

EFFECT OF CREATIVITY AND TECHNIQUE INSTRUCTION ON DESIGN PRESENTATION

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Abstract: According to the requirements of design competitions, creativity and technique are the basic indicators to evaluate logo design. According to literature review, prominent creativity can convey the spirit and essence of the themes, while perfect presentation of creativity relies on precise technique. This study found that in Design Presentations, young students may fail to grasp the content and spirit of the themes, rely on subjective idea, and even violate the themes in the application of modeling and color, thus producing works that contain inconsistent design content and patterns. This empirical study implemented experimental teaching on creativity and technique in the advertising design department of a senior high school. The instructional effectiveness was validated by evaluation to discuss the effects of the two indicators on Design Presentation.

This study found that the positive effects of experimental teaching on Design Presentation include:

1) immediate control of themes: helps students to understanding the background of a theme in creativity instruction, and develop specific and concrete themes through brainstorm and creativity sharing; 2) use of modeling and colors that match the themes: guides the students to practice modeling and color presentation using the characteristics of the themes, and enhances their creativity capability and skills.

Key words: Design Presentation, Creativity, Technique

1. Introduction

The researcher found that in design presentation, young students may not grasp the content and spirits of themes and they tend to rely on subjective ideas. Their modeling and color application usually do not match the themes, and the design content and formative presentation are commonly inconsistent in their works. They often receive negative comments such as “it does not match the theme” and “it is not easy to comprehend”. This study first conducted a “creativity and technique” instructional experiment of logo design in the advertising design department of a senior high school. By evaluation, the instructional effectiveness is validated. This study then suggested the effects of the two indicators on design presentation.

The indicators of logo design were based on the design goals of the Japanese designer Harada (1989). Logo design could be divided into image goals and function goals. As to image goals, it was necessary to investigate the design subjects’ backgrounds and control their characteristics. They were development goals. The function goals were examination goals used to test the effectiveness of logo and design systems [1]. The two indicators included

the meanings and forms of logos. Image goals focus on the content and meaning of logos, whereas function goals refer to the external forms of logos. The Taiwanese designer Lin (1994) suggested the characteristics of logo design as follows: identification, pioneer, unification, modeling, extension, system and time [2]. The content of the indicators matched the view of the design scholar Su (2005), who stated that logo design consists of form and content [3]. The design scholar Wang (2005) proposed internal and external design standards. Internal design standard is called the image standard, and it refers to the indicators according to the proprietors' identification definition and image positioning. The external design standard aims to create a design presentation that matches the corporate image [4].

According to above research findings, logo design combines the structures of content and form. Image goals focus on the content and meaning of logos. They are internal design standards and aim to convey image. Function goals refer to the external formative presentation of logos and are external design standards that focus on design presentation that matches the positioning of the image. They aim to enhance competitiveness. Based on above, the researcher proposed the research hypothesis: as to the indicators of logo design, internal and image goals were set as "creativity", while external and function goals were set as "technique". Prominent creativity can specifically convey the spirit and essence of themes, and creativity should be perfectly presented by precise technique presentation. They are both critical.

In addition, according to the requirements of competitions related to logo design, creativity and technique are essential indicators to evaluate logo design. The researcher reorganized the items of assessment of logo design competitions in Taiwan from the last three years. Similar terms were generalized and then classified. Items with high similarities included creativity, themes, modeling, color, completeness, and application. Creativity included creative presentation, creativity and total modeling, originality, innovation, creation, novelty, creativity and themes, creative ideas, creativity and aesthetic modeling, visual creativity and design creativity, etc. Themes included the images of themes, characteristics of themes, presentation of themes, precision of themes, presentation of the theme image, and the communication spirit of themes, etc. Modeling included modeling and color, design modeling, total modeling, image and style, etc. Color included color arrangement and color planning. Completeness included design aesthetics and art design. Application included feasibility and application development, etc.

The above six items were the criteria of the items in the evaluation of logo design. Creativity, themes and completeness are internal and image goals. This study treated these goals as creativity indicators. Modeling, color and application are external and function goals. This study treated these goals as technique indicators. In short, logo design is the design presentation of creativity (internal and content) and technique (external and form).

2. Experiment

The creativity and technique instruction experiment was performed in the advertising design department of Fu-Hsin Trade and Arts School in Taipei, Taiwan. The subjects were second-year students (17 years old on average), who were divided into the experimental group and the control group. Both groups were given the same topic, and they both had the same time for creation (four weeks). The experimental group was guided to create by the creativity and technique instruction experiment, while the control group had no guidance. The topic for both

groups combined life issue and design instruction, namely the logo design of LOHAS (lifestyles of health and sustainability).

