Quality-Improving Strategies of College English Teaching Based on Microlesson and Flipped Classroom

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Abstract
Microlesson and flipped classroom, which incorporate the educational information technologies, are a new trend of college English teaching. Exploration on how the flipped classroom and microlesson promote innovation and application of educational information technology are of great significance. According to a survey among teachers, strategies that can improve the quality of college English teaching may include: strengthening teacher training; reforming the previous teaching evaluation system; managing the pre-class and classroom time; correctly understanding the role of modern education technology in college English teaching; paying attention to convergence between teaching materials and teaching software; implementing a variety of teaching methods, and strengthening the interaction inside and outside of the classroom.

Keywords: college English teaching, flipped classroom, microlesson, quality-improving strategies

1. Introduction
As is mentioned in the “Educational Informatization Decade Development Plan (2011-2020)” (Ministry of Education of the People’s Republic of China, 2012), when the human society comes into the twenty-first century, information technology has penetrated into all aspects of economic development and social and cultural life. People’s life style and learning style are undergoing profound changes as well. Education for all the people, quality education, individualized learning, and lifelong learning have become important features in the educational development of the information age.

“Outline of the National Medium and Long Term Education Reform and Development Plan (2010-2020)” clearly states: “the information technology has a revolutionary impact on the development of education” (Ministry of Education of the People’s Republic of China, 2010). The educational informatization can fully play the advantages of modern information technology, focusing on the comprehensive integration of information technology and education. It plays a unique and important role in promoting fair education and the sharing of quality education resources, improving the quality of education and building a learning society, and promoting the reform of education concepts and cultivating innovative talents.

The application of the newly developed “microlesson” and “flipped classroom” into college English teaching plays a pivotal role in exploring the integration of educational resources, promoting the application of educational information technology, enhancing the balanced development of education and improving the quality of college English teaching.

2. Research Status of “Microlesson” and “Flipped Classroom”
2.1 An Introduction of Related Research Outside of China
The research on “microlesson” and “flipped classroom” started very early. Professor LeRoy A. McGrew from the Netherlands putforward 60-Second Course in 1993 and Professor T.P. Kee from England proposed The One Minute Lecture (Shieh, 2009) (Liang et al., 2013). After that, in 2008, David Penrose, the senior teaching designer, online service manager from New Mexico San Juan College in the United States firstly applied the idea of “microlecture” into teaching. He called the microlessons “knowledge pulse”, and believed that it could achieve the same effect as the traditional long-time teaching only with the support of the corresponding assignments and discussions. The core idea was to combine the teaching content with the teaching objectives
closely to produce a “more focused learning experience” (Hu et al., 2012). “Flipped classroom” originated in Woodland Park High School in the Colorado Rocky Mountains in the United States. In spring 2007, because of the weather or far distance and other reasons, many students couldn’t arrive in school on time and couldn’t keep up with the pace of classes. In order to solve this problem, chemistry teachers Jonathan Berman and Aaron Sams began to record PowerPoint presentations by using recording software, as well as the voice of Berman and Sams and uploading the video to the web to help the students (Bergmann & Sams, 2012). In 2010, some elementary and secondary schools in America began to use the Khan Academy’s curriculum to experiment on “flipped classroom”. In 2011, Salman Khan mentioned in his speech “Video Remodeling Education” that many free teaching videos he uploaded to Youtube were popular with students and parents. In 2016, Khan Academy has more than 42 million registered users from 190 countries, with tutorials on subjects from basic math through economics, art history, computer science, health, medicine and more. In 2013, Dr. Noora Hamdan from George Mason University, Dr. Patrick McKnight from Pearson’s Educational Development Center, and Dr. Kari M. Arfstrom from the Flipped Teaching Network proposed four pillars: a flexible learning environment, a cultural learning shift, well-planned teaching content and professional teachers (Huang et al., 2014).

