The Influence of Different Drawing Tools on the Learning Motivation and Color Cognition of the Fourth Grade Students at the Elementary School

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Abstract

Applying scientific and technological products to the domain of education has gradually become a trend. In the area of art education, using digital tools such as tablets and stylus not only help students freely create their imagination, but strengthen their ability to understanding the colors of the real objects. Therefore, in order to understand how the different digital drawing tools influence on the color cognition and learning motivation of the fourth grade students at the elementary school, we asked the students using "interactive electronic drawing pen", which can capture the colors of the object, "stylus" and "traditional drawing tool" to take the drawing task. Four-stage drawing experiment with 27 students from the fourth grade of elementary school were carried out, and the differences on the drawing outcome and color cognition of the students were compared for further discussion.

The result shows that: 1) Comparing the results of "drawing behavior analysis" and "the pre-test and post-test of their color cognition", we found that the students using "interactive electronic drawing pen" can improve their color cognition and depict objects with richer and more accurate colors than using the other drawing tools; 2) Through the analysis of their drawing behaviors, we found that the students frequently interacted with the drawing objects when using the "interactive electronic drawing pen", showing that "interactive electronic drawing pen" indeed helps to increase the chances for them to observing and realizing real objects; 3) Analyzing the result on the interviews of the students' learning motivation, 85% of the students consider that using the "interactive electronic drawing pen" to learn color is interesting; 63% of them believe that the "interactive electronic drawing pen" can trigger their curiosity on colors and enhance their learning motivation.

Keywords

Color cognition   Learning motivation   Drawing tools   Art education

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Notes

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