

The Influence Of Stop Motion Animation On The Coherent Thinking Of Preschool Children's Education

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Abstract

Preschool children refer to children from the age of 3 to 6-7 years of age. Children at this stage are about to receive formal learning, and early enlightenment education has an important influence on the development of their thinking and the ability to learn knowledge. The stop-motion animation combines the feelings of sight, hearing and touch, and becomes a kind of educational and entertaining way for children to understand the world. It shows unique animation effects in the form of continuous play through a frame-by-frame shooting of the movement of the real combination of things. Preschoolers need to use coherent thinking to understand when watching stop-motion animation. The paper tries to study the influence of stop-motion animation on coherent thinking in preschool children's education through the analysis of preschool children's psychology and the characteristics of stop-motion animation.

Key words: stop-motion animation; preschool children's education; coherent thinking

Introduction

Nowadays, more and more parents are paying attention to the early education of children. As an important stage of the development of children's thinking ability, preschool age has also received more attention from educators. Parents and teachers, through the education of preschool children, hope that they can better build their thinking skills in the process of growing up, help children to enrich their vocabulary, and correctly understand and use various concepts. While stop-motion animation as an educational and entertaining way during childhood early education, through the constant movement of animation and the true texture of stop-motion animation materials, children's perceptual cognition of different things and the connection between animation materials and real things is strengthened, so as to exercise children's coherent thinking ability.

The charm of stop-motion animation

Stop-motion Animation is an animated form of real-life objects that is created by frame-by-frame shooting using photographic techniques. It can be called frame-by-frame animation or still animation and so on. In the production of stop-motion animation, firstly, the object is photographed, then

the shape or displacement of the object is changed, or the object is being taken instead and then photographed, after repeated repetitions, the photos are connected in series for playback to form a coherent animation. Because the object itself has realistic materials and textures, it has unique artistic value and is distinguished from hand-drawn animation and digital animation.

Stop-motion animation is a unique form of animation art. Unlike hand-drawn animation and computer animation, the texture of stop-motion animation is usually made of clay, puppet or mixed materials and so on. These materials come from everyday life, including paper-cuts, origami, clews, dirt, rags, sand, Wood, liquids, and so forth (Fig. 1), and even real people can also be used as media in stop-motion animation. By watching or participating in the production of stop-motion animation, preschool children can improve their ability to observe stereoscopic and cognitive experiences of things.



Fig.1 stop-motion animation scene made with felt cloth

Characteristics of preschool children's thinking

Preschool is the golden period of children's intellectual and cognitive development. It is also the period of rapid development of language in children's life. During this period, children's cognitive ability for things develops rapidly, and the vocabulary increases, therefore, the education of preschool children is crucial to the development of children's intelligence and the shaping of thinking structure.

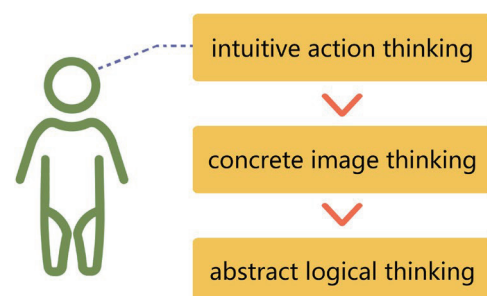


Fig. 2 Trends in thinking patterns of preschool children

Thinking is the essential attribute of the things that the human brain responds. The gradual formation of the cognitive process of children makes the children's psychology undergo an important qualitative change, which leads to the thinking structure. The development trend of preschool children's thinking patterns is mainly from intuitive action thinking to concrete image thinking, and then develop into abstract logical thinking (Fig 2).

Preschool children rely mainly on perception and action. This intuitive action thinking is the initial stage of thinking development. Perception emphasizes the possession of intuitive material. Action emphasizes doing first and then thinking, aimless, no plan.

The concrete thinking of children develops gradually on the basis of intuitive action thinking. At this time, the children usually stay in the appearance of things, and this kind of representational thinking determines the behavior of the children. The concrete manifestation of concrete image thinking is that children can recognize a single actual object. For example, preschool children can recognize specific grapes. If they are allowed to distinguish whether the grape belongs to the category of fruit, they cannot recognize it. Fruit is an abstract concept, and preschool children cannot recognize it accurately. The image is expressed in children's ability to distinguish between shape, color and sound according to the actual object. In their present stage of thinking, their description of grapes is usually superficial, such as grapes, these are the round grapes, these are the purple round grapes, these are the purple round small grapes (Fig. 3).

