully understand and grasp the information teaching in the classes? And it is hard for teachers to acquire couple back on those problems. In case of teachers intend to put forward pedagogical reform, they should face with those issues, and try to solve the problems.

**Conventional Teaching Protocols are Monotonous and Onefold**

The Agronomy Specialized English curriculum is a compulsory course at many colleges in China, teachers may apply the method of passing the knowledge on to their students via “face to face” instruction. The instruction contents are confined to all kinds of knowledge from the books. With the assistance of traditional teaching methods, but the teaching efficiency was not so good and the students are still confused on some difficult knowledge [8]. Moreover, this teaching protocol cannot realize the situation of the society and education and cannot keep pace with the social and educational development. Thus, students become increasingly feel boring in the class and cannot understand and grasp core knowledge. And the emphasis and difficulty of the Agronomy Specialized English curriculum cannot be mastered by the students. Hence, this teaching protocol will surely bring on passive classroom atmosphere, and students' learning motivation cannot be activated adequately.

**Reduction of Learning Periods**

As a vital basic specialized course in agronomy, Agronomy Specialized English has a significant impact on the agriculture and forestry. Whereas the period of every specialized courses has immensely been shorten in most of Chinese colleges during the education curriculum reform. For instance, the theoretical class hours of the Agronomy Specialized English curriculum was 48 hours
before, whereas now it has been compressed down to 32 hours. In the context of compression theoretical class hours, teachers don't have enough time to teach all the significant information in class.

**The Educational Resources are Scarcity**

The conventional education of Agronomy Specialized English curriculum primarily concentrates on three sections: instructing the textbooks, explaining basic theory and commending relevant literature information. When an increasing amount of educational resources have been appeared on the network, new information is turning into more readily to be acquired and developed for us in the present. Thus, conventional curriculum cannot be attracted by students, and learning interest and motivation of students cannot be evoked within the classroom.

**Utilization of WeChat into Agronomy Specialized English**

The novel educational method with WeChat was introduced in Agronomy Specialized English in the present study, and two classes of agronomy (70 students in total) in Guangdong Ocean University were put into use the novel teaching protocol, meanwhile the other two classes (a total of 70 students) were used the conventional educational protocol to implement one semester of educational reform and application of the curriculum. Furthermore, the inquiry of both classes was indicated that all of the students were users of WeChat in cellphones as the primary vessel of communication. In the end, we made comparative analysis of teaching efficiency among these four classes.

**Application of WeChat to Extend Beyond the Temporal and Spatial in Agronomy Specialized English Curriculum**

The WeChat was all-weather tool, and the chat groups contained in WeChat could be set up by teachers and students to allow the students to own a 24 hours online learning resource. Furthermore, this study showed that the students who made learning with the help of WeChat, could receive pictures, texts, audios, videos, etc. from their teachers in WeChat groups, meanwhile they could ask some questions to their teachers with the aid of WeChat. So that students could carry on learning in discrete time and on any surface, such as home, station, dormitory and airport, to establish the happy and relaxed conditions for themselves. Therefore, the study areas and class schedules were not restricted in the classroom. In conclusion, the students made themselves to have the chance to starting learning activities at anytime and anywhere, and the deficiencies of compression class hour were remedied eventually.

**Application of WeChat to Facilitate Renewing Instruction Resources of Agronomy Specialized English**

The instruction resource such as texts, pictures, audios and videos could be uploaded into WeChat by teachers, meanwhile students could gain the desired information in the WeChat circle of friends via reading, replying, and asking questions, and so on. Moreover, students could also energetically take part in their own activities, meanwhile different kinds of information relevant to the Agronomy Specialized English curriculum were released via WeChat. The learning materials of Agronomy Specialized English could be sent to the students by the created public platform. When making use of WeChat to study Agronomy Specialized English, students could screen what they were needed and interested information. In the end, those multifarious information were propagated via WeChat, so that the views of students were broaden, and students’ interest in learning would be enhanced.

**Contrast of the Teaching Efficiency**

The survey results of the teaching efficiency in those classes were demonstrated in figure 1. It could be found from figure 1 that the compares results of the class 1 and class 2, which had been implemented with the WeChat teaching method, were observably superior to the normal teaching classes. From the results shown in figure 1, the protocol of WeChat-aided instruction in Agronomy
Specialized English had good effects. Depended on the interactions in WeChat platform, the learning effectiveness of students had been markedly enhanced. For instance, the excellent rate of final exam and after-school exercises, and assessment of teaching were all signally better than in the control classes (Figure 1). During the period of instruction, students might discover and correct the errors in good time via practice them over and over. Furthermore, the capacity of students to discover the problems and solve them had been enhanced markedly too. It is safe to assume that the WeChat-aided instruction teaching protocol in Agronomy Specialized English might be also diffusely applied to in the education of other curriculums.

