

A STUDY OF THE COMPUTER GRAPHIC DESIGN COURSE

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ABSTRACT. *Computer graphic design software is one of the compulsory courses for digital media students. When facing various kinds of drawing software, teachers need to choose one that enables simple and easy teaching in order to stimulate student interest and motivation. In such a way, students can be trained to become familiar with a technical creative tool. Teachers must also be able to teach by example and enhance the students' aesthetic sense through the appreciation of others' excellent works. This article not only emphasizes the study of Illustrator software but also stresses the aesthetics of student work. It is expected that through continuous discussion and modification, student work would be able to improve.*

Keywords: Computer graphic design, Digital media, Drawing software

1. Introduction. Computer-generated imagery can be categorized as bitmap and vector. A bitmap uses small pixels for drawing and recording images. If a bitmap is enlarged, the pixels will also be magnified, making the lines uneven and the image blurred. Vector graphics use mathematical operations to record images, and when zoomed or reduced, the lines are still smooth, the picture does not deteriorate, and the image maintains a clear state [6].

Illustrator is a professional software used to draw vector graphics. It can simulate various line textures and is widely used in signs, posters, and business cards. It can also be used with Photoshop and Flash Editor for the production of animations, web pages, and other works. In this article, freshmen students were taught to create images in Illustrator. Through the process of discussion and modification, they were helped to learn the techniques for the operation of this software and to design with aesthetic sense. Since the students learned only the basic operations of the computer graphics software, details are not discussed here due to space constraint. However, through diligent practice of this software the ability of the students of the department can be greatly enhanced.

2. Literature Review. Some graphics software is difficult to learn; therefore, the more user-friendly Illustrator was developed for the learning of designers [3]. Of late, many illustrations are being created through computer software, and excellent marketing techniques used for online sales are getting very good sales performance. However, products must possess texture and beauty in order to sell well [4]. Teaching students to be able to interchangeably use Illustrator and 3D software trains them to be skilled in using graphic design software [5].

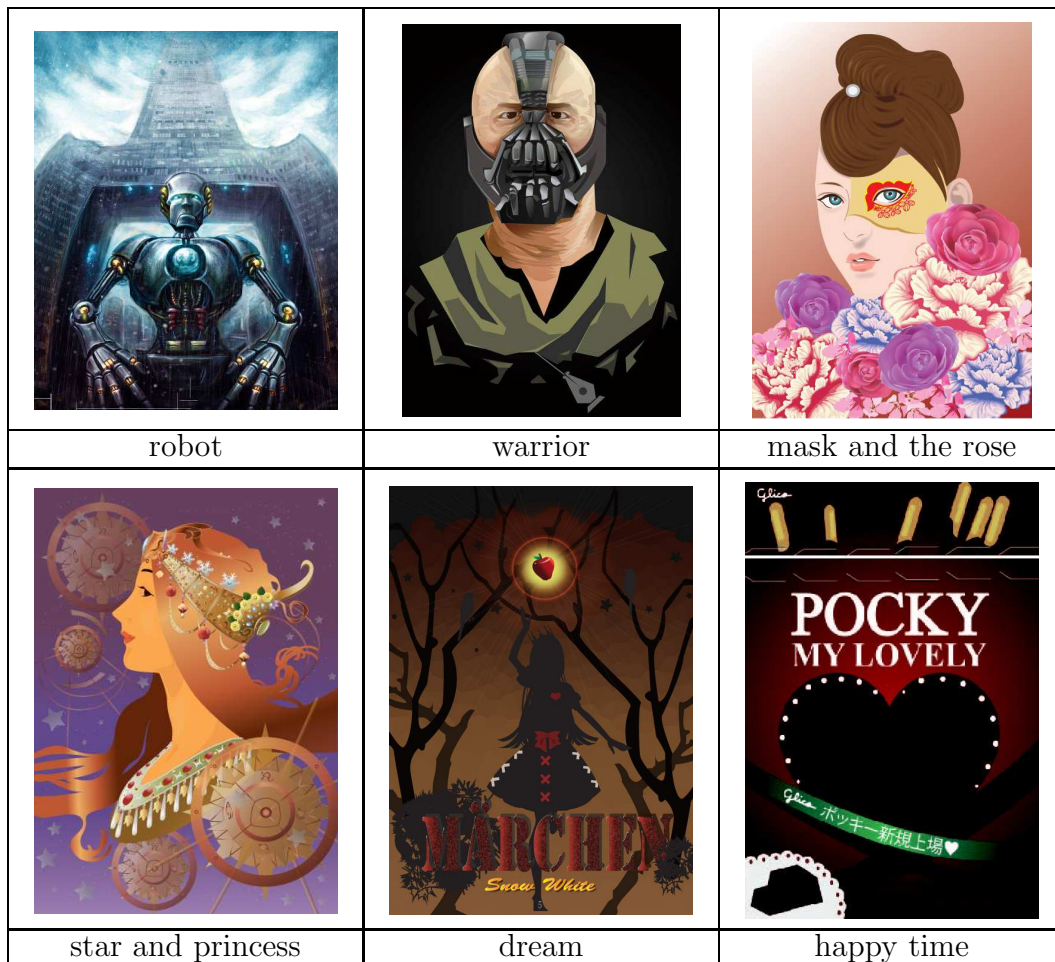
Technological innovation and change. Graphic design not only requires a high level of creativity, it also needs design technology to produce creative design results. It is considered that there is a need for in-depth discussion of this meaning [1]. Some scholars think that for design students and artists, computer graphics design is a very important tool to learn; therefore, a more user-friendly interface should be developed for operation