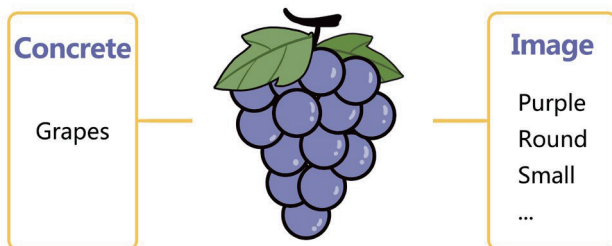


Fig.3 Preschool children's cognition of grapes

Abstract logical thinking is a typical way of thinking for human beings. Children can gradually develop abstract logical thinking after they are 5 years old. At this stage, they will gradually form self-evaluation ability, and in emotional aspects, they will change due to the influence of external things and slowly control themselves emotions. With the development of abstract logical thinking, they can already classify some simple things, such as animals and plants, and can describe things vividly with the improvement of language expression ability.

The influence of stop-motion animation on the coherent thinking of preschool children's education

A. The Coherence of specific image cognition

Cognitive ability is the ability of people to control the formation law, development direction and basic performance of things. It is a process in which the brain calculates, stores and extracts things. Cognitive ability mainly includes analyzing dismantling, recording things, observing emotions, thinking

dimensions and associations. The preschool period is a period of the initial development of children's cognitive ability, and is also crucial for the development of children in the later period. At this stage, children mainly recognize things through concrete image thinking, but lack the connection and thinking about the diversity of things. The stop-motion animation is created with real materials as the carrier, so that the picture presents a unique and sensible texture, and some of them will be processed on the basis of the existing materials, imitating the texture of other objects, whether shooting with real materials or the imitation of the object, the camera truly records its true appearance, so that giving it a 100% "real" visual effect.

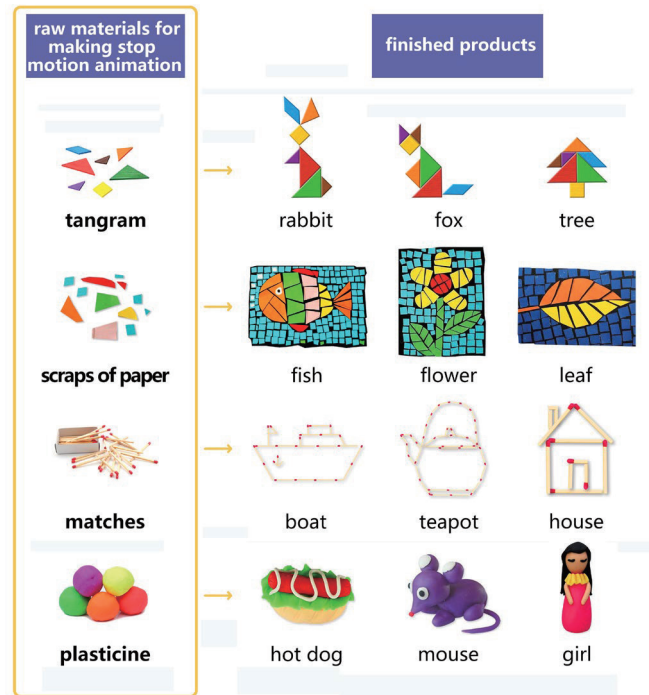


Fig. 4 Raw materials and finished products of stop-motion animation

There are various raw materials for making stop-motion animation, and different shapes and combinations of physical shapes and colors form different shapes, breaking the preschool children's single cognition of a certain thing, so that they can associate with other specific things and cultivate their understanding of things in a coherent way of thinking. For example, with Tangram as the material of stop-motion animation, children can not only recognize the color and shape of the Tangram, but also build up a cognitive connection between the Tangram and many other things through the different shapes of the Tangram into rabbits, foxes and trees. Similarly, Scraps of paper, matches, Plasticine, etc. can be used as raw materials for stop-motion animation to produce a variety of finished products (Fig. 4). By watching or participating in the production of stop-motion animation, not only can preschool children realize the stereoscopic animation raw materials and the shape, color and shape of the finished products, but also enable children to establish a coherent thinking system of the cognition of frozen animation raw materials, different finished products and real things in reality.

