The Case Design of Serious Games

——Taking College Students Civilization Etiquette Knowledge and Skills as An Example

Ling He Xiaoqiang Hu Jiugen Yuan

Jiangxi Science & Technology Normal University Nanchang, China

Abstract

This paper introduces the definition of Serious Games, and the advantages of application of Serious Games in college Students civilization etiquette knowledge and skills. It also demonstrates how to design a case of Serious Game.

Keywords: Serious Game; case design; Civilization Etiquette Knowledge; Skills

1. The Case Design of Serious Games

According to the occupation technology education theory, situational learning for skills training and development is essential.

Serious games for students have one or more professional skills of situational simulation training function, and play a relevant role in the actual application. College students before social environment personal practice can pass through the corresponding serious game, to experience professional skills development environment, and to constantly exercise and training, in a virtual environment to perceive the real working environment. It can greatly enhance the learning fun at the same time, both for official posts to lay a good foundation, but also for formal training to save time, financial cost, to make the professional skills training more effective and efficient.

1.1. The Definition of Serious Games

Serious games (SGs) are a category of video and computer games. Serious games can be of any genre, but the main goal of a serious game is not to entertain, though they must do this. A serious game is usually a simulation which has the look and feel of a game, but is actually a simulation of real-world events or processes. The main goal of a serious game is usually to train or educate users (though it may have other purposes, such as marketing) while giving them an enjoyable experience.

In 2004, the definition is first put forward in America, the Serious Games Summit in 2004 and 2005, the attenders thought the definition of serious game as following:

- 1) It is an application of interactional technology beyond the traditional game market , contained of human training, politics discussion ,analysis , visualization, simulation, education ,health and medicine.
- 2) It can also solve other problems such as armies can be trained throuth serious games to get used to foreign culture, making people work together better, and telling the children to understand the principles of science.

It's thought that the forms and functions are very important, that is to say the people who work for serious games cannot to make players addicted to the games ,they will be fired. So in my opinion, the essence of serious game embodies in two points: first, serious game is beyond the interactional science technology traditional games market; second, serious game has the essence meaning of transitional electricity game, that is to say the serious game has the charming for the players to get immerged in it. What's the difference between regular video games and serious games, of course, is that serious games have education as a primary goal while video games focus on entertainment.

1.2. The Advantages of Serious games in college students' occupation skill development and application

The occupation skill development is needed for college students, or those that entail using manual or training abilities in a variety of jobs. There are many different types of occupation skills that can be learned in a training program or on your own. Having one set of occupation skills sometimes can be applicable to a number of different careers for college students. Many types of construction jobs require vocational skills.

Serious games use the game technology and representation to apply in other field, make the enterprise, government and institution to breakthrough the represent forms, content and interaction abilities.

The serious game can be connected with real world, so we can help the people to master the vocational skill s which is needed in some jobs through the serious games.

A. Virtual environment creation and realistic environment simulation of Serious Games is helpful to enhance university students' occupation skill on interest and learning effect

Serious games can meet the needs of different users, according to the different levels of the needs of students, largely avoiding students' weariness emotion. The learning effect of this fully immersive learning is very obvious to mobilize the enthusiasm of the students, to breakthrough teaching difficulty, and to cultivate students' professional skills, and have played a positive role.

B. The virtuality of serious games, can make the students to break time and space constraints

In a virtual environment, students can experience the virtual visual experience, at the same time; students receive a rich amount of information, to stimulate students' learning interest of occupation skill. Teaching location will not be limited in the classroom, the exchange of objects is not limited to teachers and students, which greatly increased the interest in learning and learning effects. It can enlarge the great expansion of students' knowledge, and make up the shortage of classroom teaching content.

C. The Serious Games can help students to gain skills practice, to replenish teaching resources, and to avoid waste resources

A lot of schools teaching conditions are out of dated and backward, lacking the necessary skills training place. It is difficult for students to have the opportunity to develop occupation skills. But in a virtual game, all problems can be smoothly done or easily solved. Students are free to organize skill training and free design skills, try to use different ways to complete the operation skills, so they may obtain different results. This can not only avoid the teaching funding increases, save expenditure, but also can fully improve the students' practical ability and interest in study and avoid the waste of resources.

1.3. The Difficulities and Challenges of Serious games in college students' occupation skill development and application

Serious games in promoting the undergraduate occupation skill development, as an emerging industry, in its infancy stage, its development is faced with many practical difficulties and problems.

A.The Serious Games have more serious inadequacy than entertainment; or have more entertainment than serious inadequacy.

