

Research on the Design Strategy of Parent-child Interaction in Educational Games

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Abstract

With the continuous improvement of educational level and the change of educational concept, children's family education has attracted extensive attention. There are some shortcomings in parent-child interaction in traditional family education, which leads to children's lack of happy parent-child learning experience. Integrating parent-child interaction mechanism into digital educational games and combining education, games and parent-child interaction has positive significance for parents and children, promote children's development and optimize parent-child relationship. This paper puts forward the design strategy of parent-child interaction in educational games, hoping to provide reference for relevant researchers.

Keywords

Educational games; Parent-child interaction; Parent-child game.

1. Introduction

In recent years, children's family education has been paid more and more attention. Children aged 3-6 have changed from family life to kindergarten and society. In this case, parents should pay attention to all aspects of their children's development and fully interact and communicate with their children. Good family enlightenment education can help children broaden their knowledge, develop intelligence and cultivate creativity, which is of great significance to children's development. At present, there are more and more contradictions between parents and children because of learning problems. In order to adapt their children to the competitiveness of the society, parents exert various learning pressures on their children in early childhood. Communication often revolves around learning and often ignores emotional communication. In addition, parents generally have high work pressure, limited time to study and entertainment with their children, and very shallow parent-child interaction space, which increases the difficulty of solving the contradiction between parents and children. How to solve this problem has become a major problem that most families must face.

A large number of foreign research results show that parent-child play, as a way of family education, is of great value to promote children's development. It is worth noting that since the beginning of this century, many researchers have developed various types of digital educational games, and we can try to combine the two. The parent-child interaction mechanism is added to the digital educational game to make it have the functions of parent-child interaction, education and game at the same time. Parents and children can start an interesting and beneficial parent-child interaction experience by using daily mobile phones and computers. This way is in line with the nature of contemporary children and can stimulate children's interest in learning, and parent-child interaction can promote the development of children's cognitive ability, social ability and good emotion. As a method of carrying out children's family education, digital education games can enable parents to interact with their children efficiently within a limited time in daily life without doing a lot of preparatory work. In this process, children not only

acquire knowledge happily, but also get the value and significance of parent-child interaction at the emotional level. In the context of modern education, how to combine the interaction of traditional parent-child games with the ever-changing educational technology, so that children can not only acquire knowledge in the game, but also improve parent-child relationship, is a problem worthy of in-depth thinking.

2. Concept Definition

The educational game mentioned in this paper is an electronic software, which can provide players with a game environment containing educational content, in which players can play games. Professor Zhao Hailan and Professor Zhu Zhiting have made a special discussion on the educational games used by children, pointing out that in the low age stage, the integration of learning factors and interesting factors is large, and the early childhood education software belongs to the category of educational games^[1]. Therefore, educational games are educational and playful game software using multimedia forms. It is a teaching tool and means. It integrates the teaching process into the game process, so that children can actively acquire knowledge while playing games.

Parent-child interaction refers to the way and process of direct or indirect contact and interaction between parents and children. Parent-child game is not only a category of children's games, but also a way of parent-child interaction. It is parent-child interaction in the form of game. Parent-child game is based on parent-child relationship and will have an impact on parent-child relationship.

Therefore, the digital educational game with parent-child interaction function refers to the educational game software that can run on mobile devices or PCs in the form of multimedia expression, and has the functions of improving parent-child relationship, education and game. Parents and children have intimate and interesting interaction through it. Different from the previous early childhood education games, parents must accompany their children. While children acquire knowledge in the games, the parent-child relationship with their parents has also been improved. For children, this is a game that can be played with their parents, and children's learning in the process of the game is imperceptible. This way is in line with the child's nature, can stimulate the child's interest in learning, and let the child obtain a pleasant learning experience. In addition, relevant studies have shown that parent-child games can promote the development of children's cognitive ability, social ability and good emotion.

