# **Using Competition Method in E-Learning Course Design**

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**Abstract.** Using Competition Method in E-Learning Course Design is that teacher design contest according to teaching content and the professional knowledge and skills that students should master. Or students refer to the existing game project which design for strong and realistic game project under guidance of a professional teacher. Students could combine learning theory and practical skills in a fully independent competition and reinforcement learning interest. Teacher can achieve good teaching effect according to design course by this way.

#### Introduction

Teaching innovation reforms existing teaching method. Teaching innovative would stimulate creative of students and found teaching environment of mutual motivation. Teaching innovative would also make students to exert their own potential and stimulate students learning initiative. Teaching innovative can improve the teaching effect [1] [2].

Compare with traditional classroom teaching, in E-leaning teachers could not understand students' learning interest in a timely manner. In E-learning most times student learns courses alone. There is a lack of interaction between students and lack of learning atmosphere.

In addition to design an effective assessment in E-learning is also a problem. In some course such as programming and WEB design, traditional method of closed book examination could not reflect operation of the course well. Students could not play their skills well in the exam time. Test results could not reflect actual teaching effect. In E-learning students could take exam in different time. Traditional unified examination and monitor examinations would not suitable for E-leaning. E-Learning course design based on competition can solve above problems.

Using Competition Method in E-Learning Course Design is that teacher design contest according to teaching content and the professional knowledge and skills that students should master. Or students refer to the existing game project which design for strong and realistic game project under guidance of a professional teacher. Students could combine learning theory and practical skills in a fully independent competition and reinforcement learning interest. Teacher can achieve good teaching effect according to design course by this way.

## Advantage of Using Competition Method in E-Learning Course Design

Using Competition Method in E-Learning Course Design has changed traditional teaching method which knowledge just has main direction from teachers to students. In competition students solve the difficulties at the same time they could learn knowledge comprehensively. By self-study and extending learning extracurricular knowledge, students extrapolate ability training. Thus making it easier for students to understand and master contents of courses. Students participate in the competition process, not only to master the professional knowledge and skills, but also to experience the hardships and fun of innovation and to enhance the spirit of teamwork, mobilize the enthusiasm of learning.

Using competition method in E-Learning course design promotes students study consciously and

carries out skills training. By mutual complement and penetration of theoretical knowledge and skills it would improve teachers' teaching level and find out problems in teaching.

Using Competition Method in E-Learning Course Design could improve students' learning interest. In order to win in the competition students can concentrate on the class and improve students' learning enthusiasm. Competition is a kind of external excitation power to make students keep focus on teaching content. The leader group wants to keep advantage. The backward group wants to get rid of predicament, and strive to move forward. In the competition, majority of participants are not much difference, if participants want to be better they must redouble their efforts. Teaching method on competition could satisfy the students' self – worth needs [2] [3].

Using Competition Method in E-Learning Course Design could improve collaboration of teaching activity. Students are form teams to cooperate and compete with each other. It helps to excavate potential of students and cultivate their ability. When every group has just same intellectual and comparable ability, the group which has concerted efforts is bound to win. A group which likes a mess will inevitably be eliminated. Using competition method in E-Learning course design can make the group members have team concept and global consciousness.

Using Competition Method in E-Learning Course Design could improve students' learning ability. It can help students promote knowledge into ability and pay attention to the cultivation of practical ability. It is a kind of practical activity. Students not only understand of theoretical knowledge, but also mobilize to observe, memory, reasoning, association, thinking and other functions.

Using Competition Method in E-Learning Course Design could help students to connect teaching content. In incentives under the competition mechanism, students would master the knowledge. Reflection of game experience also can enhance students understanding of teaching content.

## Technological process of using competition method in E-Learning course design

Technological process of using competition method in E-Learning course design is as Figure 1.

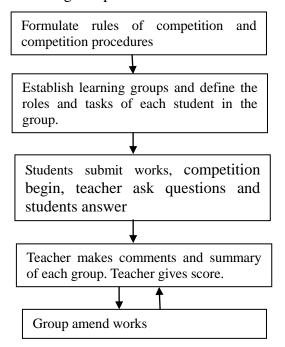


Figure 1 Technological process of using competition method in E-Learning course design First, teacher should formulate rules of competition and competition procedures according to Learning objectives and requirements of course. It makes students' preparation work with pertinence, and ensures the orderly competition.

Teacher gives students reference materials lists. Teacher should encourage students to query information according to these lists. Students are required to prepare before class. In classroom

teaching would inspect students to preview of competition by asking questions.

To formulate detailed rules of competition and specific competition process, teachers are challenged about teaching ability and teaching level. If the competition rules are not clear, it will not only affect the level of competition, but also lead to controversy and hinder the process of competition. When teachers formulate rules of competition and competition procedures, they could refer to relevant regulations such as computer ability competition and so on. Teacher should be sure to make the competition fair and effective and to help students grasp the content of study.