The instruction experiment included: 1) conceptualization, 2) structuralization, and 3) visualization. The experiment content and process are shown in Table 1

Table 1. Experiment steps of creativity and technique instruction

Steps	Content	Process
Step 1: Conceptualization	Study of the theme LOHAS	·Guide students to start from their experience to explore content of the themes and collect related information. ·Ideas are developed by word association and key words are set.
Step 2: Structuralization	Content of theme is transformed into the form of creativity	·Key words are integrated and transformed into related things. ·Combination of related things. ·Sketch presentation.
Step 3: Visualization	Technique presentation	·Modeling, color presentation matches theme creativity. ·Finishing the electronic file.

In Step 1, words that were found to be in common with LOHAS were earth, leaves and water drops, while the abstract words were smile, happiness, green and slowness. Among all words, the students' preferred words of association were light bulb, faucet, bicycle, grasslands, snail, path, and peace. The sketch presentation of Step 2 was based on the earth, the sun, leaves and water drops. There were also composite combinations of other images, such as hearts combined with trees or multiple combinations of trees, water drops and arrow.

Regarding the above instruction experiment, the experimental group students suggested that they spent less time on brainstorming; however, they could more rapidly and precisely control the content of the themes. By the process of word association, creativity presentation was richer and smoother. The experimental group also suggested that their technique presentation, such as color and modeling, was more specific and successful than before.

3. Survey

An evaluation of the experiment was conducted in order to validate its effectiveness. Regarding the works of the experimental group and the control group, after eliminating works that did not match the themes or were incomplete, the researcher classified them into Class A (89-80), Class B (79-70) and Class C (69-60) based on the scores. A total of ten works of each group were selected according to the ranking of scores, and 20 works were treated as the samples. In the investigation, the samples were played randomly on the screen. The analysis of the survey result was based on the classification of the experimental group and control group.

There were 115 evaluation questionnaires. Of the respondents, 41 were male (36%) and 74 were female (64%). In addition, 60 respondents were 11~20 years old (52%); 29 were 21~30 years old (25%) and 26 were 31~40 years old (23%). According to the above literature investigation result, the evaluation items included themes, creativity, modeling, color, application and completeness. Scoring was based on a Likert 5-point scale (Likert,

1932), in which strongly agree was 5, agree was 4, no comment was 3, disagree was 2 and strongly disagree was 1). A higher score indicated a higher degree of agreement.

The evaluation result was the mean of all samples evaluated by the respondents. The codes of the samples for the experimental group were 1~10 and the codes of the samples for the control group were 11~20. Table 2 lists the means of the samples and the descriptive statistics of the samples and items. According to the items, the scores of experimental group were higher than those of the control group. The means of sample 10 were the highest and it had the best overall evaluation. Sample 20 was the logo with the lowest mean.

The highest and lowest scores are shown in Figure 1. The top three were sample 10 (a mean of 4.21), sample 06 (3.96), and sample 12 (3.72). The first two were works from the experimental group and the third was a work from the control group. The bottom three were sample 20 (a mean of 1.87), sample 14 (2.34), and sample 13 (2.46). All three were works from the control group.

Table 2. Means of samples (MAX: italic; MIN: underlined)

Samples		Themes	Creativity	Modeling	Color	Application	Completeness	Mean
Experimental group	1	3.42	3.30	3.42	3.36	3.30	3.25	3.34
	2	3.59	3.53	3.61	3.72	3.52	3.51	3.58
	3	3.75	3.63	3.72	3.61	3.54	3.55	3.63
	4	3.24	3.50	3.26	3.44	3.27	3.37	3.35
	5	3.37	3.36	3.40	3.52	3.18	3.33	3.36
	6	4.01	3.84	3.88	4.00	4.03	3.97	3.96
	7	3.43	3.29	3.38	3.43	3.17	3.18	3.31
	8	3.70	3.50	3.63	3.73	3.50	3.56	3.60
	9	3.30	3.30	3.30	3.12	3.09	3.06	3.20
	10	4.23	4.09	4.32	4.19	4.21	4.23	4.21
Control group	11	2.99	2.60	2.87	3.04	2.76	2.57	2.80
	12	3.69	3.68	3.66	3.80	3.74	3.78	3.72
	13	2.74	2.23	2.57	2.60	2.38	2.23	2.46
	14	2.44	2.29	2.33	2.35	2.38	2.23	2.34
	15	3.36	3.06	3.19	3.21	3.13	3.14	3.18
	16	3.36	3.23	3.16	2.95	3.22	3.19	3.18
	17	3.27	2.86	3.01	3.18	2.90	2.81	3.01
	18	2.93	2.40	2.82	3.11	2.72	2.74	2.79
	19	2.84	2.29	2.65	2.89	2.52	2.50	2.61
	20	1.92	1.88	1.85	1.75	1.94	1.87	1.87
MAX		4.23	4.09	4.32	4.19	4.21	4.23	4.24
MIN		1.92	1.88	1.85	1.75	1.94	1.87	1.86
Average		3.28	3.09	3.20	3.25	3.13	3.10	3.18






