



Research on the application of game-based learning in the teaching reform of management courses

Jianhong PENG

Teaching and Research Office of Business Administration, School of Management, Jiujiang University, Jiujiang 332005, China

Abstract: Game-based learning refers to the learning process in which learners understand the rules of the game to a certain extent and ultimately solve problems or complete tasks. Game-based learning is a new and effective learning method. This method is different from the traditional teaching method, which can fully mobilize the learner's subjective initiative and realize the learners' autonomy, enthusiasm and creativity through the redesign of learning content, method and process. Game-based learning can stimulate students' initiative and enthusiasm, and achieve the goals of knowledge learning and ability training.

Key words: game-based learning; learning methods; learning effect

1 Introduction

With the development of science and technology and the progress of society, games are also playing an increasingly important role in modern education. Especially with the popularization of digital technology and mobile internet technology, more and more parents and students are beginning to accept game-based learning methods, and game-based learning is gradually entering the field of education.

Game-based learning refers to the integration of games into school education, the introduction of game elements into the classroom, the full play of students' initiative and enthusiasm in learning, the stimulation of students' interest in learning, the cultivation of students' autonomous learning and exploration abilities, and ultimately the promotion of students' comprehensive literacy through game-based learning.

Game-based learning can effectively stimulate students' interest and initiative in learning, promote students' knowledge acquisition and ability improvement, strengthen teachers' professional literacy, and stimulate students' enthusiasm and potential for learning. Applying game-based learning to practical education is of great significance.

2 Purpose of adopting game-based learning

The aim of game-based learning is to improve students' learning efficiency and stimulate their interest in learning. The process of game-based learning enables students to experience the sense of achievement and satisfaction in the process of learning, thus stimulating their interest in learning. Game-based learning combines education with entertainment and realizes the effect of teaching with pleasure. In the process of game-based learning, learners need to understand the rules of

the game to a certain extent, and ultimately to solve problems or complete tasks as guidance, so as to achieve students' autonomy, enthusiasm and creativity.

In game-based learning, students can choose appropriate games according to their interests and needs. They can choose their own game content according to their own preferences, for example, they can choose some of their favorite characters and stories [1]. Through game-based learning, students can fully understand what they have learned.

Management courses usually include management, accounting, financial management, marketing and other courses. Game-based learning can enhance students' interest in learning. Take management science as an example, in the management science course, the traditional teaching method is the teacher teaches the theory knowledge, and the student listens to the teacher passively. Case analysis means that teachers explain theoretical knowledge to students through cases and let students learn theoretical knowledge through cases. In the management course, the teacher carries on teaching through the case analysis way, which will let the student understand the theory knowledge deeply.

In management courses, if the traditional teaching methods are followed, students can only passively accept knowledge points. For example, in the course of "Principles of Management", teachers explain the relevant knowledge of management to students through case analysis. During the case study, the teacher can set up a game scene. After explaining the cases to the students, the students will play the roles of customers, enterprises and consumers and this process may enhance students' enthusiasm and initiative. Under this kind of teaching method, they may raise students' thinking ability, language expression ability and communication ability and so on.

3 Requirements for implementing game-based learning

In game-based learning, learning content refers to those that can stimulate students' interest in learning and stimulate students' motivation and desire for learning. The contents of game-based learning mainly include three aspects: one is a challenging subject closely related to real life, the other is a content that enables students to solve problems in games, and the third is a subject closely related to real life, such as science, technology and mathematics.

In teaching, teachers should refine the rules and strategies according to the characteristics of game-based learning, and combine the cognitive needs and emotional needs of students. In the design of learning content, teachers can appropriately add some interesting, stimulating, challenging content. In addition, teachers can stimulate the enthusiasm and initiative of students to participate in learning activities through teaching strategies and methods, and improve students' ability to solve problems and complete tasks.

3.1 Rules of the game

The rules of the game refer to the rules that players must abide by and play a decisive role in the game, which is the most important factor determining whether players can proceed. The rules of the game to a large extent determine the player's action strategy, that is, players how to play the game. Therefore, the teacher must clearly define and explain each rule to help students understand the learning content and guide students to complete the task in the game [2].

In general, teachers will formulate two types of rules: one is the behavior rules, the other is the value rules. The rules of behavior refer to the instructions that the player completes the task and gets the reward. For example, a teacher might ask students to complete a task in the "task-reward" order, or they might ask students to complete a task within a given time and receive a reward. Value rules refer to the advantages, disadvantages, or other attributes that players have over other players. For example, a teacher might ask students to complete a task within a given time, or ask students to reward group members after completing a task in groups.

3.2 Feedback mechanism

The feedback mechanism in game-based learning mainly refers to providing learners with timely feedback to help them gain a sense of success and achieve their goals. Therefore, it is necessary to design an effective feedback mechanism to help learners achieve success and progress in time, so as to enhance their sense of achievement and self-confidence.

At present, there are two types of feedback mechanisms for game-based learning: one is based on the completion of goals, i.e. reward for the completion of tasks, and the other is based on learning ability and behavioral performance, i.e., learning about students' abilities and behavioral performance through evaluation [3].

Taking management course as an example, as it is a subject with theoretical and practical significance, students need to master basic knowledge such as basic theory, management methods, and management terminology. At the same time, management course is also a skill subject, which needs to master the basic skills of listening, speaking, reading and writing management. Therefore, it is necessary to provide corresponding feedback mechanisms in the process of management course learning to help students understand their own level and ability, and get a sense of success in time, for example, in the completion of teaching tasks to give encouragement and praise, in peacetime to give positive feedback, comments, etc.