![Figure 1](image1)

WeChat-aided instruction teaching protocol was used in Class 1 and 2; normal teaching method was applied to Class 3 and 4.

**Application of WeChat to Establish an Interaction Platform for Teachers and Students**

With the help of WeChat, we could make discussions about Agronomy Specialized English on line, and projecting them onto large screens in the classroom, meanwhile students could make comments and answer the questions at any moment. At the same time, teachers could inspect the students’ actually learning in time and discover whether the students knowing the basics or not, so that the exchange and interaction among teachers and students might be made them easy. There were some attempts in this field had been made in some colleges, and good teaching effectiveness had been gained.

For instance, there were some students of computer science in the suzhou university in China, they had applied WeChat to establish the public number for exchanging among teachers and students in classroom. Students could put to use the public on cell phones to exchange with teachers, meanwhile they could also make use of it to hand in homework, answer questions, and take part in discussions. Moreover, Exploring issues among teachers and students after school could be also made by WeChat feasibly. In addition, some students could apply WeChat to put questions to teachers and other students, and to dispose multifarious doubts met during the process of learning. Making use of the WeChat circle of friends, students could receive their need in time, such as discussing about knowledge points, announcing their own attainments and comprehension, and presenting their preliminary thought. What’s more, students could gain some information outside the classroom, and teachers could also acquire the feedback from students via the WeChat.

**Superiority of Using WeChat in Education of Agronomy Specialized English**

**To the Benefit of Interaction among Students and Teachers**

There were some advantages had in the education of Agronomy Specialized English by means of WeChat, particularly included three aspects: (1) Teachers could set up disparate WeChat groups in
classes, meanwhile, teachers made use of WeChat groups to let students participate in discussing on a specific theme, and they utilized the WeChat group to put questions to particular students too. Hence, students could give their perspectives at all hours in the learning process. (2) For the sake of making communication easier, students establish various WeChat groups to study, and they utilized the WeChat group to make discussion and mutual aid. So that the perplexities were met for students in the process of learning in Agronomy Specialized English eventually. (3) When homework was arranged by teachers, with the help of WeChat students in different groups could make discussion and analysis in groups, and gained very consistent and reasonable answers finally.

**Exciting Interest of Students by Establishing the WeChat Public Number**

The WeChat public number has been appeared as emerging things in the 21th century and is extensively used now. On account of the characteristics and advantages of WeChat, a WeChat public number for Agronomy Specialized English was set up to send course materials to students who had paid attention to the public number. On the basis of their hobbies and interests, students could make use of WeChat to implement studying of Agronomy Specialized English and receive the information about Agronomy Specialized English curriculum.

**Stimulating to Study Independently of Students via WeChat Friends Circle**

With the help of WeChat friends circle, teachers could release messages about Agronomy Specialized English curriculum. These messages could be published in different types, such as videos, pictures, audios and texts. The details of messages could be original creating or transmitted ones. So that the scope of knowledge about Agronomy Specialized English would be extended observably for students via transmitting, reading, or commenting the messages from teachers in WeChat. Finally, a large number of information were acquired by students, and students’ interest in learning would be promoted on the Agronomy Specialized English.

**Conclusion**

In the present era, along with the Internet rapid development, information technology and mathematics do good to the conformity of education technology tools. WeChat, serving as a handy and immediate communication tools, has been turned into a fashionable chat program for students in colleges. There were some new chances brought for university's curricular reforms naturally. Teachers and students could make use of WeChat to develop a new kind of education in Agronomy Specialized English. The actualities of college students utilizing WeChat were surveyed in the present study, and the WeChat was utilized in the education of Agronomy Specialized English to become a bridge for communication among students and teachers for sharing knowledge and experience. Furthermore, the teacher-student interaction had been implemented to facilitate renewal of instruction resources in time. In the end, a suit of WeChat-assisted education method was summarized and used in the education of Agronomy Specialized English to motivate interest in learning and enhance the teaching results.

**Acknowledgements**

First author: Ying Liu, Faculty of Agricultural Science, Guang Dong Ocean University, Haida Road #1, Mazhang District, 524088, Zhanjiang, Guangdong, P. R. China.

This work were supported by the Chinese Postdoctoral Science Foundation (2018M633059), Natural Science Foundation of Guangdong Province (2018A030310057), Program for Nanhai Youth Scholar Project of Guangdong Ocean University, Program for Scientific Research Start-up Funds of Guangdong Ocean University (R17023), the Project of Science and Technology of Zhanjiang City (2016B01004), the Project for Innovation and Strong School of Department of Education of Guangdong Province (2016KQNCX067), Education Teaching Reform Project of Guangdong Ocean
References