2.2 An Introduction of Related Research in China

In recent years, research on “microlesson” and “flipped classroom” has become the focus of attention of the experts and scholars in China. In 2012, “Nanyang School” of Shanghai Jiaotong University applied a teaching reform measure by combining microlesson and flipped classroom. Through the research on the characteristics of college English teachers and students in China, as well as the teaching environment analysis, Lu (2014) discussed the possibility of the application of “flipped classroom” model based on “microlesson”. Yang Xiaohong etc. (2014) proposed the problem and development path of the practice of flipped classroom teaching in China, and constructed the localizational strategy system of the teaching mode from the three dimensions of consciousness, practice and model innovation. Xie (2015) proposed to apply the teaching model of flipped classroom based on microlesson to the teaching of flash in vocational colleges. This teaching model consists of three stages: pre-class study (hierarchical microlesson as the core), inquiry-based task-driven classroom interaction, and diversified evaluation of post-class reflection. Chen (2015) carried out innovative research on the content system, skills system, task system and evaluation system of interpretation teaching, and he had created a corpus-driven interpreting “flipped classroom” teaching mode.

Through the research on the academic history at home and abroad, it is not difficult to find out that there are many achievements in the study of “microlesson” and “flipped classroom”, which have great enlightenment and significance for further research on this project. But also we can find that the current research is lacking systematic analysis; there are still some difficulties: firstly, we still need to continue to study and improve how to let the “flipped classroom” better apply to the college English teaching process; Secondly, “flipped classroom” teaching mode calls for students to have a high degree of self-control and initiative, which many students are lacking. Finally, there are still some deficiencies in the process. So “flipped classroom” needs to explore and improve in practice, which will be a long process.

2.3 Significance and Research Value

The teaching model of “flipped classroom” based on the microlesson has the advantages of letting students control their own learning, increasing the interaction in learning and improving the psychological superiority of students. It can effectively make up for the shortcomings in the current traditional teaching mode. Under the tide of China’s education and information technology reform, various colleges and universities try to improve their hardware equipment, which can also be very good to meet the implementation of the requirements of flipped classroom teaching mode based on micro-lesson. Under the background of the new curriculum reform in China, it is feasible to apply the teaching model in college English teaching.

This research is the deep integration of educational technology and teaching courses, which is conducive to strengthening the curriculum construction of college English. It is a specific implementation on the spirit of “information technology has a revolutionary impact on the development of education, which we must attach great importance to” and “to solidly promote the comprehensive integration of information technology and education deeply, and to enhance the application of educational information technology innovation and promote the balanced development of education” in the “Outline of the National Medium and Long-term Education Reform Development Plan (2010-2020)” and “Educational Informatization Decade Development Plan (2011-2020)”.

The college English teaching method by using microlesson and flipped classroom has yielded fruitful results, but there are still some difficulties for teachers in the implementation process.
3. The Shortcomings and Insufficiencies of Using Microlesson and Flipped Classroom

3.1 The Production of Micro Videos Is Difficult; the Quality Is Not High

Micro teaching video class learning quality has an important effect on the students, making high quality teaching videos not only requires teachers to have certain information technology literacy, but also must show them to students in proper form according to students’ characteristics. As to teachers, it is easy to make a teaching video but it is not easy to produce high quality teaching videos. According to a survey related to the “microlesson and flipped classroom teaching”, 4% of 211 teachers think making a microlesson video is “very difficult”, 69% say “a little bit difficult”, only 23% think that it’s easy. As to “what are big difficulties of teaching by using microlesson and flipped classroom”, the answer of nearly half of the teachers (92) is “micro video is hard to make”. In addition, there are also a lot of students reflecting that the quality of micro videos is not high, such as “micro videos can be made more perfectly”, “videos look boring”, “videos are of poor quality”, “the voice is too quiet” and so on. Through the data, we learn that micro video teaching really brought greater difficulties to the teachers, and their skills of making a micro video need to be improved.

3.2 Preparation Time Is Too Long

In the implementation of the new teaching method, teachers often complain: “making the micro videos and designing the classroom teaching will cost too much energy and time, but sometimes it can not achieve expected effect” and so on. Through a questionnaire survey which also reflects the teachers’ situation. In the answers of “What are the big difficulties in flip classroom teaching?”, nearly 90% of the teachers (189) choose “preparation time is too long”. Obviously, that is a difficult problem encountered in the field of education.

3.3 The Class Is Difficult to Control and Manage

Teachers need to change their roles in the classroom, becoming students’ mentor and facilitator, which makes it difficult to adapt to the new teaching mode and control and manage the class. According to the survey, nearly a quarter of the teachers (44) hold that “it is difficult to control and manage the classes”. Some students think that classes also need to be improved. Sometimes the problems of information technology, network or hardware can lead to chaos in the classroom.

