

Introduction and purpose

College English teaching aims at improving students' application skills. However, a frustrating phenomenon in traditional college English class has aroused much concern. Most students are passive learners short of interest and enthusiasm in English learning, let alone initiative application, which further lead to poor English application especially writing and reading abilities. It is high time to change it. In order to improve students' learning predicament in English learning and enhance their reading and writing abilities, this study aims at establishing a SPOC-based mixed classroom mode for College English. Besides, an empirical study was done to prove the effect of mixed classroom design on reading and writing ability by means of control experiment and statistics analysis tool, SPSS. The SPOC creates a high-quality online learning environment for knowledge learning and thus more time can be allowed for classroom output activities. In this study, elaboration is conducted around four teaching phases of SPOC-based mixed teaching: SPOC online learning, offline cooperative learning, writing skill construction and prompt evaluation. Research and analysis show that this design has obvious advantages in improving students' reading and writing abilities.

Research method and main process

An empirical study was done to prove the positive effect of mixed classroom design on reading and writing ability by means of control experiment and statistics analysis tool, SPSS.

- Pretest. It is to test students' basic reading and writing ability. Independent sample t-test was conducted with IBM SPSS statistics software to ensure no significant difference exist in students' basic reading and writing abilities.
- Sampling group teaching. According to the results of the pre-test, one class was the experimental group with Mixed classroom teaching mode. The other is the control group, with traditional teaching mode, only offline classroom lecturing.
- Post test. After 20 weeks of experimental teaching, the two groups of students took CET-4 to collect their reading and writing scores as the post-test data of their reading and writing ability. Independent t-test was also used verify whether mixed instructional design can significantly improve students' reading and writing abilities.
- Analysis of post-test Result.

SPOC-Based
Mixed Teaching
mode

- A. SPOC Autonomous Online Learning
- B. Cooperative Learning
- C. Skill Construction
- D. Timely Evaluation

Result: The independent sample t-test results showed that there was a significant difference between the two groups in reading ($t = 4.637$, $DF = 90$, $P = 0.00 < 0.05$) and writing ($t = 4.384$, $DF = 90$, $P = 0.00 < 0.05$). The analysis shows that the SPOC based flipped design of College English reading and writing can effectively improve students' English reading and writing ability.

Conclusions

The research confirms that SPOC-based mixed classroom encourages active learning and skills improvement in reading and writing. SPOC system provides students with the opportunity to view and stay a variety of lectures to make English knowledge acquisition interesting and to promote students' learning autonomy and enthusiasm. In order to exert its greatest effectiveness, teachers should make the following efforts. Meanwhile, teachers should strengthen the guidance and supervision of students' autonomous learning, and instill self-study strategies so as to improve the students' autonomous learning ability. Cooperative learning and skill construction are the most important phases of offline classroom teaching, which directly affects the cultivation and improvement of students' English reading and writing abilities. Cooperative learning helps students deepen reading input learning, acquire the organization of paragraph and text and correct use of language knowledge. Skill construction helps students to use reading input learning in reverse to exercise writing output. Teachers should help and guide students to apply language gradually to form their own writing. It is also important to evaluate the output of students in a timely and effective way. Only by connecting each phase of mixed classroom can we promote the internalization and application of knowledge and improve the students' reading and writing abilities. In conclusion, the benefits of SPOC enhanced mixed classroom may cause a distinct change in English learning.