## Available online www.jsaer.com

Journal of Scientific and Engineering Research, 2016, 3(2):183-186



Research Article ISSN: 2394-2630 CODEN(USA): JSERBR

# 2015 Taiwan International Student Design Competition-Using the Far East University as an Example

## Jing-Chen Xie

\* Department of Digital Media Design and Management, Far East University, Taiwan

**Abstract** This study used the Department of Digital Media Design and Management of Far East University as an example of teaching and learning for pictogram design courses. The students were arranged to participate in the 2015 Taiwan international student design competition, with their creative poster designs for the subject "embrace". The designs were evaluated through the cross-school cooperation between the 2 professional design teachers. The outstanding designs were selected for the competition. It was hoped to inspire the university students' creativity and ambitions and to help improve their professional abilities in creative design.

Keywords Digital Media Design, Pictogram Design, Creative Poster Design.

#### Introduction

Design education stresses presentation of creative ideas. However, design theories and practical skills must be integrated for a good creative idea to work. Then visually beautiful elements need to be combined. And through fluent speeches, the design ideal can be presented. In the aspect of design theories, it is important for teachers to organize and summarize key points in their teaching contents and pass them on to their students. In the aspect of practical skills, teachers' personal demonstrations and explanations of examples are important for them to teach these skills to their students. Secondly, in the processes of teaching and learning, through interactions and discussions between teachers and students, creative ideas can be inspired and then actually implemented.

In this study during the processes of teaching and learning in the pictogram design course, the students were arranged to participate in the 2015 Taiwan international student design competition, with their creative poster designs for the subject "embrace". The designs were evaluated through the cross-school cooperation between the 2 professional design teachers. The outstanding designs were selected for the competition. It was hoped to improve their professional abilities in computer software applications and awareness of aesthetics.

## Literature Review

Some studies suggested that pictograms affixed to agricultural machinery are important tools to reduce the occurrence of accidents and injuries when correctly noticed, comprehended, and followed [1-2]. Also a study indicated that when using pictograms on drug labels, their design must be clear and simple [3]. One image can replace a thousand words. A good pictogram design for an item can help users to learn about what they should know about the item and the functions of the item in a short time, reducing the possibility of misuse [4]. There was also a study showing several pictograms without any text to children for identification. The experiment result showed that children had a very unique understanding of pictograms. This finding was helpful for designing items related to children [5].

Computer-aided design has been considered as one of the most important tools for industrial product design or visual media design nowadays. The parameters of applications help to present creative ideas, so that the quality of the overall structures of products can very high, making people's living environment better and safer [6-7]. Computer-aided design or computer-aided manufacturing (CAD-CAM) can be used to plan reconstructive surgery, optimizing aesthetic outcomes and functional rehabilitation [8]. Some study combined computer-aided design with the creative method from the TRIZ theory to design items. The results were fairly good [9].



#### **Creation Design**

Knowing how to apply graphic software as a tool to support creation is an important and essential skill for design learners. In this study, the students performed practical design with the subject "embrace" for the 2015 Taiwan international student design competition. They had to present family love, friendship, love between lovers, and humans' various affections regarding all things on earth in a creative way. Then they had to present their creative ideal through an oral presentation.

After understanding the meaning of the competition, the teachers and the students began in the teaching and learning activities in the pictogram design course to determine their design directions, visual elements, the creative ideal to be stressed, and how to present it. They could then discuss and make modifications after class using internet tools such as Facebook, Hangouts, and Skype. The two teachers evaluated the students' works together based on the scoring criterion of the competition (creativity: 50%; relevance to the subject: 30%; and composition and aesthetics: 20%) and assisted the students in the competition.

### **Design Results**

This study allowed the students to design their "embrace" posters during the pictogram design course. The selected outstanding works are presented below with descriptions of their subjects and creative ideals and some photos.