When teacher help students to establish learning groups and define the roles and tasks of each student in the group they should ensure that the number of students in each group and level of learning of each group are equivalent. It can increase the degree of competition. At the same time they should ensure that each member of the group has a specific task. In group student should help each other and to form a fine style of study. It would ensure that each student will get the opportunity to exercise. Every group should have a leader to responsible to decompose learning task for each member in group, to organize group discussion, to coordinate relationship between group members, and to communicate with teachers [4].

In competition, match between the group members is very important. Each member of the group should make a statement to show what he has done. After presentation team members should answer questions from teacher and classmates. Teachers should confirm students' questions should efficacious and controls the tempo of competition.

In competition, teacher should focus on multi direction interaction such as teacher-student interaction, student-student interaction, and group interaction. Interactive forms are such as question, show, exchange of ideas, group discussion, difficult analysis, point of view, issue of the review, etc.

The teacher's comments and summary of each group are very important to students. Students may not be able to grasp well of depth and breadth of discussion according to students' learning content, and important degrees of teacher and students' questions. Teacher should comment on performance of each student in the competition and the wonderful performance should be praised, the inadequacies one should be criticism.

In competition, many questions from student are scattered and trivial. Teacher should help group members to establish contact with the questions. For some of important issues, if students do not put forward in the competition, teacher should remind students to pay attention to Content of courses, and teacher should give a brief analysis about important issues. When students' discussion may evasive for difficulty, teachers should appropriate analysis to help students understand and master course better.

At the end of competition, it is very important that groups should amend their works according to result of competition. So students can have a deep impression on the difficulty of learning.

## Problem should pay attention of using competition method in E-Learning course design

Teacher should control tempo of competition effectively, do hard work to prepare class, understand preparation of each groups, and give some guide. The subject of study is students. Teacher is just a guide. Teacher should cultivate students' ability of autonomous learning, independent thinking, analysis and evaluation. Teacher also should improve students' ability of practical use, cooperation and exchange and ability of flexible strain. In the process of teaching, teachers should grasp the sense of propriety, should not excessive intervention students' game preparation. Teachers should guide students to think, to analyze problems and organize ideas [5].

Teacher should prevention and handling emergencies in competition. Students are individual activities. A variety of unexpected emergencies can occur at any time. Teachers should develop with competition rules and specific procedures of contest. They should give some actions of prevention of unexpected situations as far as possible. When unexpected events have happen in competition, teacher should be calm, deal with problems. Teacher should make sure that unexpected events do not affect the teaching discipline and competition.

## Practice of using competition method in E-Learning course design

In the spring of 2015 we used using competition method in E-Learning course design in WEB application technology. At the end of the teaching period, 90 people in two teaching classes were investigated, and 87 valid questionnaires were returned. 65 were satisfied with the using competition method in E-Learning course design. Students' academic background is 15 persons from law school, 23 persons from accounting department, 17 persons from art school, 20 persons from finance department and 15 persons from mathematics department. Investigated results of using competition method in E-Learning course design is following table 1.

Items	Most satisfied	satisfied	No satisfied
Teaching method help aroused in learning	69/87 (79%)	11/87 (13%)	7/87 (8%)
Rules and procedures of competition	77/87 (89%)	10/87 (11%)	0/87 (0%)
Equal in group	7/87 (8%)	40/87 (46%)	40/87 (46%)
Time for prepare works	23/87 (26% )	22/87 (26%)	42/87 (48%)
Guidance from teacher	70/87 (80%)	13/87 (15%)	4/87 (5%)
Questions and answers in competition	63/87 (72%)	7/87 (8%)	17/87 (20%)
Teacher's comments and summary	80/87 (92% )	6/87 (7%)	1/87 (1%)
Reference materials	17/87(20%)	44/87 (50%)	26/87 (30%)
More courses using this teaching method	68/87 (78% )	15/87 (17%)	4/87 (5%)

Table 1 Investigated results of using competition method in E-Learning course design

Students were most satisfied with the teaching method that could have aroused interest in learning. When they saw their own works they feel great, etc. Not satisfied points were to spend more time to do the work and it was unfair that in group some person just did less work but he could get the same score as other students in group. Student wanted that the reference materials for students to read before the class should be more targeted, and more effective for control allocation of roles and coordination of work.

### Conclusion

Using competition method in E-Learning course design has changed teaching and study mode both of teacher and students. In traditional teaching method, knowledge flows mainly from teachers to students. Students just listen. In using competition method in E-Learning course design, knowledge flows in network transmission. Knowledge flows not only from teacher to students but also from students to students. Even from students to teachers. Teacher would fully mobilize the enthusiasm of students learning, so as to improve the teaching effect.

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