



Development and Utilization of Folk Game Intelligent Program in Children's Activities of Big Data Information Education

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Abstract. With the continuous development of the times, people have higher and higher requirements for education. Therefore, the intelligent folk games need to pay more. How to improve the development and utilization of folk games in children's activities has become the focus of teachers' research. At the same time, the concept of education is also changing. Therefore, when carrying out educational activities, we should fully integrate folk intelligent game resources and give full play to the advantages of folk game resources.

Keywords: Intelligent folk games · Kindergarten activities · Development and utilization

1 Introduction

The current education stage has started from kindergarten, but kindergarten education belongs to a special stage of education, there are some difficulties in the process of education, if there is no scientific and effective education methods, it will lose the role and significance of education. The students in the early childhood stage are the golden age of the common development of morality, intelligence, sports and beauty, so it is very important for the correct education of children [1]. Children's age is low, and their cognition of things is not comprehensive. If we adopt the indoctrination education mode in the process of education, it will seriously affect the normal development of children. Therefore, teachers should make full use of folk game resources, start with children's interests and hobbies, and drive them to learn by means of games. The schematic diagram of children's games is shown in Fig. 1.

2 Related Work

2.1 Combined with children's Teaching Objectives, the Introduction of Local Folk Games

In the early childhood stage, students are very interested in the game, so in the process of teaching activities, making full use of game resources can effectively stimulate children's



Fig. 1. The schematic diagram of children's games

interest in learning, so that children have a more forward understanding of learning. In the process of playing games, self innovation awareness can also be effectively improved, and it can also help children establish a correct ideological and moral sentiment [2–4]. The introduction of game resources in kindergarten activities can make children become more confident. In the activities, children can make their moral, intellectual, physical and aesthetic development better by playing games. In this way, it is of great significance for children's healthy and comprehensive development.

At present, there are many folk game resources that can be used in kindergarten activities, but many folk game resources cannot be used directly. We need to innovate on the original basis, so as to better play the role of game resources. Therefore, kindergarten teachers should constantly innovate the traditional folk game resources, and use the methods of expansion, combination and divergent thinking in specific activities to make the innovative folk game resources more in line with children's cognition, so as to continuously improve children's enthusiasm to participate in education, At the same time, we also need to innovate the use of folk game resources [5]. Will use the form of design interesting, can effectively attract young people.

2.2 Based on children's Reality, We Should Choose Folk Games that Are Conducive to children's Physical and Mental Development

As the most important content of early childhood education activities, the design of teaching activities is very important. According to children's age and psychological characteristics, teachers should not only pay attention to the theoretical basis of the game, but also pay attention to the cultivation of their comprehensive ability. Therefore, teachers must consider the following aspects, such as children's age, gender, hobbies and their cooperation ability [6–8]. Because of this, the introduction of games should be combined with the actual situation of children to make it more targeted and effective. In addition, the local characteristics of folk games should be integrated into it, and teachers should choose suitable folk games for children. For example, younger children, because

of their poor cooperation ability, are more independent in the game and often do not like to be disturbed, so they are more suitable for individual games, while older children like to play with other children, so they are more suitable for group games. For another example, boys like challenging and sports games, while girls like relatively quiet games. From these points of view, teachers in the introduction of folk games must be based on children's reality, so as to better play the positive role of folk games in promoting children's physical and mental health development.

2.3 Creating Folk Game Situation and Developing children's Learning Potential

In the introduction of folk games, teachers should also pay attention to the creation of relevant game situations, which is not only conducive to the innovation of the form of game teaching, but also conducive to enrich the content of game teaching. To provide children with a vivid game field with more diversified game situations and give full play to its value, develop children's intelligence and develop their learning potential. In addition, teachers can also make use of the advantages of information technology to create vivid game situations for children, such as video, animation, pictures and so on. At the same time, they can provide props for them to give them sufficient space for performance, so that they can feel the fun of the game, so as to achieve the goal of education [9]. Teachers gradually guide children to learn by playing and play in learning to promote their development in many aspects. Teachers must also realize that folk games, as the essence of national culture, can guide children to learn the excellent traditional culture of the Chinese nation in game teaching.

