

# Research on the Reform Method of the Teaching and Examination for Erya Online General Course under the Background of “iGeneration”

Huining Zan

School of Law, Tianjin Polytechnic University, Tianjin 300387, China

zanhuining@tjpu.edu.cn

**Abstract.** The reform process of the teaching and examination for Erya online general education course during the last 7-years at Tianjin Polytechnic University is introduced in detail, and the effect is evaluated by data analysis. Furthermore, the prospect of network teaching is proposed based on the learning characteristics of “iGeneration” students.

**Keywords:** iGeneration; reform method; general education; teaching and examination mode.

## 1. Introduction

Nowadays, the rapid development of technology has dramatically promoted the evolution of the global information, which will certainly propel the great change of the learning environment and skills. The information network teaching at home and abroad has become the inevitable trend of teaching reform. Students of the 21st century, also known as “iGeneration” learners, grow up in mobile technology and virtual reality games. Their learning contents and methods are not only different from the traditional ones for their parents and teachers, but also different from those for the slightly older “Net Generation”. The changes between technologies and students have put forward new demand to the traditional teaching methods, and it is necessary to change the teaching assessment methods to better meet the needs of students, who are now used to the advanced computer techniques as their natural learning methods.

## 2. Introduction of the Network Education Platform for Erya Online General Education Course

General education aims at cultivating the ability and literacy of students with a global perspective. However, there are some problems in the courses of general education at Tianjin Polytechnic University, such as insufficient sources of general education courses, difficulties for students in selecting, and no enough appeal to students. In addition, teachers are not willing to set up novel general education courses, and the level of some lectures needs to be further enhanced. To solve these problems, Erya online general education course was introduced in 2011. By using network teaching mode, the needs of students for independent choice and learning have been satisfied, resulting in the foundation for lifelong learning at the university. On one hand, the courses on Erya platform are taught by domestic famous experts and masters from various disciplines, providing comprehensive and rich learning resources. On the other hand, students can obtain elective course credits through online independent learning.

During the first semester of 2011-2012, three Erya network general courses were introduced into the university, including “A brief history of science and technology”, “Ten speaks of Ming dynasty” and “the pursuit of happiness: A perspective of western ethical history”. According to the needs of the curriculum, one assistant teacher is arranged in the class to play the video of the network courses, which can be still regarded as the traditional classroom teaching mode. The class is dominated by the assistant teacher, who offers some relevant explanations and guides students both online and offline learning with Erya courses as the media. Examination is adopted in the course assessment. A total of 561 students participated in this term, and satisfactory results were obtained, with a pass rate of 71.5% and a student satisfaction rate of 95%. From the second semester of 2011-2012, the number of Erya online general education courses increased, and the results are summarized in Table 1.

Table 1. Erya online general education courses for each term.

Semester	Number of Courses opened	Number of students attending class	Average number of courses
2011-2012-2	32	3512	109
2012-2013-1	28	3566	127
2012-2013-2	25	3080	123
2013-2014-1	28	3979	142
2013-2014-2	32	4488	140
2014-2015-1	28	3946	141
2014-2015-2	28	3619	130
2015-2016-1	27	3557	132
2015-2016-2	30	4596	153
<b>2016-2017-1</b>	<b>38</b>	<b>4132</b>	<b>109</b>
2016-2017-2	42	4251	101
<b>2017-2018-1</b>	<b>59</b>	<b>5116</b>	<b>87</b>
2017-2018-2	57	5288	93

$$\text{Average number of courses} = \frac{\text{Number of students attending class}}{\text{Number of Courses opened}}$$

As can be seen from Table 1, the number of Erya online general education courses for each term was about 30 from the 2011-2012-2 to the 2015-2016-2. That number increased to 40 at the 2016-2017 school year, and further increased to about 60 at the 2017-2018 school year. Normally, the total number of students taking the Erya online general education course was about 4,000 in each semester. Particularly, up to 5000 students took this course during the 2017-2018 school year. It is worth noting that the average number for each general education course raised gradually from the second semester of 2011-2012 till the second semester of 2015-2016, when it reached the maximum of 153. With the increase of general education courses from the 2016-2017-1, the average number for each course decreased gradually and became steady at about 100.