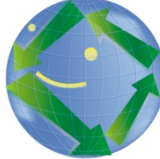
Ranking	NO.1	NO.2	NO.3
High scores	 Sample 10	 Sample 6	 Sample 12
Low scores	 Sample 20	 Sample 14	 Sample 13

Figure1. Samples with the highest and lowest scores

The curve distribution of the experimental group and the control group means are shown in Figure 2. The experimental group was more stable than the control group. As to the evaluation ranking, the evaluations of the samples in the experimental group were more consistent and those in the control group were more inconsistent. As to the means of the two groups, the mean of samples 1~10 in the experimental group was 3.55 and mean of samples 11~20 of control group was 2.80. Thus, the overall evaluation of the experimental group was higher than the control group. However, three samples in the control group (12, 15 and 16) revealed higher scores and had means at the level of the experimental group.

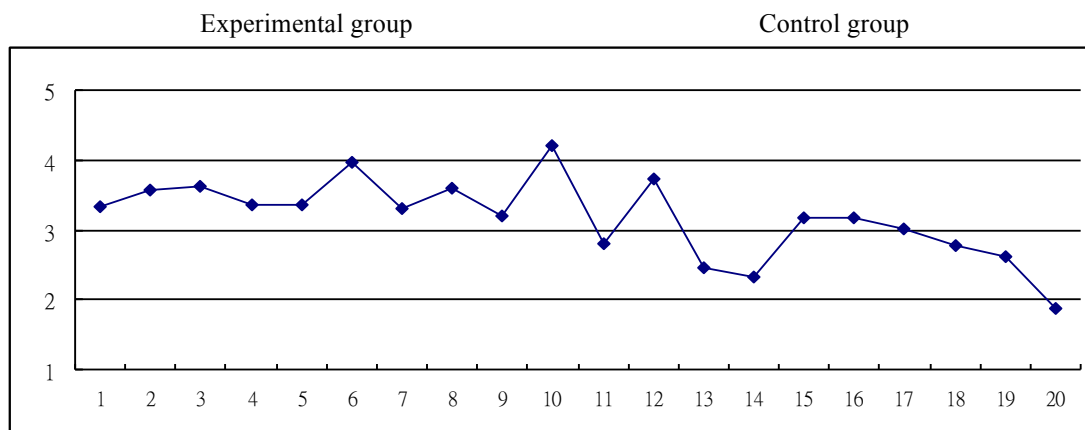


Figure2. Means of all samples

Figure 3 compares the means of the two groups. The ◆ curve represents the experimental group (samples 1-10) and the ■ curve is the control group (sample 11-20). According to the analytical result of statistics, 115 respondents' evaluations on the experimental group are higher than the control group. The overall curve of the experimental group was insignificant, meaning that the difference among the 10 samples in the experimental group was insignificant. There were more positive and stable comments. On the contrary, the curve of the control group was significant and the comments showed greater differences. Thus, the respondents' comments on the 10 samples of the control group had greater differences.