3 Optimization Strategy of Big Data Technology in College Education

3.1 Building a Complementary System to Break the Information Island

In order to ensure the effective formation of education data and break the information island, it is necessary not only to strengthen the information construction, but also to strengthen the technical support, system maintenance and so on. At the same time, we should strengthen the use of relevant education data. Through the establishment of relevant leading groups, we can clarify the business responsibilities of different departments, so as to promote the further use of big data and help it to play its value. All business departments should also conduct comprehensive data exchange and complementation, and verify the inconsistent data information again, so as to ensure the standardization and authenticity of data collection. In addition, all business departments should collect relevant information in a unified format, which is conducive to the later data analysis, inspection and evaluation [10–12]. For example, information collection standards and databases can be unified, and the popularization and promotion of information collection standards can be promoted, so as to ensure the effectiveness and uniformity of data collection.

3.2 Strengthen Data Integration, Application and Research

It is necessary to strengthen data integration, application and research, and enhance the auxiliary frequency of education data in higher education teaching and education management, so as to promote the modernization of education teaching and education management. First of all, it is necessary to further integrate the scattered information among the business departments of colleges and universities, not only to fully realize the automation of data collection, modernization of education and teaching, automation of scientific research management and informatization of financial management, but also to integrate all the education data, divide and stack the simple data structure, so as to increase the analysis of the relevant dominant data, So as to provide relevant data support for colleges and universities [13–15]. For example, we can strengthen the effective management of the collection way in the data collection stage. Different collection ways will form different collection forms. We can unify, sort and transform different data collection, hoping to lay the foundation for later data analysis and integration by forming a new data set.

3.3 Strengthen Systematic Management and Overall Planning

Colleges and universities should strengthen the overall management and planning of educational information, so as to strengthen the analysis and use of the original data. First of all, it is necessary to formulate long-term data collection standards and development plans, so as to promote the improvement of data collection, analysis and application, and strengthen the maintenance and summary of initial data. At the same time, the relevant data statistics work should also be evaluated regularly, so as to strengthen the macro management of relevant data and information; secondly, colleges and universities should constantly coordinate and organize various business departments to carry out information work, so as to promote the construction of school affairs network platform [16–18]. At the same time, it is also necessary to strengthen the maintenance and management of university websites, and timely warn the relevant network public opinion, so as to ensure that bad information can be handled in time; finally, it is necessary to strengthen the development of big data information system, establish a unified big data computing system, and promote the diversification of computing, so as to meet the different computing needs of educational data, It can also manage and plan education data in a unified way,

4 Relevant Strategies to Strengthen the Organic Combination of Kindergarten Activities and Folk Game Resources

4.1 Effective Integration of Folk Game Resources and Outdoor Game Activities

Most of the folk games are carried out outdoors, so when teachers carry out activities, they can fully combine folk game resources with outdoor sports, so that children can exercise in the process of playing games. In this way, children's participation enthusiasm can be improved, and students' perception ability can be cultivated. The moral quality of students can also be good edification. In addition to combining folk game resources

with sports activities, teachers can also combine folk game resources with intellectual activities, such as radish squatting, counting frogs and other games. In this way, children can not only enjoy themselves, but also exercise their thinking, which can be said to kill two birds with one stone [19]. In order to improve the data transmission rate and energy efficiency, the following energy efficiency maximization resource allocation problem is established:

$$\max = \frac{P_U E_w \% GF}{P_t E_w F} \quad (1)$$

$$G_2 G \|w\|^2 \leq P_{\max} \quad (2)$$

4.2 Effective Integration of Folk Game Resources and Indoor Activities

Although most of the folk game resources are carried out outdoors, it is impossible to organize children to go outdoors every time in the process of carrying out activities. Appropriate indoor activities can also effectively improve students' personal ability. Therefore, teachers should fully combine folk game resources with indoor activities in the process of carrying out activities. Fully explore the characteristics of folk game resources, so as to select some activities suitable for indoor development. For example, tangram, checkers or jigsaw puzzle. Indoor activities often focus on training students' thinking ability, so scientific and effective indoor activities can continuously improve students' thinking ability. To lay a good foundation for future learning and development. In addition to carrying out some intellectual activities indoors, we can also carry out some manual activities, such as paper-cut, clay sculpture and so on. Through this activity mode, students' hands-on ability and action coordination ability can be well improved, which is of great help to children's future life [20]. Although folk game resources are dead, but the content and form can be innovated. Therefore, teachers can encourage students to innovate the original activities in the process of carrying out activities, and add their own interested elements in the activities, so as to improve students' innovation and creativity.

