O Worthiness of Adobe Flash Multimedia no Programa de Design de Moda do Curso de Graduação da Universidade Estadual de Malang

The Worthiness of Adobe Flash Multimedia in Grading Course's Fashion Design Program of Malang State University

El valor de Adobe Flash Multimedia en el programa de diseño de moda del curso de calificación de la Universidad Estatal de Malang

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### Resumo

O uso do Adobe Flash Multimedia como mídia de aprendizado é considerado menos utilizado pelos professores ou professor no processo de aprendizagem. No programa de design de moda, especialmente no curso de graduação, o Adobe Flash Multimedia é aplicado no processo de aprendizado. Assim, o objetivo deste estudo é tentar visualizar o valor do Adobe Flash multimídia em disciplinas de graduação em programa de design de moda, Malang State University. A população está envolvendo os alunos que obtiveram a graduação. Usando padrão de dignidade de mídia, o resultado mostra que multimídia Adobe Flash em disciplinas de graduação no programa de design de usar no assunto de aprendizagem na Universidade Estadual de Malang de mídia e especialista em materiais e também estudantes. Espera-se que essa multimídia possa facilitar o processo de aprendizado e aumentar a mídia de aprendizado para ser mais interessante e encorajar o estudo de motivação.

Palavras-chave: Dignidade; Multimídia; Adobe Flash; Curso de Graduação.

### Abstract

The used of Adobe Flash Multimedia as learning media is considered to be less used by the teachers or lecturer in learning process. In fashion design program, especially in grading course, Adobe Flash Multimedia is applied in the learning process. Thus, the objective of this study is tried to view the worthiness of Adobe Flash multimedia in grading subjects in fashion design program, Malang State University. The population is involving the students who has obtained grading subject. By using media worthiness pattern, the result shows that Adobe Flash multimedia in grading subjects in fashion design program is worthy to use in learning subject in Malang State University from media and materials expert, and also students. It is hoped that this multimedia can ease in the learning process and increase learning media to be more interesting and encourage motivation study.

Keywords: Worthiness; Multimedia; Adobe Flash; Grading course

## Resumen

El uso de Adobe Flash Multimedia como medio de aprendizaje se considera menos utilizado por los profesores o el profesor en el proceso de aprendizaje. En el programa de diseño de moda, especialmente en el curso de calificación, Adobe Flash Multimedia se aplica en el proceso de aprendizaje. Por lo tanto, el objetivo de este estudio es tratar de ver la valía de Adobe Flash multimedia en la calificación de materias en el programa de diseño de moda, Malang State University. La población está involucrando a los estudiantes que han obtenido una asignatura de calificación. Al usar el patrón de valía de los medios, el resultado muestra que el contenido multimedia de Adobe Flash en las asignaturas de calificación en el programa de diseño de usar en la asignatura de aprendizaje en la Universidad Estatal de Malang del experto en medios y materiales, y también de los estudiantes. Se espera que este multimedia pueda facilitar el proceso de aprendizaje y aumentar los medios de aprendizaje para que sean más interesantes y fomenten el estudio de la motivación.

#### 1. Introduction

Grading course is one of pattern making practice subject in Fashion Design Program, Malang State University. There are several previous studies which dealing with fashion

design program. These researches mostly discusses new topic as like draping, design making, pattern making and others. Some of these researches are 1) An intelligent system for customized clothing making (Lu & Wang, 2008), 2) An Advanced Computer Aided Apparel Design System (DAI et al., 1999), 3) A Computer-Aided Production System for Mass Customization in Fashion (Lu & Wang, 2011), 4) Posture and depth adjustable 3D body model for individual pattern making (Sook Cho et al., 2006), 5) Development of a computer-aided design software for smart garments (Kim, 2017), 6) Automatic custom pattern generation using width-height independent grading (Han, Kim, & Park, 2015), 7) A personalized recommendation model for online apparel shopping based on Kansei engineering (Zhou, Liang, & Dong, 2017), 8) Analysis of lockstitch seam strength and its efficiency (Frydrych & Greszta, 2016).

Thus, regarding to the previous studies above, this study will discuss about fashion design by developing Adobe Flash multimedia course. Previously, there are no researches that discuss the using of Adobe Flash multimedia in grading course.

In this case, grading can be defined as one of the technique to change pattern from small measure (S) to extra-large measure (XL). Along the time, the learning process is performed manually using white board, therefore there are some obstacles faced. To overcome the obstacles, it is need a multimedia which can ease the learning process of grading course. One of the multimedia that has been developed and validated is Adobe Flash multimedia. The multimedia learning in grading course of research's step 1 has obtained well-response, and then it can be said as worthy. In research's step 1, the basic multimedia learning has been developed including body basic pattern grading, skirt basic pattern grading, and arm basic pattern grading.

In the second step of research, the Adobe Flash multimedia learning in grading course of further step is made. In this step, the making process of multimedia is more complicated since before the pattern is graded, firstly, the pattern is broke according to the desired model (blouse, skirt, and dress variation).

As known that kind of learning media is plentiful. Moreover, the development in this modern era has lead into development in any field as well. Oroja, Kotoua, & Ilkan (2011) have mentioned that learning is changing as well, especially the technologies of learning. From several experts' opinion, it can be concluded that learning media can be in a form of visual, audio, silent projection, motion projection, audio visual, multimedia, and object media.