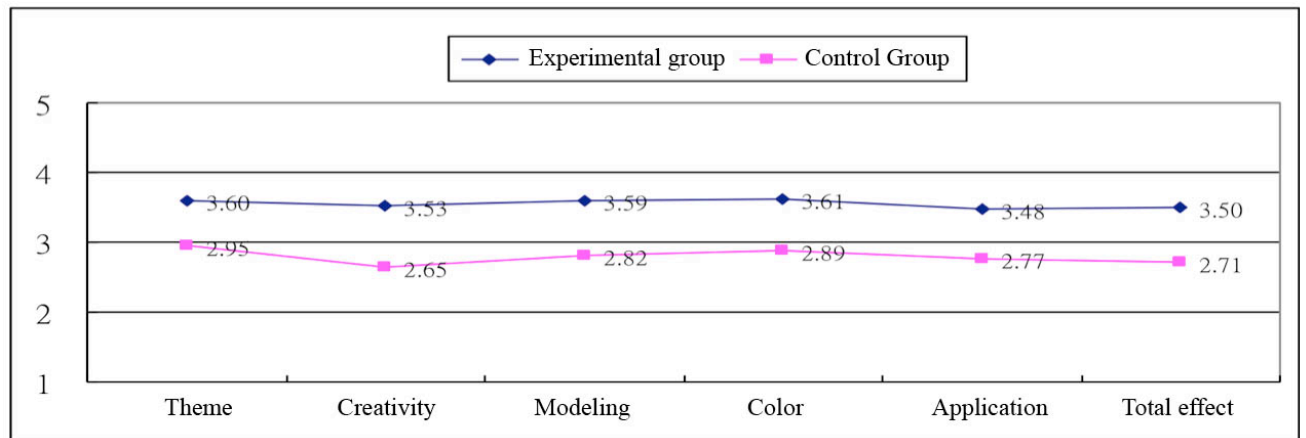


Figure3. Comparison of means of two groups

After comparing the means of the two groups, the researcher found that the item with the highest evaluation was “theme”. The respondents suggested that the presentation of the works mostly matched the theme. “Creativity” was the item with the lowest evaluation. The respondents did not have positive comments on the creativity of works. The researcher classified six evaluation items into creativity and technique to explore the scores of the samples in the two groups. As to the scores of the experimental group, the mean of creativity was 3.56 and the mean of technique was 3.54. As to the scores of the control group, the mean of creativity was 2.80 and the mean of technique was 2.79. Thus, the evaluation of creativity and technique for the experimental group was higher than that for the control group.

The researcher then conducted correlation coefficient analysis of the items. The ones with the highest correlation are shown in Table 3. There were six items that were significantly related. The correlation between application and total effect was the highest, with a correlation coefficient of 0.993**. The correlation between themes and modeling was 0.989**, and the correlation between creativity and total effect was 0.978**. The correlation between color and modeling was 0.970**.

Table 3. Items with the highest correlation

Items	Items with the highest correlation	Correlation
Themes	Modeling	.989**
Creativity	Completeness	.978**
Modeling	Themes	.989**
Color	Modeling	.970**
Application	Completeness	.993**
Completeness	Application	.993**

According to the above table, there was significant correlation among themes, modeling and color. There was also correlation among application, completeness and creativity. This indicated that in logo design, the complete control of the content of the themes will cause comments on the modeling and color to be more positive. Likewise, when design is regarded as creative, comments on the total effect will be more positive and the application will be assessed as positive.

As to t test of independent samples, creativity in the experimental group had $P < 0.05$ and was significant. There was no significant difference in the control group. As to the results of one-way ANOVA, the researcher conducted variance analysis on the means of two groups of respondents at different ages. Regarding the different ages in the experimental group, in the test on themes, creativity, modeling, color, application and completeness, only creativity ($P = 0.008 < 0.05$) was significant. The items of the control group were insignificant.

4. Conclusions

By the implementation of the creativity and technique instruction experiment and evaluation, this study suggested the effects of the two indicators on design presentation. According to the result, the evaluations on the six items of the experimental group were more positive than those of the control group. As to creativity and technique, the means of creativity (3.562) and technique (3.545) in the experimental group were higher than those (2.80 and 2.795, respectively) in the control group. According to above results, the creativity and technique instruction experiment positively influenced the creativity presentation and technique effect of logo design.

Based on the t test, the creativity of the experimental group was significant. The guidance of the creativity technique instruction experiment helped enhance the students' creativity performance. According to result of the correlation coefficient, among the six items, the correlations between themes and modeling and application and completeness were the highest. Thus, there was a close relationship between themes and modeling. Themes will decide the modeling performance and the modeling should match the content of the themes.

By observing the experiment, the researcher realized that the students developed richer association with the themes, and that modeling and color were extended. The technique effectively conveyed the messages of themes and successfully triggered the students' creativity and control of technique.

Based on the experiment and investigation result, positive effects of the creativity and technique instruction experiment on design presentation were as follows. First, the approach could help students to rapidly grasp the themes. Creativity instruction reinforced the students' recognition of the backgrounds of the themes. By class brainstorming and creativity sharing experiments, the students were able to control the content of the themes and allowed the themes to be more clear and specific. Second, the modeling and color matched the themes. Technique instruction guided the students to practice modeling and color presentation using the characteristics of the themes and strengthened the students' matching of creativity and technique. Thus, the modeling and color presentation of the works could be consistent with the content of the themes.

5. References

- [1] Harada, J. (2007)*CI Design Brand*, Morningstar Publishing, pp 146-147.
- [2] Lin, P.S. (1994)*Corporate Identity System*, Yi Feng Tang Publishing, pp 51.
- [3] Su, W.C. (2005)*Semiology Application in "Form" and "Meaning" Structure of Mark Design*, Chuan Hua Publishing.
- [4] Wang, K.T. (2005)*Enterprise Brand. Identification Image: Symbolic Thought and Design*, Chuan Hua Publishing.