4.3 Effective Integration of Folk Game Resources and Spare Time

Children's daily time in school is very limited, and the time in class is even more limited. Therefore, it is basically impossible to give full play to the role of folk game resources only by the activity time in class. Therefore, teachers should seize the spare time and combine the spare time with folk game resources scientifically and reasonably, So as to maximize the role of folk game resources. When children enter the kindergarten in the morning, they are easily bored. If they don't adjust the students' mood in time, it is easy to directly affect the students' learning state all day. Therefore, teachers can carry out some game activities in the morning. For example: hawk catching chicken, radish squatting and other activities. When students participate in activities, they will soon forget some unhappy emotions. Dependence on parents.

4.4 Infiltrate Folk Games into the Whole Process of Teaching and Develop children’s Thinking

In children’s daily teaching, teachers can carry out folk games in their spare time. Such as tug of war, stone, scissors, cloth and so on to enhance the sense of participation in children’s activities, not only to integrate folk games into the whole teaching process, but also to meet the needs of children through various forms of folk games. Under the guidance of teachers, they complete the game together, which adds a sense of achievement to children’s game experience [21]. At the same time, teachers can also select appropriate game items according to the classification of games and children’s wishes, so as to fully mobilize their participation in activities and successfully complete the teaching objectives. In the game, teachers can guide children to role play, so that they can better understand the characters and stimulate their desire for performance. Such as doctors, police and teachers, if you are a doctor, how would you treat patients, if you are a police, how would you do it, if you are a teacher, how would you teach children to learn knowledge, etc. In the creation of this kind of problem situation, it can stimulate children’s curiosity and creativity, not only meet their desire for performance, but also spread children’s thinking and innovation ability.

5 Simulation Analysis

For children’s activities, we mainly need to develop children’s intelligence level, so we use different games to match children’s hands-on ability, etc. we can get the simulation distribution as shown in Fig. 2. From Fig. 2, we can see that different strategies and games have different effects on children. Among them, the proportion of events in the competition has reached 30%. That shows that children should not only do things but also think about problems in games with comparison [22]. On the other hand, it also shows that people will develop a higher level of intelligence in the process of moving.

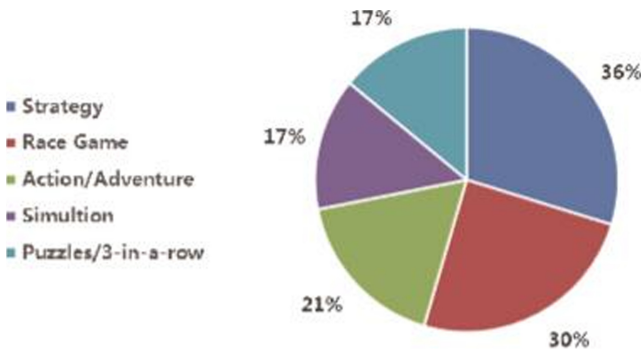


Fig. 2. The influence of different projects on children

To get rid of the chronic disease of “five only” education evaluation and implement the inevitable choice of establishing morality and cultivating people and running people’s satisfactory education.

