The Research of China Folk Games on Kindergarten STREAM Education

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ABSTRACT: *Folk games are indispensable part of children's childhood life, it is a carrier for children to obtain joy, freedom and rights, it is also an important form of comprehensive development education for children. China folk games are based on the local traditional cultural background, are highly practical, entertaining, educational and interesting, and it is not restricted by time, venue, number of people, and materials, which can effectively promote the growth of children. Folk games are medium and carrier, with simple content, but very rich in connotation. This study separately discussed the unique impact of China folk games on children in various aspects from the STREAM (Science, Technology, Reading, Engineering, Aesthetics, Mathematics) perspective. So as to lay a solid foundation for children's future learning. Moreover, this study is of great significance to the development of children's STREAM abilities and inheritance of folk games, so that children can grow up healthily under the influence of folk games, and will also help parents and teachers to value their children's exploration of folk games.*
KEYWORDS: *China folk games • Kindergarten education • STREAM*

I. INTRODUCTION

There are many games with different types and styles in the Chinese folk, that is, folk games, which refers to the playful and entertaining activities that are spread in the lives of the majority of people, the colloquial term is "play". Folk games are formed by people's continuous processing on the basis of national traditional culture. They have strong local characteristics and life atmosphere, and can meet the requirements of children of different ages, genders and personalities. It is the vehicle through which children obtain joy, freedom and rights. STREAM is Science, Technology, Reading, Engineering, Aesthetics, Mathematics (Belbase et al., 2021). When young children have the opportunity to investigate the world around them, they learn and experiment with new STREAM skills and theories. Research shows there is a positive relationship between early STREAM experiences and future success in school. These are all the learning areas that our children will need to adapt to in the future. Many Chinese folk games can develop children's STREAM competence (Torres-Crespo, Kraatz, & Pallansch, 2014). Children need to collect and use evidence from folk games to create knowledge or solve problems (Feng, González, Mutch, Amor, & Cabrera-Guerrero, 2021). As children explore and play folk games, STREAM will naturally be able to develop in folk games every day.

II. THE SOURCE AND CHARACTERISTIC OF FOLK GAMES

Source of folk games

Folk games for children are adapted by working people, suitable for children's age, and are fun and entertaining children's games that are happy to be accepted by children. The biggest difference between folk games and the current games is that folk games are simple, with local materials, high entertainment, easy to learn and play, and it is hardly restricted by time, place, materials, number of people, etc (Zhong, 2021). There are many types of folk games in China. Nowadays, with the emergence of modern and high-tech toys, folk games are becoming unfamiliar to children (Kecskes, 2013). In fact, folk games are incomparable by modern toys. Folk games can promote the development of children's STREAM in many ways.

Characteristic of folk games

Childhood plays a key role in a person's life, and games are the best friends who accompany one's childhood life and are an indispensable part of childhood life. It is a symbol of children's childhood joy, freedom

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and rights. And it should become an important game content for children. China folk games have the following characteristics:

i. Folk games have many types.

ii. Folk games are highly entertaining, strong in group, and easy to learn.

iii. Folk games are not restricted by time, place, or number of people, and can be played anytime, anywhere.

iv. Folk games are very scientific.

III. SIGNIFICANCE OF THE STUDY

In the process of folk games, children will not only have fun, but also explore, discover and create (Kecskes, 2013). On the one hand, this is very beneficial to promote the growth of STREAM (science, technology, reading, engineering, aesthetics, mathematics) competence of children. On the other hand, folk games are derived from life, which is of great significance to the inheritance of folk games. Pre-school educators attach importance to and fully explore, develop and use the application of folk games in kindergarten education, so that they can play and play the unique brilliance and educational functions of folk games.