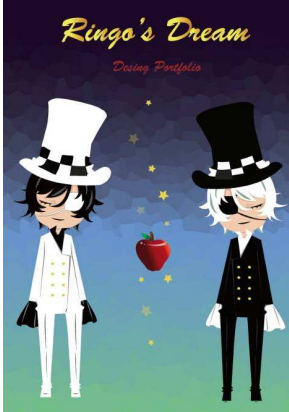

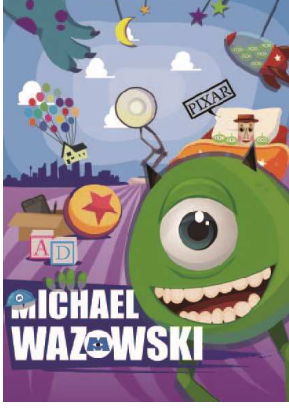


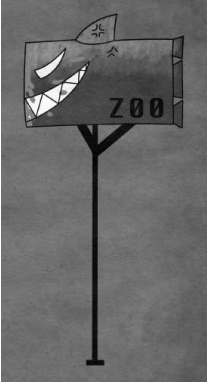
of users [2]. An easy to learn software allows students to have fun while learning and helps improve learning outcomes.

3. Innovation Product Design. When using Illustrator to draw computer graphics, CMYK and RGB are the two color models available for use. The CMYK model is analog printing produced by mixing the four colors cyan, magenta, yellow, and black and is suitable for ink printing. The RGB model simulates the colors in nature by mixing the three colors red, green, and blue. It is suitable for the creation of on-screen display. Furthermore, when producing creative works using Illustrator, aside from learning the drawing environment and tool functions, aesthetic sense must be nurtured to produce high-quality work [6].

Familiarity with how to operate Illustrator can enable creative ideas to be presented on the point-line surface and even make possible the photo-realistic design of innovative products. Beginners learn easily and get started quickly because Illustrator is a straightforward graphics software. Moreover, the file containing the creative work is easy to convert and export, its color looks fresh and vivid, and it occupies less memory. Many designers use it to design business cards, cards, logos, DM, and posters.

4. Design Results. After learning how to use Illustrator graphic design software, the teacher asked the students to create designs of their topics of interest. The following are student works that show excellent creativity (Figure 1). The students mostly chose to use Illustrator graphic design in recreating people and things from their surroundings.



		
<p>false</p>	<p>wisdom</p>	<p>technology service</p>
		
<p>safe or dangerous</p>	<p>helicopter</p>	<p>white and black</p>
		
<p>doll</p>	<p>doll</p>	<p>green and boy</p>
		
<p>superstar</p>	<p>stroke</p>	<p>stroke</p>

		
superman	creative work	fish wings
		
freedom?	pretty and cute	strange

FIGURE 1. Design results

5. **Conclusions.** It is recommended that future research be conducted on topics related to computer graphics software. In summary, the teacher and students put forward the following points to discuss as well as suggestions for the teaching and learning process in the computer graphic design course.

(1) Due to low birth rate, students are less resistant to pressure, and their learning motivation is not high; therefore, the rate of submission of projects is also low. This easily leads to unproductive learning. There is a need for teachers to give incessant guidance and encouragement during the first year learning process.

(2) Teachers can encourage students to practice using the graphic design software so as to enhance their computer design skill which is an important tool in the design process.

(3) It is indispensable for teachers to cultivate the aesthetic sense of students. It is recommended that the method of teaching by example be used so that students can be better enlightened and their aesthetic sense enhanced.

(4) If a student is familiar with the graphic design technology and can produce creations with texture and beauty, after daily practice, he will eventually be trained to become an outstanding design professional.

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