# Creative Design Research on Hands-on Color Play 

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Abstract This article is based on the teaching and learning process of the Modeling Aesthetics Course offered by the Audio Visual Department. In this course, students worked freely with watercolors or poster paints. After diluting the paints, they rendered clippings through leaf rubbing and played with color creation to achieve and cultivate their cognitive and practical ability in the use of color and color matching. Best performing works were selected and displayed as research results that can be used as a reference for subsequent related research discussions and the design of teaching materials.

Keywords Hands-on Color Play, Creative Design, Modeling Principles, Visual Design

## Introduction

Due to the diversification of the channels for student enrollment and the low birth rate trend, private school teachers try their best in teaching. They hope that through vivid curriculum design, students with a foundation can have further progress, and students without a foundation can be stimulated and motivated to learn by the interesting curriculum.
This article discusses the teaching concept developed under this premise, in hopes that students can present their inner creative ideas and fully demonstrate and possess the skills of creative thinking and design through handson color play.

## The Creative Idea

In the discussion of related topics, some scholars believe that the relationship between optical structure and the human eye perception of color is complex, making the design very challenging [2]. Some scholars believe that color has a significant impact on marketing. Therefore, designers often use color strategically to shape brand personality and purchase intention [6]. Another scholar conducted experiments on the color matching of recycling bins and found that using colors that are too weak makes it less likely for people to sort their garbage. It is recommended that colors that are highly preferred by the public should be used for color matching [4].
The product color image conveys consumer needs for color through emotional cognition. Experimental results show that the proposed color decision support system has theoretical implications in the color scheme design and product color [3]. It was found that the color design in hospitals can widely improve the feelings to the environment of patients, staff, and visitors [1]. In addition, webpage color matching tries to propose a frame design for the effectiveness of exhibits and makes the module more flexible to use [7]. There are even studies using algorithms to simulate color features for texture rendering [5].

## Creative Skills

The charm of color often varies according to personal preference. This article guides students to use leaf textures, fingerprints, discarded toothbrushes, paint rendering, etc. to carry out their creative design and creation of the ands-on color play. The purpose is to stimulate student interest and motivation in learning. It can also help students who have not yet learned the basics to know how to use the objects around them for their creation.

Secondly, in the hands-on color unit of the Modeling Aesthetics Course, students are willing to create. They can also discuss and learn with their peers, making the entire learning environment full of colorful situations.

## Achievements Exhibition

The teacher and industry practitioner jointly formulated: (1) visual elements (30\%); (2) creative expression ( $30 \%$ ); ( 3 ) color scheme ( $30 \%$ ); (4) design concept ( $10 \%$ ) evaluation criteria, to provide a reference for the industry in their development of innovative products (figure 1).


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Figure 1: Design Results
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## Results and Contributions

There are multiple channels for further education. Teachers face different student abilities caused by different professional training when teaching. They also need the development and application of teaching materials, curriculum activities, and assessment tools to stimulate student interest and motivation in learning, as well as to enhance their design expertise.
Secondly, students with strong design professional abilities can be trained as contestants and teacher assistants to guide peers in need and promote the learning atmosphere of the class. They can also encourage participation in domestic and foreign design competitions to obtain better learning achievements.

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