FOLK GAMES CAN PROMOTE CHILD

4. Folk games can promote children's STREAM

Chinese folk games contain rich modern educational value. Folk games for children have great value and functions for the development of children's STEAM, and their functions cannot be replaced by modern games. Specifically the following aspects:

4.1 Folk games can develop Science Competence in Young Children

Science requires preschoolers to not only answer but also to ask questions. Science powers curiosity, investigation, and problem solving, often involving (Haenilah, Yanzi, & Drupadi, 2021). Children are born scientists. They try to figure out how the world works by taking a series of steps called the scientific method. The scientific method includes observation, formulating suggestions, making predictions, designing and executing experiments, and discussion. They are also using a basic form of scientific method (or conducting small experiments). They explore and discover the world around them. Children find patterns and build theories to explain what they see, and collect "data" to test these theories. A theory is like a guess or possible plan for something. For example, when playing the folk game "Blowing Feathers", put a feather on the table, and the two toddlers participating in the game stand on both sides of the table while blowing the feathers at the same time, and blow the feathers to the right taxi to win the game. Children may form a theory based on his body posture when blowing feathers and how hard he blows, that is, how much and how fast she blows will change the direction of feathers falling. Maybe she will try to change how much and how fast she blows to test her theory. Like scientists, children learn from others. They watch what children and adults do and learn from trying to repeat what they've seen or by asking questions and seeing the results.

4.2 Folk games can develop Technology Competence in Young Children

Technology refers to applying the scientific knowledge a preschooler gains (Kinnula & Iivari, 2021). They do this by using the most basic tools like crayons and rulers, as well as more complex technological inventions like microscopes and computers. When we think of technology, we often think of mobile phones and computers. But the "T" in technology also represents any type of man-made object. Techniques include simple tools such as pulleys, wheels, levers, scissors, and ramps. For example, in the game of "rolling the hoop", the thicker wire is bent into a big loop, and then a hook is bent with the wire. The bottom of the hook is bent into a "U" shape, the upper end is in my hand, and the lower "U" shaped hook pushes the hoop forward. When children use these tools, they will observe and learn the underlying causality. These play techniques allow children to understand how tools can help us complete tasks. Children can see the cause and effect behind them, why the ring can roll, it turns out that an object can move under the push of external force, or how to make the hoop roll faster on high slopes.

4.3 Folk games can develop Reading Competence in Young Children

Children are in the enlightenment period of language development, and their reading competence can be improved through folk games (Li, 2021). In many folk games, children are required to use language to express the plot and content of the game, learn dialogue, and exchange ideas. This is an effective means to develop children's reading competence (Sutton-Smith, 1989).

Most folk games are equipped with nursery rhymes and songs (Blos, 1974). These nursery rhymes and songs have been passed down from generation to generation, and they are relatively straightforward and easy to understand in terms of language expression. It can be said that folk games are rich in content, easy to play, easy to learn, and interesting. For example, "Go up the mountain for tigers ".

One, two, three, four, five,
Go up the mountain for tigers,
Missing tigers meeting squirrel,
Show many of them, let me count the munber,
One, two, three four, five,
Five little squirrels,

Children play and sing, play and talk, and gradually learn to express their thoughts and emotions accurately, thereby enhancing their reading competence. Also, in the game of "throwing the handkerchief", Before the game, telling the children to pay attention and observe, to see which children are caught more often, what are the reasons, why some children can always escape, and what are the reasons. In this way, children experience joy in the game, and at the same time, through summarizing observations and drawing corresponding conclusions, children's reading competence has also been improved. In short, children's reading competence can be improved in the folk games. We should create favorable conditions and improve children's reading competence through folk games, so as to lay a solid foundation for children's healthy development.

4.4. Folk games can develop Engineering Competence in Young Children

Engineering activities in preschool are concerned with the design and building (Bagiati & Evangelou, 2016). It is testing structures and designs, as well as discovering and testing posisble solutions. Engineering applies science, mathematics, and technology to problem solving. Engineering is the use of materials, design, production and construction, it helps us understand how and why things work. Chinldren use building blocks to design and build, or put railways together, and they act as engineers. When children build fortresses with snow, pillows or cardboard, they are solving structural problems. For example, when "building a house", children use different materials to build a house. Children in different regions design different house structures. They can combine the architecture of their hometown to design a house suitable for locals. They design the structure of the house, think about what type of house to build, and design windows, doors, and fences for the house. When they figured out how to stack wood and stone to make the house more solid and taller, or how to combine objects together, they were engineering. Also, for the "hopscotch" game, you only need to draw grids on an open area larger than 3 square meters, what shape grids need to be drawn, how big to draw, and how to arrange the shape and structure of each grid. This requires children to think and design, in this process also needs to be measured.