Serious game development and design is the key of the game and how to combine education, find the education game education and game equilibrium point.

B.Bias on the game of people

Since the game in the society with enormous public opinion pressure, on the Internet and game player moral issues has been controversial in the teeth of the storm. If the serious games and combination of classroom teaching, may have been a lot of parents opposed, they tend to think that playing games is a sap one's spirit by seeking pleasures behavior, restrict the serious game development.

C.The development of domestic enterprises lack of confidence.

Serious games mostly belongs to B2B pattern, which is different from the normal game of mass consumption patterns, which makes the mainstream of domestic enterprises to develop serious game profit potential lack of confidence, not dare to take risks.

D.The lack of professional design personnel

The game designers thinking only stay in the game player's thinking concept, the education idea in the game 's permeability is not very good grasp, the development of the game does not conform to the education subject under the rules and design, and the school education and teaching it is difficult to effectively fusion.

E.Physical and mental problems Some scholars believe that some serious games may also cause health problems (fatigue, emotional turmoil), psychological -- social problems (depression, social isolation, less aggressive behavior) and behavioral problems (aggression, negative personality development).

1.4. Case Design of serious game --Taking College Students civilization etiquette knowledge and skills as an example

The designers can design corresponding to the storyline, combined with social topic, with appropriate plot scenes and characters. So we can let the students in such scenarios to choose their favorite characters, and to experience the game in the role.

We can design the case from the four facts as following: the plot design; the level design; the interactivity design; the emotion design. Shown in Figure.1.

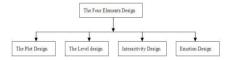


Fig. 1: The Four Elements Design

A. Serious games through the plot design can reflecte the imparting of process knowledge and skills

Serious games and civilized etiquette knowledge and skills can both be fascinating stories. College Students' civilized etiquette knowledge and skills are divided into several modules.

B.The design of the serious game level can make the knowledge and skills assessment as incentive mechanism

Incentive mechanism is one of an important factor of serious game design, but also according with college students' psychological knowledge. The players can learn from the tutorials with the basics of how to control and interact with the game and then the player will be tested on this information with a series of levels or missions. The soring is a very important method to tell the player what's important and what's unimportant. In the same way,

the serious games clearly identify to the student what is important to learn and what can be ignored just like in-game scores do in entertainment games.

C. The interactivity of serious games can help college students to get civilization etiquette knowledge and skills

Students get civilization etiquette knowledge and skills. In the traditional teaching activities, it is usually that only teacher in teaching, the lack of interactivity, the initiative and enthusiasm of students. Successful education emphasizes the interaction between the teacher and students, which can be achieved in the serious games. Interactivity is the game most powerful features. Interactivity design of the serious game can be divided into four parts as following: action interaction: image interaction: sound interaction; and data interaction. Image design mainly refers to the serious game interface design. In addition, there also need other interactive module, such as the NPC dialog module, task module, module, module trade team and so on.

D. Serious Games spirit world is advantage for the game player (learners) to get emotion recognition

The majority of people in the virtual game world made up of social spiritual blank, this is also one of reasons why the game can make people to indulge in and be captivated. Serious games also have this feature, though we do not let students addicted to the game world and can not extricate themselves, but at least serious game's spiritual world can make game player (learners) in the game world has the biggest free show.

In the book of "emotion in games", David Freeman mentioned: let the game player identity of their roles combine with NPC (a not game player characters), with designing attractive and beyond all expectations game time, creating an emotional depth of NPC.

It can be written a movie clip to improve the game players' understand of game background and emotional, such as play a wonderful film animation at the beginning of the game.

1.5. Conclusion

Give full play to the positive role of serious education, can change the current lagging students' skills development path, and greatly promote the students' skill development.

It is not only for the majority of College Students' personal life to have a significant positive impact, but also for social development of transportation outstanding occupation professional talent, effectively solve the enterprise recruitment difficult, professional scarce skills, talents of higher level problem. I believe that in the near future, serious games will be playing an increasingly important role in the college students' skills development.

2. References

- [1] http://en.wikipedia.org/wiki/Serious games
- [2] http://www.glearning.com.cn/chanpin/xiaos hou.html, 2012-3-15.
- [3] http://www.seriousgamessummit.com
- [4] http://baike.baidu.com/view/826196.htm?fr =ala0_1_1
- [5] Alice Mitchell, Carol Savill-Smith. The use of computer and video games for learning: A review of the literature[C]. Learning and Skills Development Agency, 2004.
- [6] http://baike.baidu.com/view/6069.htm
- [7] http://www.gdi.com.cn/?page_id=13