

Research on Educational Games in Childhood Teaching

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Abstract

As people pay more attention to preschool education and improve teaching conditions, many kindergartens have begun to use educational games for teaching. The use of educational games is in line with the characteristics of children's psychological development, can greatly mobilize and satisfy children's curiosity, and play a good transitional role in the process of children's intellectual development according to the level of knowledge from shallow to deep, from low to high. It has a positive effect on children's attention, observation, memory, emotion and other non-intellectual factors. This article elaborates on the application advantages of using educational games in preschool teaching, and points out the responsibilities and identities of preschool teachers in the process of educational games. This article explains the practical significance of using educational games in preschool teaching, and summarizes the research results and conclusions of the use of educational games in preschool teaching at home and abroad. The teacher's identity in teaching should be an observer, a supporter, and a guide, not a commander. Teachers should give themselves a certain amount of observation time when intervening in children's games, so as to understand children's interests and needs more deeply, and guide children's games in a targeted manner. At the same time, in the process of applying educational games, it should be both educational and entertaining, and truly entertaining. Only in this way can we make educational games play a greater role in children's teaching.

Keywords

Educational Games, Childhood Teaching, Childhood Games

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1. Introduction

The traditional kindergarten teaching method has many drawbacks, such as a single teaching method; most of the teaching time is for all children, which cannot develop the children's personality well; the classroom capacity is small and cannot meet the needs of every child, etc. The use of educational games can solve these problems [1-4]. The content of knowledge involved in children's teaching is simple and vivid, and it has certain game elements in itself, which is very suitable for making games. So teaching and games can achieve a better combination. In contrast, in middle school and university education, the knowledge that students learn is abstract, complex and logical

[5-7]. After being converted into games, most of them appear to be too blunt, and some are even just copies of textbook content, and these knowledge contents requires subjective effort to understand and learn. The use of educational games is for the purpose of entertaining and entertaining, and it does not require subjective effort. Therefore, educational games are particularly suitable for use in children's teaching

2. Related Concepts and Theories

2.1. Learn Through Play

Learn through play, also known as learning gamification,

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means that under the guidance of the concept of learning gamification, in the teaching design process, in terms of training goals, development, and evaluation methods, it is based on the psychological characteristics of learners' age and Teaching strategies and other factors, learn from games, design and select appropriate development tools, evaluation methods, and teaching strategies [8-11]. It is a new generation of learning method strongly advocated by the famous information technology education expert Professor Sang Xinmin. Interest is the best teacher. Games are in fact to provide children with a virtual environment, children need to solve all kinds of problems they encounter here.

2.2. Entertainment Technology

In order to realize the idea of gamified learning, the research of entertainment and education technology emerged. Entertainment and education technology is "based on respecting learners' current life value, through the creation, use and management of appropriate technical processes and resources to promote learners' life experience and fun with the theory and practice of the integration of educational goals and methods." The realization method of entertainment education is to promote the integration of learners' real "experience and fun of life" and "learning purpose and means". The goal of entertainment education is to turn the experience and fun of life into the purpose and means of learning. Educational games are a practice of entertainment education, the product of the combination of educational content and entertainment forms, and the process of carrying out education in the entertainment form. The subject of practice is the player, and the purpose of practice is to obtain a pleasant experience and useful knowledge. In this kind of pleasant practical activity, the learner is in a dominant position, dominating the game process, and at the same time the absolute subject of the educational process [9]. People who play games are both decision makers and executors, they are both learners and experiencers. They internally stimulate the learners' enthusiasm for learning and make the teaching process as attractive as entertainment.

2.3. Implicit Learning Theory

American psychologist Rob first proposed the concept of implicit learning. That is, the process of unconsciously acquiring complex knowledge about the stimulus environment. He believes that there are two different learning modes in human learning, one is the common explicit learning, and the other is implicit learning. In implicit learning, people do not realize what the rules governing them are, but they have mastered the rules unconsciously [12]. Learning is a process of mutual transformation between implicit and explicit knowledge. Freud also believed that unconsciousness determines human

behavior and is one of the basic elements of personality formation. The theory of implicit learning provides a strong basis for the application of educational games in children's teaching. Early childhood education highly emphasizes that the unconscious exerts an influence on children's morality and behavior in a subtle way. Children's memory is mainly based on unintentional memory, and the essence of implicit learning is unconscious acquisition and unconscious use.

2.4. Piaget's Theory of "Let Children Play and Learn"

Piaget emphasized that the essence of children's psychological development is the subject's adaptation to the object through a certain behavior, which is the result of the interaction of internal and external factors. The success of children is not mainly taught by teachers, but from the children themselves. It is the result of children's initiative discovery and spontaneous learning. When using games, children are happy, selfless, tireless, and have no other purpose, just to fully enjoy the joy that the game brings to them [13]. The game leads to cognitive learning and mastery of rules. Piaget's activity theory emphasizes "spontaneous initiative", while the creation of activities in traditional kindergarten teaching is less spontaneous. This is because the rhythm in children's teaching is basically controlled by the teacher. The use of educational games can better realize children's autonomy, attract children to participate in activities consciously and freely, and enable them to learn new knowledge, train new skills, and form new abilities in fun-filled activities.