3.4 Teachers’ Workload Is Heavy

Teachers should play multiple roles, not only for the normal classroom teaching, but also video recording, online counseling and dynamic evaluation, which will make teachers feel the burden is quite heavy. Indeed, in the starting period, micro video production and preparation, the classroom teaching design and management will increase the workload of teachers. However, with the development of the teaching mode, high-quality teaching videos are growing; online learning platform is becoming more and more convenient. Therefore, we believe that under the support of information technology, teachers’ labor can be reduced.

According to the difficulties teachers meet in the process of implementing microlesson and flipped classroom into college English teaching, strategies that can improve the quality of college English teaching are very important.

4. Quality-Improving Strategies of College English Teaching

4.1 Strengthening Teachers’ Training

Young teachers are easy to accept new things, walking in the forefront of the times and having innovative ideas, so their micro lesson’s audiovisual effects are often able to give students a good feeling. But because of the lack of the relevant technical skills of microlesson production, during the designing process, they cannot often handle the problem of content and efficiency. Designing and making a microlesson is a systematic process. It involves many details and technical problems, needing theories as a guide, so we teachers need go through a period of time to explore it. Only a skilled teacher can better implement the flipped classroom teaching, so that is why we need to strengthen the training of teachers. First of all, teachers need to master the basic knowledge of the computer, and know how to make a microlesson teaching video. It is true that some teaching platform requires professionals, but a teacher with a certain level will be more conducive to promote the development of the flipped classroom. Secondly, teachers should always update the teaching concept, as far as possible to adapt the teaching materials to attracting students’ attention during the teaching process, and show a personalized teaching class to enhance students’ enthusiasm.

4.2 Reforming the Previous Teaching Evaluation System

The previous teaching evaluation system is not suitable for “flipped classroom”. We need to reform the teaching evaluation system, increase the interaction between teachers and students, answer the questions raised by
students, design a lot of teaching activities, and make the teaching evaluation system as a tool to inspire students’ learning interests. Teaching evaluation not only includes the degree of mastery of knowledge points, but also includes the students’ self-management ability. So we need to set a teaching evaluation system matching flipped classroom, in order to better promote the application.

4.3 Managing the Pre-class and Classroom Time

Flipped classroom is a kind of teaching mode that pays more attention to the students’ self-learning and teacher’s guiding. The most effective way to improve the teaching effect is to do pre-class and classroom time management. Students need to plan well in their pre-class study time, and in the classroom, teachers need to actively guide students to learn and help students to solve the problems, and supervise them to complete their learning tasks and goals.

Flipped classroom is an advanced teaching model, and a brand-new teaching concept. First of all, it can promote the role alternation of students and teachers. Secondly, it can develop students’ self-learning ability and overall quality. So we need to increase the teaching support for the flipped classroom, and constantly enhance the level of teachers, and open up a new teaching path for college English classrooms.

4.4 Correctly Understanding the Role of Modern Education Technology in College English Teaching

In any case how modern education technology develops and achieves advanced levels, it should be positioned as the auxiliary for college English teaching. Modern educational technology is not a substitution for teachers but helps to relieve the heavy labor of teachers. It is the original intention of using modern educational technology: to assist English teaching. It cannot completely replace the teacher’s responsibility, but only to better assist teachers to complete the teaching tasks, and to achieve better teaching results. Teachers should use this good helper, and fully play the leading role of creating favorable conditions for language acquisition, saving valuable classroom time, and improving the efficiency of students’ language-learning. First of all, teachers should be effective guides to help students use multimedia network resources. Teachers can use advanced information technology to select the multimedia network resources, and to recommend resources to students with different needs according to the teaching content. But traditional teaching can only take care of the drawbacks of most students, ignoring their individual development.

Besides, teachers can also carry out effective guidance on students’ autonomous learning processes. Teachers can set different forms and difficulty topics according to the needs of teaching, and comprehensively examine or urge students to self-study. In short, no matter which way the teachers operate, they need a reasonable choice and overall consideration.