The plan points out that we should take the effectiveness of moral education as the fundamental standard, improve the system of moral education, speed up the modernization of education, build a powerful country in education, and run a satisfactory education for the people. In terms of promoting the development of students, education evaluation must adhere to the principle of “moral education as the fundamental task” and point to the life growth of students. However, traditional education evaluation pursues utilitarian value too much, especially the chronic disease of “five only evaluation” is making teachers and students instrumental, profit oriented and one-sided in school education. The development of individual teachers and students is dominated by the evaluation index dimension, system and inherent evaluation standard. Personality and spiritual pursuit are gradually lost and declined, and life vitality is covered. The original reason is that the “five only evaluation system” is the product of China’s specific historical stage. In the past, in order to cultivate and select catch-up standardized talents, we chose quantitative and objective external benchmarking indicators that are easy to see, catch up and surpass [23]. However, the current evaluation system seriously suppresses people’s life vitality, conceals personality and creativity, and is seriously contrary to the goal of cultivating new people with harmonious and healthy body and mind and all-round development in the new era. It is an urgent task to get rid of the “five only” stubborn disease and realize the modern transformation of education evaluation.

6 Application of Big Data Technology in Higher Education

6.1 There is Information Island Phenomenon

At present, there is a lack of communication in the business departments of many colleges and universities, which also leads to the independent existence of many data resources in the business departments, which is not conducive to information sharing, but also makes the data stored between various departments deviate. This will also affect the business collaboration of different departments, which will easily lead to waste of storage space and low utilization rate of storage space. At the same time, the phenomenon of information island is also difficult to recessively analyze the dominant data, even if the formation of relevant recessive data, its authenticity and value also need to be considered. For example, at present, many business departments of colleges and universities will use Oracle, visual FOX PRO, Sybase and other databases, and some departments will use traditional Excel to save relevant data. This kind of storage form is not unified, which also makes data fusion difficult. As shown in Fig. 3. Moreover, some universities lack of long-term planning, data independence between business departments, and many businesses can not share data, which not only wastes storage space, but also makes the phenomenon of information island exist all the time.

6.2 The Data Caliber of Each Department is not Unified

It is necessary to strengthen the cooperation between the two business departments in Colleges and universities to make joint efforts for data integration, application and research. But at present, each business department in Colleges and universities has their

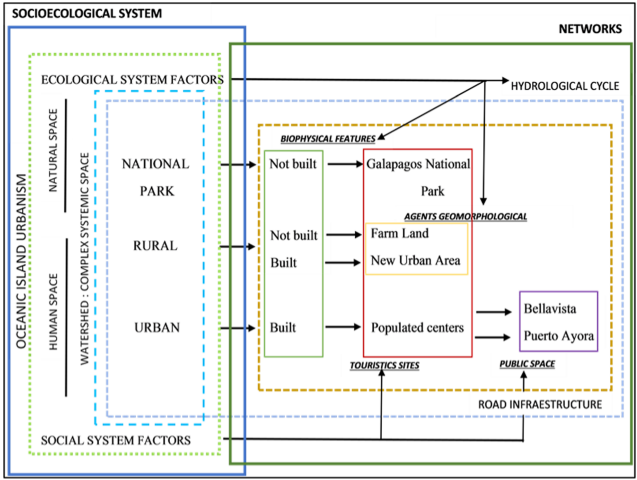


Fig. 3. Island phenomenon

own struggle, which also leads to the data caliber is not unified, a lot of education data can not be effectively applied in education teaching and education management, which also hinders the deep mining of the value of education data to a certain extent. For example, the alumni system does not share the data of enrollment, employment, student management and so on with the University, which also causes a lot of inconsistent information input and makes it lack of certain integrity.

7 Conclusions

To sum up, early childhood education plays a very important role in children’s growth and development. Folk game resources are a very important part of Chinese traditional culture. In the process of early childhood education, making full use of folk game resources can continuously improve children’s learning interest and comprehensive learning ability, which plays a very important role in children’s growth and development. The ultimate purpose of evaluation is to promote the fullness and perfection of learners’ life meaning based on educational goals. At present, in order to ease the big data education evaluation becoming the means, methods and processes of producers, avoid becoming a discipline technology and fall into the pattern of simply focusing on instrumental rationality, we must regain the value of big data evaluation, stick to it and drive the reconstruction of education evaluation system [24]. The persistence of value rationality of big data reflects students’ value pursuit and life significance. Instrumental rationality is the source of students’ rationality and innovation. The combination of the two becomes the Ariadne line to guide students to realize the ultimate value of life. On the one hand, we should promote the diversification of evaluation subjects and give full play to the role of professional institutions and social organizations.

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