Whether children can grow up healthily and happily is the common focus of family, school and society. Parent-child educational games can meet the needs of many parties: children need the company of their parents and hope to have fun with their parents; Parents want their children to have a happy childhood, and hope that their children can learn knowledge well. They hope that they can not only entertain with their children, but also guide their children to learn and communicate with their children from time to time; The school hopes that parents can correctly guide their children's daily behavior and moral concepts while guiding their children's studies; The society hopes that the new generation of children can grow up healthily and happily^[2].

3. Problems and Enlightenments in Traditional Parent-child Interaction

3.1. The Interaction Process Is Dominated by Parents

Parents are in the central, dominant and controlling position, while children are usually in the marginal, passive and dependent position, forming unequal poles. Parents are condescending in the "center", subjectively examine the "edge" situation in their own way, forcibly input "instructions", and rarely consider whether their children can accept it, while their children's interaction is reflected in their negative and passive will to accept it.

In the design of parent-child education games, we should pay attention to the balance between the two sides of interaction. Children and parents are in an equal position, have full self-play space, actively participate in game tasks and obtain a pleasant learning experience.

3.2. The Interactive Content Is Narrow and Monotonous

The traditional parent-child interaction often only pays attention to the intellectual development of children, but ignores the development of non intellectual factors. Under the pressure of entering a higher school, many parents arrange their children's learning time very full, and even have learning tasks on holidays, winter and summer vacation, which makes their children's ideological burden too heavy and exhausted. The communication and communication between parents and children only include examinations and scores. The content of parent-child interaction is narrow and monotonous, resulting in the lack of necessary psychological counseling and emotional communication.

Our Educational games are not another form of answer training. The emotional communication of players is equally important. We should pay attention to the development and guidance of non intellectual factors. The learning content is not limited to book knowledge. Life knowledge, artistic enlightenment and moral cultivation outside the discipline can be integrated into the game task, and the interaction and feedback between parents and children should run through every link.

3.3. Interactive Way of Re Preaching Light Body Teaching

Parents are the first idols in the eyes of children and the first enlightenment teachers of children. Parents' thoughts, personality, interests and habits will have a subtle impact on their children. Many parents are not clearly aware of the important role of their role model. They often talk about some general and abstract truths in the process of parent-child interaction. These truths are often impossible for adults themselves and lack the role of an example for their children.

In parent-child games, we should provide parents with scientific and appropriate ways and methods, guide parents to correctly guide their children, and give them specific and clear demonstration from the perspective of children.

3.4. The Quality of Interaction Needs to Be Improved

With the accelerated pace of life and increasingly fierce competition, many parents rarely take time to interact with their children because of their busy work. People are social animals, especially children. In the face of various pressures today, they are also eager to get the understanding and comfort of their families. If the frequency of interaction between the basic triangles of the family is not high, or even the basic two corners are missing, it is more difficult to meet children's emotional needs, which is not conducive to their healthy growth.

The game tasks in parent-child games are not simply completed by parents supervising their children, but need the cooperation of both sides, so as to restrain the deep and meaningful interaction between parents and children. The process of completing the task carries the good time of parents and children, which is conducive to the healthy growth of children.

4. Design Strategy of Parent-child Interaction in Educational Games

4.1. Design Strategy of Player's Role

Corresponding to daily life, the role of parents in the game plays the role of guidance, help and supervision, echoes with the role of children in the game, increases the intimacy of children players, and promotes children to integrate into the parent-child atmosphere more quickly. Parents and children complete the game tasks together, give timely guidance and help when children encounter difficulties, and supervise children's behavior during the game. Parents and children need to participate in the game together, but the operation content, behavior and

purpose are different. Children only feel that they play games with their parents, listen to their parents tell stories, feel the joy of completing the game with their parents, and unconsciously learn relevant knowledge. The role and behavior of parents are complex, and they are responsible for the difficulty setting, evaluation, adjustment, reward, information collection and other work of the game. The designer should give detailed instructions to facilitate the operation of parents. Parents should not only operate the game and communicate with their children like their children, but also assist the game in the process of the game, trying to create a more real and interesting game atmosphere for their children.