### 3. Insufficient Teaching and Examination Mode for the Erya Online General Education Course

Although problems in the courses of general education, such as insufficient sources, difficulties for students in selecting, and some unqualified lectures, were solved by the introduction of Erya online education platform in our school, but along them there appeared some new questions. Specifically, with students receiving quality teaching resources, the traditional mode of teaching and examination did not match the network teaching platform.

Firstly, in the context of global information, “iGeneration” students could access the teaching website system whenever and wherever possible for online learning. Hence, self-management ability is urgently needed for the study. In order to adapt to the new situation, teachers should take efforts to reform teaching and examination methods. If teachers only considered Erya courses as the media and play the video of the network courses at classroom, it is easy for students to relax their own, including lack of concentration, doing their homework and playing with cell phones. Even worse, students would take these classes as easy grades, which fail to fulfil its function in guiding students to study independently [1].

Secondly, it should be noted that the lack of mutual communications between teachers and students is a dramatic intrinsic limitation for the network media. Without interaction and cooperation in class, the positive effect may possibly be discounted. Although one teacher was arranged in each class, limited assistance was provided through the learning process. In some cases, students in the classroom paid no attention to whatever lectures had given, when the teacher was negligent in the supervision and management.

Thirdly, the course assessment was relatively easy, while the blindness, randomness and utilitarian purpose were often found in the learning behaviors of students. Along with the guidance and supervision from the assistant teacher, the attitude of the students toward online courses must be corrected. Besides inspiring their learning interest, effective means must be taken to urge the students to master the related knowledge. Therefore, it was imperative to implement teaching and examination reform in the Erya online general education course.

#### 4. Teaching and Examination Reform for the Erya Online General Education Course

Effective reform process of the teaching and examination for the Erya online general education course started from the first semester of 2016-2017. According the questions mentioned above, improvements have been made by the following measures:

First of all, considering the problem of insufficient self-learning ability of students in the online courses, the teachers in charge of course management will meet with their students at the first class, and introduce the contents, objectives, assessment methods, etc. of the course. Meanwhile, QQ group, WeChat group and other communication software systems will also be established to promote students learning. Through the first meeting class, students can fully comprehend the assessment methods, which is conducive to better self-learning, reasonable arrangement of study time and full preparation for examinations. Thus, the pass rate of the Erya online course has been enhanced [2].

Additionally, in cooperation with the online course, teachers responsible for curriculum management are required to actively participate in the online teaching process. At the same time, regular training sessions for Erya online platform are offered to the teachers by school. Particularly, the responsibilities for the assistant teachers have been clarified, and there are rules to follow in the management process.

At last, the assessment methods and evaluation criterion have been reformed and standardized. The test time and place of the final online examination are fixed, while the final grade consists of 30% of the usual video watching score and 70% of the online exam result. The authority, fairness and feasibility of the evaluation are guaranteed.

Then, taking "The beauty of Chinese poetry" for an example, the effect can be verified by comparing the pass rates of the courses before and after the reform. All the data and results are shown in Figure 1 in details.

