Learn Typography Using Design Tools

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Abstract: - This paper will focus on the dynamics of group collaboration within a design project context and the application of design software tools. A typography design based project was used to create a collaborative learning environment with the aim of inculcating collaborative skills into the learners and increase their creative problem-solving and critical thinking skills. Therefore, the study were sought to measure the task skill which the focusing will be on the skills acquired in learning and the process skills which will be focus on the individual and group response during the completion of the task. The ability of students to produce good typography artwork according to the specific requirement was measured from the final artwork submitted.

Key-Words: - Typography, Design Tools, Learning Process, Typography Artwork, Skills Requirements, Collaborative Learning.

1 Introduction

The focus of this research was to study the dynamics of group collaboration within a design project context and the application of design software tools. A typography design project was used to create a collaborative learning environment with the aim of inculcating collaborative skills into the learners and increase their problem-solving and critical thinking skills. Thus, in higher education, mostly, the class has been equipped by computer [6] for the skill requirements at higher institutions. The project was created using all the software tools for design such as Adobe Photoshop, Adobe PageMaker, Illustrator, Adobe Macromedia Freehand and Quark Express, standard software tools for design application.

2 Design of the Study

The study is based on a conceptual framework for the collaborative environment within a typography design project. The framework comprised of three parts: introduction on the project, team formation and collaborative activities. The briefing occurred simultaneously to all the students during the lecture. The students were brief on the requirements, specifications and the objective of the project

During the collaborative learning activities the team had to work closely to enable them to plan and

execute their idea according to the design process acquired. "A good process keeps the mind alert - preventing us from jumping to conclusion prematurely and while process is more important than result, we respect a good result from a good process" [3]. In professional practice, there are a few steps to guide through the design process: usually it begins with:

- Research Findings
- Brainstorming
- Thumbnail Sketches
- Developing Visuals
- Implement Final Comprehensive 'Comp'
- Final Artwork

Computers permits designers to accomplish numerous possibilities and computers can do much to enhance an existing concept but computer cannot create a concept [7]. This study was conducted to examine their efforts to collaborate with each other in order to accomplish their goal, which was quite challenging for them to achieve on their own. It was also geared towards educating, and providing a visual experience that combines art and technology to the students. At the end of the project the final typography artwork will be produced in digital format.

2.1 Participants

The study was conducted in Trimester 3, in the academic year 2003/2004. Subjects consisted of 234 students in their third semester of their first year (Beta level) of their Bachelors in Multimedia in the Faculty of Creative Multimedia (FCM), Multimedia University, Cyberjaya, Malaysia, taking the Media Design Process 3 (MDP 1033) course.

2.2 Procedures

The students were given six weeks to complete the project (as the final assignment in the course) whereby they were required to work in a group of two by self-selection. Thus, there were 117 groups of students participated in this study and were actively responsible for their own learning process. According to Rau and Heyl, smaller groups (of three) contain less diversity; and may lack divergent thinking styles and varied expertise that help to animate collective decision making [4]. Conversely, in larger groups it is difficult to ensure that all members participate. An article [5] stated that 'small group work, used both in and out of class, can be an important supplement to educators, helping students master concepts and apply them to situations calling for complex applications of critical thinking skills.

3 Result and Discussion

Table 1 below shows that all the students have technical knowledge of the computer and the use of software to create images and design, but were not at an advanced level. From the 100% registered for this course, 94% of the students were from foundation level (Alpha Year) where they had completed their Computer Graphics (CG1) course which was a prerequisite subject, in their first, second and third semester.

During these years they had been exposed to the computer, web, and design tools. Whereas the other 6% of the students were the 'direct intake' students students who were directly joined Beta without entering Alpha Year. These students had undergone a 3 years diploma in Design and any other Computer related courses from other local university and colleges. Basically, all the students have knowledge in using computer. Thus in this question, the experience of using design tools is the ability of using it wherever needed. This project will not give them an extra class on how to use these design tools.

	Frequency		%(p)
Yes	14	Alpha students	6.0
No	220	Direct Intake students	94.0
Total	234		100.0

Table 1: Experience Level

For this project, the students were required to execute their final artwork using Adobe Photoshop, Adobe Illustrator, Adobe PageMaker, and Macromedia Freehand, Quark Express or any other existing software. It is an essential that the use of design software tools, allowed the students to become more technically inclined and able to immerse themselves in a very relevant and authentic task as a multimedia designers and developers.

Table 2 shows that the understanding in applying the design software according to their design needs. From 117 groups participated, 73% from the whole group were using Adobe Illustrator and Adobe Photoshop as their main software whereas 13 % of the group were using Adobe Photoshop + Macromedia Freehand, 2% were using Adobe Photoshop + Adobe PageMaker, 3% were using Adobe Photoshop + Adobe Illustrator + Adobe PageMaker, 4% were using Adobe Photoshop + Adobe PageMaker + Macromedia Freehand, 3% were using Adobe Illustrator + Adobe Photoshop + Adobe PageMaker + Macromedia Freehand and 2 % were using others than stated in the questionnaire.

On the whole, majority of the students (73%) were using Adobe Photoshop and Adobe Illustrator. These applications are the best software suits for this project. It proofs the increased of the students understanding towards the usage of the design software tools and it was also evidenced by the quality of their final work submitted.

Designs Tools	Frequency	%(p)
Adobe Photoshop + Adobe Illustrator	86	73.0
Adobe Photoshop + Macromedia Freehand	15	13.0
Adobe Photoshop + Adobe PageMaker	2	2.0
Adobe Photoshop + Adobe Illustrator + Adobe PageMaker	3	3.0
Adobe Photoshop + Adobe PageMaker + Macromedia Freehand	5	4.0
Adobe Illustrator + Adobe Photoshop + Adobe PageMaker +	4	3.0
Macromedia Freehand		
Others	2	2.0
Total	117	100

Table 2: Design Tools Requirements

The term 'collaborative learning' refers to an instruction method in which students at various performance levels work together in small groups toward a common goal. The students are responsible for one another's learning as well as their own. Thus, the success of one student helps other students to be successful [1]. Collaborative learning by Barbara Leigh Smith T.MacGregor in their article Jean abbreviated from [2] referred collaborative learning as "an umbrella term for a variety of educational approaches involving intellectual effort by students, or students and teachers together.

4 Conclusion

Learning typography is one of the modules in this course that prepare students for professional practice in their future projects and careers. Therefore, it is project-based rather than subjectbased. In this class, the students are being actively involved in the development of this project and in their own learning process whereby they learn more about the course content, design tools and software and develop their teamwork skills. When the students engaged in their process of learning, they are learning by doing. Good design thinking is developed through investigation and experimentation. As such although the role of a

instructor are moving away from the traditional role of being an expert, but scaffolding activities are still needed in able to help the students to built their skills.

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