4.2. Design Strategy of Difficulty Level

Too high game difficulty will lead to children's inability to complete tasks, bring a certain sense of frustration to children, and make them lack self-confidence; Too low game difficulty is not challenging. Children can complete it easily. They lose the interest of the game and are not helpful to development. Therefore, the difficulty of game tasks should be flexibly controlled. The tasks should be set to different levels (including the difference between the difficulty of operation and the number of steps). The choice should be given to parents. Parents should choose according to their children's existing cognitive level and ability, and constantly encourage and guide their children to complete more difficult tasks.

4.3. Design Strategy of Learning Content

In Dewey's pragmatic educational theory, education is the reconstruction or reorganization of experience. Children can accept limited knowledge. To arrange and organize knowledge suitable for them, the learning content in educational games should first be suitable for children's existing life experience^[3]. Secondly, we should skillfully integrate these knowledge into game tasks. Each theme task can contain a variety of knowledge and abilities at the same time, rather than boring exercises in different categories. Digital education game is to create a knowledge situation for learners. It is an implementation of experiential learning. The game background should be related to the reality of life, and the logic of the game world should be in line with the reality, not contrary to the real world. Learners are like solving problems in real life. Parents should also timely communicate with their children and expand the content of the game in combination with their children's life experience. During this period, it can not only connect knowledge points with life, deepen children's understanding of knowledge points, but also take the opportunity to correctly guide children's daily behaviors and ideas. The mode of parents and children playing together is consistent with some purposes of parent-child education. They can share emotional experience with children through parent-child interactive games, promote parent-child communication, and meet children's internal spiritual development needs^[4].

4.4. Design Strategy of Interactive

In the process of the game, parents and children should not only interact in the game, but also communicate in reality. The process of the game is independent, but it does not exclude the traditional form of interaction. The real interaction can be used as an auxiliary of the game. There are four ways of parent-child interaction in digital education games: guiding interaction, cooperative interaction, competitive interaction and anti string interaction.

Guiding interaction is generally in the stage of knowledge enlightenment, which is equivalent to the novice guidance in online games. Parents are guides and demonstrators. Parents should give their children a first demonstration in the game, and also have language guidance and inspiration in reality. Children imitate under the demonstration and guidance of their parents and have a preliminary understanding of the learning content.

Cooperative interaction means that parents and children cooperate together, cooperate and help each other, solve problems and complete tasks together, and shorten the distance between

parents and children. Discuss countermeasures in reality and cooperate with the operation on the game interface. Parents should strive to create an equal and democratic atmosphere, so that children feel needed and their own ability and value are affirmed.

Competitive interaction means that parents and children face the same rules of the game and compete fairly in the game. However, it is worth noting that parents should flexibly hide their strength and make appropriate concessions according to the actual situation. The essence is to let children complete their goals with the encouragement of their parents. Children challenge their parents' authority in the competition and can gain self-confidence and a sense of achievement.

In the anti serial interaction, the roles of parents and children are exchanged, such as the task of letting children save parents. Parents should show weakness to their children and encourage their children to complete tasks independently. This kind of interaction can not only make children feel more successful, but also cultivate their sense of responsibility.

5. Summary

Parent-child relationship is the most lasting, stable and unchangeable relationship in everyone's life. The quality of parent-child interaction affects children's development in all aspects. With the rapid development of science and technology, the form of parent-child interaction can turn to electronic. The combination of digital educational games and parent-child interaction provides an effective method to solve the problem of parent-child education, which is feasible. However, at present, there is still a lot of development space for the design and development of related products. It is also necessary to explore effective design strategies, constantly innovate design methods, and make the game design more scientific and reasonable according to the needs of children.

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