B. Visual coherence

The reason why the stop-motion animation can be played smoothly is to use the Persistence of Vision phenomenon of the

human eye, which is also the principle basis of stop-motion animation. Visual residual phenomenon is a kind of physiological eye phenomenon of human beings. When an object or image suddenly disappears from the line of sight, the image of the object received by the human eye does not disappear immediately, but continues in the human vision for 0.1-0.4 seconds. The psychologist's annotation is: when a number of similar and slightly different images appear in the line of sight, in their psychology people cannot help but create coherence the high picture content, creating an intuitive sense of dynamic tendency, that is "Stroboscopic movement". In animation, film, and television, the persistence of vision and the principles of stroboscopic movement of human are also utilized to produce visual effects of image motion.

Because of the moving picture formed by frame-by-frame shooting, the motion of the stop-motion animation is more performance-oriented, and the "moving" is also more characteristic. Due to the particularity of its "moving", in the production of stop-motion animation, the requirements for the authenticity and fluency of the action will also be lowered, which makes the "moving" in the stop-motion animation more creative and agile. Compared to 2D and 3D digital animation, stop-motion animation is shot frame-by-frame by the photographer to produce a coherent picture of one card and another card, and the viewer needs to use the visual coherence of the brain to connect the picture in the brain to build a coherent action model, so as to smoothly receive the information transmitted by the stop-motion animation. As shown in Figure 5, in the stop-motion animation, the end of the day is represented by the way the sun rises and falls. By shooting by frame, our eyes can get 3 frames of images, namely, the position of the sun in the morning, at noon, in the evening, and in the human brain, we have added a total of 14 intermediate frames from a to n, and show an arc of motion, which makes the animation of the sunrise and sunset scenes coherent.

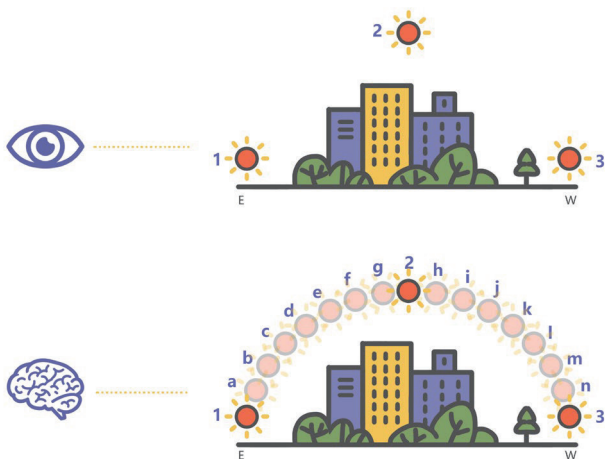


Fig.5 Coherent thinking in stop-motion animation

Moreover, the judgment of preschool children is extremely simple, and it is difficult to concentrate on the observation of things. They often do two things at once. In the process of judging things, they only grasp a specific feature of things and ignore their unimportant aspects, such as "the sky is blue, apple is round, rabbits have long ears, etc." In daily life, children gradually form a continuous and purposeful self-observation

ability under the guidance of teachers and parents. At the age of 5-6, they are able to continuously observe things and find out the commonalities and advantages and disadvantages of various things in the games and activities of interest., and gradually transform their thinking into abstract logical thinking.

Conclusion

The unique material sense and shooting technique of stop-motion animation distinguish it from the general hand-drawn animation or computer animation. The thinking enlightenment of preschool children is to lead children to understand better the world things and promote children to pay attention to the surrounding environment, actively share their views. In terms of cognition and vision, stop-motion animation not only allows children to better understand the production materials in stop-motion animation, but also can make the coherent relationship between the created characters and the real things in real life, and exercise their coherent thinking. Also, let the children touch the art of stop-motion animation. As long as we reasonably use the art of stop-motion animation, from the children's psychology, I believe that more children will come into contact with this art, and stimulate more thinking ways from stop-motion animation, learn flexible creativity and elegant art taste, establish independent personality, and provide a way for preschool children's enlightenment education.

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