4.5. Folk games can develop Aesthetics Competence in Young Children

Aesthetics encourages creativity and process development, as well as allows children to illustrate concepts they are learning. A creative mindset is critical for STREAM subjects. That is why the Aesthetics was added to STREAM to become STREAM (Leggett, 2017).

Active and self-guided discovery is core to the Aesthetics and to STREAM learning. Children engage in painting, pretend play, music, and drawing. Folk games are a collection of multi-angle knowledge, including a wide range of factors such as music and art. Music is also related to Aesthetics skills such as pattern recognition and numeration. Just Like "throwing a handkerchief", nursery rhymes, it makes children feel the charm of music while chasing and jumping. There is also a "play house" folk game. Children like to find all kinds of beautiful things to dress themselves up, dressing up as princes or princesses in fairy tales, which also invisibly cultivates children's pursuit of beauty. "Jasmine Flower" music game, children play through traditional folk songs, and the whole process is relaxed and happy, various Chinese elements that can be added to the game, which can be done through role games. Folk games can also be played through art activities. Children use various methods such as cutting, painting, weaving, etc. to make lanterns, peacocks, producers, fish and other ornaments with Chinese folk customs characteristics. For example, "Mouse of Marriage" game can let children understand the content of the story by performing role games or paper-cutting, and reproduce the folk art for children, so that children can feel the charm of folk culture immersively, and get the aesthetic experience of folk art. In short, actively developing folk games can not only enable children's aesthetics competence to be fully developed, but also enrich their lives and make them grow up happily.

4.6. Folk games can develop Mathematics Competence in Young Children

Mathematics isn't limited to just number sense for preschoolers. It also includes the ability to see and create patterns, shapes, as well as organizational skills like graphing and sorting(Sarama & Clements, 2008). Mathematics is numbers and operations, measurement, patterns, geometric figures and a sense of space. From birth to five years old, children are exploring daily mathematics, including informal "more" and "less, "shape, size, order, volume and distance". Mathematics is a tool that children use every day! Babies and toddlers learn early mathematical concepts, such as geometry and spatial relationships, as they explore new ways to slap them with their hands and mouths.

The folk game "hopscotch" contains a lot of mathematics knowledge. First, the child needs to draw the shape of the house, the number, size, order, and distance of each house. Through the concept of these numbers, children can better understand the concept of mathematics. There is also a Chinese folk song "What month does the lotus bloom?", the lyrics are as follows: " What month does the lotus bloom?" "January blooms?" "Not open in January, What month will it open?"....... "June blooms". The child deepens the child's perception and interest in mathematics during the question-and-answer game, and integrates mathematics into the game organically. In this folk game, children's thinking is active, while the body movements are developed, the children's mathematics competence is also exercised. Some folk games are equipped with jingle, rap, etc., such as: "One, one, one, what one? One is the kitten catching big fish. Two, two, two, what two? Two is kitten combing pigtails. Three, three, three, what three? Three is kitten climbing snow mountain. Four, four, four, what four? Four is kitten writing big words. This "Number Song of folk game", which counts from one to nine number, develops children's mathematics competence. Another Jumping the Rubber band Ring for Chinses children.

One, two, three, four, five, six, seven,
Malan flowers twenty one,
Two, five, six,
Two, five, seven,
Two, eight, two, nine, thirty one,
Three, five, six,
Three, five, seven,
Three, eight, three, nine, forty one.

All these nursery rhymes are very popular among children. The regular rhythm of numbers can help children count and cultivate children's knowledge of numbers (Clements, 1999).

V. CONCLUSION

Folk games originate from the folk (Tolib & Nigora, 2021). The reason why it can be passed down from generation to generation is because it caters to children's psychological and developmental characteristics. The content of folk games are specific and vivid, the form is lively, relaxed, and interesting. Folk games are an indispensable part of children's growth. The colorful folk games have a huge impact on the development of children in all aspects, and their effects cannot be replaced by other games (Abdullaev, 2021). It can not only promote the development of children's physical and mental health, but also promote the development of children's Science, Technology, Reading, Engineering, Aesthetics, Mathematics (STREAM). STREAM education has been identified as a critical component in developing student critical thinking, problem solving and collaborative skills (Clements, 1999). For folk games, we should carry forward its advantages, make folk games more interesting and entertaining, and promote the development of children's STREAM competence through folk games, and lay a solid foundation for children's future.

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