4.5 Paying Attention to Convergence between Teaching Materials and Teaching Software

After the use of modern educational technology, the arrangement of multimedia teaching materials is not corresponding to the textbooks in the same way as the teachers’ writing on the blackboard, it displays the main text in the main window, and other contents such as vocabulary explanation, background introduction will be hyperlinked to new pop-up windows. Each window is not linked through in a linear fashion, but connected by ways of association and divergent thinking. By using this classroom teaching method, students often ignore the contents of the textbooks, or cannot find the correspondence and convergence between the content of multimedia courseware and the content of the textbook. Therefore, teachers must strengthen the students’ previewing work, requiring students to preview consciously and purposefully with their own thoughtful questions, and get familiar with the contents of the textbook. While in the classroom, the students should focus on the important and difficult points, which is very important for the multimedia-assisted English teaching. The teaching materials and teaching software are not antagonistic; they do not preclude each other but benefit each other. We must pay attention to the combination of them, and let them serve classroom teaching well.

4.6 Implementing a Variety of Teaching Methods, and Strengthening the Interaction Inside and Outside of the Classroom

In the process of using the new teaching mode, students are neither reading by themselves through looking at the big screen, nor simply accept video and audio and other information. Teachers in the classroom can arrange a variety of teaching activities by using role-play, two-way translation, English debates and dubbing the film fragments etc., so that listening, speaking, reading, writing and translating will be fully exercised. Teachers can attract students’ attention through the animation, music, etc., so that the students can always be energetic and actively complete the teaching tasks and improve their learning efficiency in class. After class, multimedia network teaching environment provides a variety of effective interactive platforms for teachers and students. Bulletin board can be used to unidirectionally publish notices and to solve important and representative issues.
E-mails, online forums, microblogs and other ways also can be used to communicate with students. These methods are effective ways for teachers to understand the needs of students and listen to the ideas of students, but also an effective means to make the relationship between teacher and students closer. In addition, QQ, WeChat and other convenient chat tools can meet the needs of timely communication. Only by strengthening the interaction between teachers and students inside and outside the classroom can the great power of modern educational technology be further played.

5. Conclusion
The 21st century is the era of knowledge-based economy and information technology is gradually affecting all aspects of social life, linking everyone’s life with work closely, which will have a profound impact on education. The rapid development of modern educational technology has had an unprecedented impact on higher education. College English teachers should improve the skills of hardware operation and software writing as soon as possible, update teaching thoughts and teaching methods, actively explore the application of modern educational technology, reduce or even cancel its negative affections, and contribute to improving the quality of college English teaching.

References
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**Questionnaire:**

1. How long have you been a teacher?
   A. less than five years   B. five years to ten years   C. ten years to fifteen years   D. more than fifteen years
2. Which degree do you have?
   A. Bachelor’s degree   B. Master’s degree   C. Doctor’s degree   D. other
3. Have you ever heard of microlesson and flipped classroom?
   A. yes   B. no   C. heard of it but not familiar with it
4. What’s your attitude toward microlesson and flipped classroom?
   A. positive   B. negative   C. neutral
5. Do you like using the micro video in class?
   A. yes   B. no   C. a little bit
6. Do you think it’s difficult to make a micro video?
   A. Yes, it’s very difficult   B. No, it is simple   C. A little bit hard for me
7. If other teachers use video in class, do you think it is interesting?
   A. Yes, it is very interesting   B. No, it is boring   C. a little bit D. I am not sure.
8. If you have any difficulty in making micro videos, what would you do?
   A. search online   B. ask for other teachers’ help   C. give up
9. Will you find a micro video for reference online when you have some difficulty in making one?
   A. often   B. occasionally   C. never
10. Do you think it is necessary for the school to train teachers for educational technology training?
    A. Yes   B. No   C. I am not sure.
11. Do you think the school should improve the hardware system of micro video production?
    A. Yes B. No C. I am not sure.
12. Are you satisfied with your micro video production?
    A. Yes, I am satisfied   B. No, not at all   C. the quality of micro videos needs improving
13. ‘The biggest difficulties I meet in microlesson and flipped classroom teaching are ____
A. micro videos are hard to make
B. preparation time is too long
C. It is difficult to control and manage classes
D. students’ self-control is poor
E. students’ teamwork is not good
F. students’ self-study platform is poor
14. According to your teaching experience, do you have any other opinions and suggestions about microlesson and flipped classroom teaching?

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