I know you need an embrace: In life, frustrations are inevitable. Some people cannot go through every turbulent phase in a peaceful way. Their sense of loss may start to accumulate. When their pressure is excessive, despair arises and further leads to depression. Actually, sometimes, all they ever want is to be loved, to be guided, and to embrace their whole self (figure 1). Embracement: A good morning always begins with a good breakfast. Usually, there are eggs in breakfasts. This is why an egg is added to this meal. Based on the theme of embracement, the egg white and the egg yolk embrace each other, making this meal even more delicious. The egg yolk which is being embraced has a warm facial expression like a child. And the egg white is like a mother taking care of the yolk. The overall atmosphere is very warm and nice (figure 2). Embracement: Trees are tall, big, and dense, symbolizing a strong force from embracing each other, showing a sense of responsibility and safety. Branches which extend up symbolize close connections among people. The hearts represent people you love, important ones, and even those who love you. The birds resting on the trees represent that we are capable of helping those in need, embracing their sorrow, and helping them to get out of their difficult situations. The flowers, fallen leaves, and fruit represent the marks left after going through all these, reminding us to embrace ourselves (figure 3). Embracement: One of the reasons of endangered animals becoming extinct is the environment being harmed. In the natural environment, evolvements of lives and climate changes continue in a very slow pace. Animals can usually adapt and deal with interferences from the nature. However, human activities and illegal hunting have changed the nature and harmed animals' living environment. As a result, the numbers of animals are dropping and some species are facing extinction. In the past, animals have been endangered. Now, it's time to save and protect them from being harmed again. If you love them, please give them an embrace (figure 4). Embracement: Going back to the beginning of our memories, when we first started to remember things, family affection is warm and irreplaceable. When growing up, we began to make true friends and build friendships without any regrets. Then romance quietly got into our lives, sweat, with mutual tolerance. We have family affection, friendships, and love in our life. Do you still remember when was the last time you embraced your family, friend, or lover? Where did those beautiful moments go? Let us cherish this moment right now and embrace them wholeheartedly! (figure 5).



figure 1









figure 2







figure 3







figure 4







figure 5

## **Discussion and Suggestions**

This study allowed the students to design their "embrace" posters during the course and participate in the competition. The discussions and suggestions related to this study are summarized below:

(1) The teachers and the students discussed face to face or through the internet, allowing their creativity to be inspired and design professional abilities to be improved. Moreover, with the professional guidance from the two teachers, their designs showed higher design diversity and a higher possibility for development.



- (2) The teachers assisted the students to participate in the international design competition, helping them to expand their views regarding design and learn design related professional courses with higher confidence.
- (3) Generally, the students' oral presentation ability was poor and needed more guidance from and being urged by the teachers. Due to the trend of internationalization, it would be better to offer foreign language trainings for the students.
- (4) Winning is of course the best result. However, there is no need to be sad about not winning. The best attitude after losing is to keep on the efforts and make better preparation for the next competition. Victories belong to those with sufficient experiments in competitions.

#### References

- [1]. F. Caffaro, E. Cavallo, Comprehension of safety pictograms affixed to agricultural machinery: A survey of users Journal of Safety Research, In Press, Uncorrected Proof, Available online, 14, September, 2015.
- [2]. M.C. Barros, T. S. Alcântara, A. R. Mesquita, A. C. O. Santos, F. P. Paixão, D. P. Lyra Jr, The use of pictograms in the health care: A literature review Research in Social and Administrative Pharmacy, 10 (5), September-October, pp. 704-719, 2014.
- [3]. N. Kheir, A. Awaisu, A. Radoui, A. El Badawi, L. Jean, R. Dowse, Development and evaluation of pictograms on medication labels for patients with limited literacy skills in a culturally diverse multiethnic population, Research in Social and Administrative Pharmacy, 10 (5), September-October, pp. 720-730, 2014.
- [4]. Y. Joshi, P. Kothiyal, A pilot study to evaluate pharmaceutical pictograms in a multispecialty hospital at dehradun, Journal of Young Pharmacists, 3 (2), April-June, pp. 163-166, 2011.
- [5]. G. O. Deák, A. J. Toney, Young children's fast mapping and generalization of words, facts, and pictograms, Journal of Experimental Child Psychology, 115 (2), June, pp. 273-296, 2013.
- [6]. L. Y. Ng, F. K. Chong, N. G. Chemmangattuvalappil, Challenges and opportunities in computer-aided molecular design, Computers & Chemical Engineering, 81 (4), October, pp. 115-129, 2015.
- [7]. M. Lampe, M. Stavrou, J. Schilling, E. Sauer, J. Gross, A. Bardow, Computer- aided molecular design in the continuous-molecular targeting framework using group-contribution PC-SAFT, Computers & Chemical Engineering, 81 (4), October, pp. 278-287, 2015.
- [8]. Tarsitano, G. D. Corso, L. Ciocca, R. Scotti, C. Marchetti, Mandibular reconstructions using computer-aided design/computer-aided manufacturing: A systematic review of a defect-based reconstructive algorithm, Journal of Cranio-Maxillofacial Surgery, In Press, Corrected Proof, Available online, August, 2015.
- [9]. R. L. Flores, J. P. Belaud, J. M. L. Lann, S. Negny, Using the collective intelligence for inventive problem solving: A contribution for open computer aided innovation expert systems with applications, 42 (23), December, 9340-9352, 2015.