3.3 Teacher participation

Teachers are the leading force in classroom teaching, but also an important guide for students to learn. In game-based learning, teachers should not only play the roles of organizer, collaborator and guider, but also play an important role in the whole process of teaching activities. Therefore, teachers should participate in the design and implementation of game-based learning, strive to improve their understanding of game-based learning, actively participate in the process of game-based learning. Teachers should guide students to master scientific and effective learning methods and correct learning strategies step by step in the process of game learning. At the same time, we should encourage students to explore independently, cooperatively and actively reflect, and improve their ability to analyze and solve problems. Teachers should strive to provide students with as many opportunities and avenues for success as possible [4].

3.4 Evaluation method

The evaluation methods mainly include the evaluation of learning results and the evaluation of the learning process. The evaluation of learning outcomes is to evaluate the creativity, initiative and ability of learners according to their cognition of learning outcomes, and take it as the basis of rewarding and punishing. In game learning, teachers can use the following two ways to evaluate:

One is individual evaluation, that is, learners are evaluated by the knowledge and skills acquired through game learning. Teachers can conduct a comprehensive evaluation of the learners according to their task completion and activity performance.

The other is group evaluation, i. e. game-based learning in groups. The knowledge and skills acquired through game-based learning can be shared among team members, and can stimulate the spirit of cooperation and competition among team members. At the same time, the creativity and initiative of students in game-based learning can also be used as a basis for teachers to reward and punish students [5].

3.5 Organization form

Game-based learning can be divided into three forms: the game-based learning led by learners, the game-based learning led by educators and the game-based learning involved by both sides. Game-based learning, which is completely dominated by learners, in many cases appears as "learning by playing". This teaching method is very suitable for classroom teaching, but it sets higher requirements for learners. Game-based learning led by educators needs teachers to play a leading role in teaching activities, create good situations, mobilize the enthusiasm of students to participate in learning, and

achieve teaching objectives.

4 Examples of game-based learning for management courses

Management courses are closely related to students' life. If game-based learning method is applied to management courses, unexpected results will be achieved. This paper takes case analysis, scenario simulation, role creation, role playing, team building in management courses as examples.

4.1 Case analysis

Case analysis is an essential part of management courses. In management courses, case analysis is a key link, which is helpful to improve students' ability to analyze and solve problems. The process of case analysis is that under the guidance of the teacher, students analyze, judge and make decisions according to what they have learned. In this process, students will encounter various problems and difficulties. In management courses, case analysis can help students apply their knowledge to solve various problems they encounter in life, for example, how to manage themselves and their families, how to get along with others, and how to allocate work efficiently. Through case analysis, students can engage in self-directed learning, collaborative learning, and exploratory learning, so as to cultivate their ability to discover, pose and solve problems.

4.2 Scene simulation

According to the teaching material or the course content, the situation simulation is to let the students use the knowledge and skills to solve the problems, so as to gain experience, comprehension and learning. The application of scene simulation teaching method in management courses is an extension of classroom teaching, which enables students to master the knowledge in a specific context.

4.3 Role-playing

In the teaching of management courses, role-playing is integrated into the management courses to let the students think and practice constantly in the process of game learning. This kind of game-based learning is a teaching mode that integrates game, learning and practice. Through role-playing, students can continuously think and practice during the game learning process, thus enhancing students' comprehensive ability. For example, in the "management communication" teaching process, through role-playing, students can simulate real business operations. In the process of simulating enterprise operation, the teachers let the students play different roles, then let the students put forward questions for different roles, and finally, let the students answer different questions. Role-playing is a teaching mode integrating game, learning and practice, which is one of the most effective methods to integrate game-based learning into management courses. Through role-playing game study, students' leadership ability, team cooperation ability, communication ability, strain ability and so on may be raised.

4.4 Character creation

In the process of role-playing, teachers can not blindly explain according to the content of the book, and they need to adjust the role according to the response of students. In the process of role creation, teachers can divide different groups into several groups and each group chooses a leader, and then the leader of each group leads the members to create the role. This can give full play to the initiative of each student, so as to cultivate their sense of teamwork, leadership and communication skills.

4.5 Team building

In the management course reform, team building can be adopted to cultivate students' team consciousness. In management courses, for example, teachers can give students a task, so that students work in groups to complete the task. In order to improve the team consciousness of the students, we can use the way of scene simulation to set up the content of

the management course as a scene play. After designing each role, teachers let the students rehearse in groups and make a comparison after the rehearsal. Finally, according to the evaluation results, the best team will be determined.

Integrating game-based learning into management courses can not only improve students' interest in learning, but also cultivate their comprehensive ability. The following aspects should be paid attention to when applying game learning in the reform of management courses:

Firstly, gamified courses need to set reasonable game learning tasks. Secondly, the rules of the game should be clearly set, criteria for judging the results of the game should be provided, and the conclusion of the game should be supported. Thirdly, other considerations related to this game should be set.

In the teaching of management courses, due to their strong professionalism, students are prone to develop fear of difficulty and lack interest during the learning process. Therefore, teachers can properly use the game teaching method in the teaching of management courses, such as case analysis, scene simulation, role play and role creation.

5 Conclusion

Through game-based learning, teachers can use the game mechanism to stimulate students' interest, help students improve their interest in the learning process, and also improve their comprehensive abilities during the game-based learning process. Through game-based learning, teachers can design game-based tasks according to course content, combine classroom knowledge and game mechanism, and use the game mechanism to stimulate students' interest. In the reform of management course, the use of game-based learning can enrich teaching content, expand the teaching means and optimize teaching resources. Game-based learning in management course reform can also help students participate in curriculum design, participate in class discussion and solve learning problems.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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