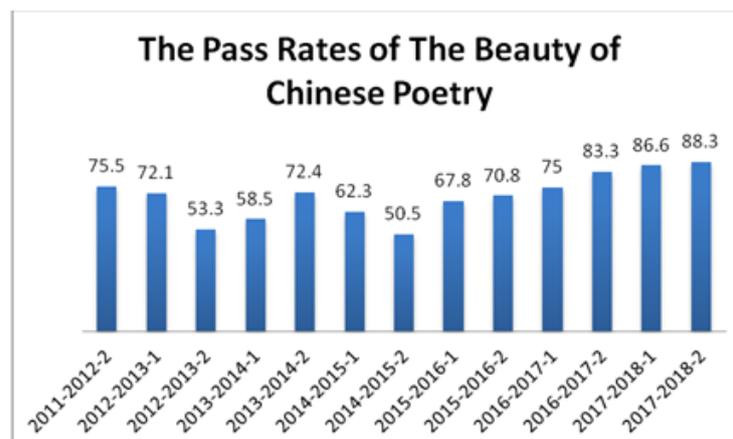


Fig. 1 The pass rates of "The Beauty of Chinese Poetry" for each term

The teaching and assessment mode of "The Beauty of Chinese Poetry" has been passed through four stages, and three reforms have been carried out before and after. All these indicate that the school, teachers and students have been all explored the best way to integrate online courses with traditional teaching, online test and traditional examination.

In the first stage, since "The Beauty of Chinese Poetry" was first opened at the second semester of 2011-2012, the traditional teaching mode was adopted. The assistant teachers led students to finish the learning with Erya online courses as the media, and gave some relevant explanations. Scores were given through the final assessment with a decent pass rate of 75.5%. Nevertheless, the pass rate gradually reduced to below 60% during the terms of 2012-2013-2 and 2013-2014-1. With this kind of teaching and assessment mode, "iGeneration" students did not fully develop their learning autonomy, neither can teachers be liberated from the classroom management.

In the second stage, the first reform of the teaching method for Erya online platform was conducted from the 2013-2014-2 to the 2014-2015-2. Using Erya online platform and the internet examination system, students could learn independently, complete video viewing, and take online exams within the specified time to earn the course credit. However, the course pass rate did not get improved, suggesting that their independent study was not very effective without supervision and guidance.

In the third stage, the second teaching and examination reform for the Erya online general education course was initiated in the 2015-2016 school year. The teaching adopted the traditional curriculum model, and the students returned to the classroom to finish their video learning. The traditional mode of examination was utilized for the evaluation, and the passing rate increased from 50.5% of the previous semester to 67.8%, indicating that the supervision of teachers is necessary for the students learning. In this teaching and test mode, although the online teaching was used, the teachers were not freed from the classroom.

In the fourth stage, the third reform of the teaching method for Erya online course started at the first semester of 2016-2017. Online self-learning and online computer room test were utilized, and students could complete independent study on the Erya online platform. After completion of the task, they could apply to the management teacher to conduct the offline computer room test. The pass rate was much higher than that of the previous school year. In the following semester of 2016-2017, this novel teaching and test mode was continued, and the pass rate greatly improved to 83.3%. As can be seen from Figure 1, the pass rate steadily increased in the 2017-2018 school year, and both the quality and fairness can be guaranteed. This teaching and assessment mode have been approved by both students and teachers, for it not only stimulates the learning enthusiasm of students, but also liberates teachers from the classroom.

## **5. Conclusion and Prospects**

Nowadays, to realize the target of training talent, teachers for general education courses must initiatively adapt to the new situation. In response to the characteristics of the "iGeneration" students, the teaching and management mode for online courses should be adjusted through continuous reform and compilation. Furthermore, online courses can also be integrated into the new curriculum to construct characterized course system.

To improve the efficiency of online courses, various kinds of encouragement means and assessment methods can be taken to excite the learning enthusiasm of students, such as optimizing the contents, adding cooperation discussions, increasing the content of questions and answering. Particularly, the online discussion area and group interactive area can be set up, all of which will be included in the evaluation system. More significantly, students can consult teachers or discuss with their classmates at any time through the mobile Internet, while teachers can initiate discussions as well as answer questions online in real time, contributing to the cultivation of problem consciousness and query spirit.

## References

- [1]. G. Chen, C. Chen. Exploration and Reflection on General Education Courses in Colleges and Universities under the “Internet +”—Taking the Jiangnan Culture Series of Zhejiang Normal University as an Example. *China Education Daily*. Vol. 6 (2017) No. 1, p. 8.
- [2]. H. Zhang, C. Wang. The demand and countermeasure of teaching and management of general education course in universities under the Information Environment. *China Education Info*. Vol. 216(2012), p. 63-65.