3. Game Classification

3.1. Irregular Games

Such games include role-playing games, structured games:

Role games are games where children play roles in games through imitation and imagination, creatively reflecting real life, such as games that simulate doll homes, hospitals, shops, and barber shops.

Structure game is a game in which children use virtual materials such as sand, building blocks, and plastics in the game to carry out structural and creative activities. This kind of game has obvious promotion effect in cultivating children's space concept and comparing object characteristics, such as children's origami games, toy creation, sand table games, etc.

3.2. Game with Rules

This type of game has certain rules and playing methods, and sometimes teachers need to give some guidance first. Regular games generally include intellectual games and music games. Intellectual games are specially designed to enrich children's

knowledge and develop children's intelligence. It is the most used teaching game in kindergarten teaching. It is used to develop children's attention, observation, memory, calculation and language skills, such as common literacy, number, and learning games.

4. The Advantages of Educational Games in Preschool Teaching

The application advantages of educational games in children's teaching are mainly reflected in the following aspects:

The biggest obstacle to using educational games in elementary and middle schools is that the content of the games is not necessarily consistent with the content of the curriculum, and the abilities developed in the games may not necessarily help pass the entrance examination, and may not be recognized by the school education authority [14]. The curriculum set up in kindergartens does not have a strict examination system, and the teaching effect does not need to be linked to test scores, so there is a lot of room for the use of educational games in preschool teaching. Therefore, we say that this is one of the reasons why educational games are suitable for use in preschool teaching.

The content of knowledge involved in children's teaching is simple and image, and it has certain game elements in itself, which is very suitable for making educational games, so that teaching and games can achieve a better combination. In contrast to middle school education and university education, the knowledge that students learn is abstract, complex and logical. After being converted into games, most of them seem too blunt, and some are even just copies of textbook content. Moreover, these knowledge contents require subjective effort to understand and learn, and the use of games is for entertaining and fun, and it does not require subjective effort, so educational games are particularly suitable for use in preschool education.

Educational games not only enrich children's early education, but also solve some problems that are difficult to solve in traditional teaching models. In real life, teachers and parents will tell children something that should not be done, such as don't put your hands on the kettle to prevent it from getting hot, and don't touch the power supply. These things are dangerous, and children should not be allowed to experiment in person, but the simulation of these events can be completed by using games. For example, in the game, let the person touching the power supply show a painful expression to warn the child that he will not do such a thing again in the future. In addition, the use of games can also allow children to learn social behaviors such as riding a car and sorting garbage, and

use them in daily life.

The famous psychologist Terry Chira once pointed out: 1% of human learning is through taste, 1.5% through touch, 3.5% through smell, 11% through hearing, and 83% through sight. In other words, the information that people obtain through hearing and vision is 94% of all information, and the advantage of educational games in teaching is here. Compared with ordinary teaching methods that use conventional teaching aids such as books, models, pictures, educational games have irreplaceable interactivity and can carry out personalized teaching. At the same time, in the teaching process, whether it is information presentation, information feedback, and stimulation reactions, control reactions, evaluation and diagnosis, and educational games all have obvious advantages. The game includes information such as animation, text, image, sound, color, etc. This is a comprehensive information function that cannot be replaced by a good book. Therefore, it is not only suitable for the teaching of single subject courses in kindergartens, but also conducive to the integration of teaching courses in kindergartens. A variety of information in the game produces stimuli to promote the intellectual development of children, analyze and think about the problems encountered in the game, try to solve the problems in various ways, so that the children can truly control their own learning process as the leader. What cannot be achieved by traditional teaching methods.

5. Conclusion

This article explains the practical significance of using educational games in preschool teaching, and summarizes the research results and conclusions of the use of educational games in preschool teaching at home and abroad. As a new educational method, the use of educational games is an important part of the kindergarten curriculum reform. In teaching activities, children are the main body and teachers are the leading ones. All teaching activities are carried out around children. As educational games have reduced the workload of teachers to a certain extent, teachers have more time and energy to pay attention to the development of children's individuality, so as to provide individual guidance and teach students in accordance with their aptitude. The teacher's identity in teaching should be an observer, a supporter, and a guide, not a commander. Teachers should give themselves a certain amount of observation time when intervening in children's games, so as to understand children's interests and needs more deeply, and guide children's games in a targeted manner. At the same time, in the process of applying educational games, it should be both educational and entertaining, and truly entertaining. Only in this way can we make educational games play a greater role in children's teaching.

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