The definition of multimedia is derived from the word multi and media. Multi means plenty and media means medium. Then, if it is defined in terminology, multimedia is

combination of several elements including text, graph, voice, video and animation which produces good presentation. Further, Gümüş & Okur (2010) stated that multimedia is a computer program consisted of texts, graphic, sound and images and animations which having different tools to link various parts of the software and interaction with users and giving them feedback are among other properties of multimedia. Umar & Aziz (2015) said that multimedia can also attract students' attention and make them concentrate on learning. In addition, by using multimedia, students can also assess their own capabilities and enhance their creativity. Multimedia is considered to be important in this era. For these reasons, teaching and learning digital signal processing become an important component in education (Ubul, Ubul, & Aysa, 2011).

The multimedia basic learning is having more advantageous than using board and chalk. This kind of multimedia is involving almost of sensing elements. Further, it can ease the students while learning and the time is more effective and efficient. Moreover, multimedia learning will increase students' motivation in studying. If students are having high motivation, then the achievement will be more optimal and will make the students to be more active.

The consideration in using Adobe Flash in this research is due to its advantageous compared to other media. As written by Yam, (2006), Flash is more appropriate for integrating and delivering animations for Internet applications such as radiologic electronic presentations. For this reason, detailed step-by-step instructions for creating Flash slide shows with common features such as text, images, arrows, buttons, movie loops, and transitions are provided.

### 2. Methodology

This research uses descriptive and quantitative approach which is aimed to find out the worthiness of Adobe Flash multimedia in grading course of fashion design program, Malang State University. The populations are involving students who already taken grading course but merly consist of 10 students.

The research instruments were in the form of worthiness questionnaires for media, material, language experts and assessment questionnaires for students. The questionnaires from students has been consult to the media learning expert to view the worthiness of media used either by media, material, language experts and students using the pattern proposed by Sugiyono (n.d.):

% Vs x =  $\frac{Number of assessment scores}{Number of maximum scores}$  x 100%

Content validity creteria 76% + 100% : foosible

teasible
quite feasible
less fesible
not feasible

### 3. Results

The result of media worthiness testing from media expert is obtained by this pattern:

% Vs x = 
$$\frac{evaluator \ score \ amounts}{maximum \ score \ amounts}$$
 x 100%  
=  $\frac{((28 \text{ x } 4) + (10 \text{ x } 3))}{38 \text{ x } 4}$  x 100%  
= **93.4 = 93%**  
= **feasible**

The result of media worthiness testing from material expert is obtained by this pattern:

% Vs x = 
$$\frac{evaluator \ score \ amounts}{maximum \ score \ amounts}$$
 x 100%  
=  $\frac{((19 \ x \ 4) + (8 \ x \ 3))}{27 \ x \ 4}$  x 100%  
= **92.59 = 93%**  
= **feasible**

The result of media worthiness testing from language expert is obtained by this pattern:

% Vs x = 
$$\frac{evaluator \ score \ amounts}{maximum \ score \ amounts}$$
 x 100%  
=  $\frac{((5 \text{ x } 4) + (4 \text{ x } 3))}{9 \text{ x } 4}$   
= 88.8 = 89%  
= feasible

The result of media worthiness testing from students is obtained by this pattern:

# % Vs x = $\frac{evaluator\ score\ amounts}{maximum\ score\ amounts}$ x 100%

Frame 1 – The Result of Media Worthiness									
Question	Pattern	Percentage	R count	R table	Prediction				
Number 1	$= \frac{33}{40} \times 100\%$	82.5%	0.576	.82327	feasible				
Number 2	$= \frac{26}{40} \ge 100\%$	65%	0.576	.51640	Quite feasible				
Number 3	$=\frac{27}{40} \ge 100\%$	67.5%	0.576	.67495	Quite feasible				
Number 4	$= 34 \times 100\%$	85%	0.576	.69921	Feasible				
Number 5	$= \frac{35}{40} \ge 100\%$	87.5%	0.576	.70711	Feasible				
Number 6	$= \frac{32}{40} \ge 100\%$	80%	0.576	.78881	Feasible				
Number 7	$= \frac{33}{40} \ge 100\%$	82.5%	0.576	.67495	Feasible				
Number 8	$= \frac{33}{40} \times 100\%$	82.5%	0.576	.67495	Feasible				
Number 9	$= 33 \times 100\%$	82.5%	0.576	.67495	Feasible				
Number 10	$= \frac{33}{40} \ge 100\%$	82.5%	0.576	.48305	Feasible				
Number 11	= <u>30</u> x 100% 40	75%	0.576	.47140	Quite feasible				
Number 12	$= \frac{30}{40} \ge 100\%$	75%	0.576	.81650	Quite feasible				
Number 13	$= \frac{28}{40} \times 100\%$	70%	0.576	.42164	Quite feasible				
Number 14	$=\frac{31}{40} \ge 100\%$	77.5%	0.576	.73786	feasible				
Number 15	$=\frac{32}{40} \ge 100\%$	80%	0.576	.63246	feasible				
Number 16	$= \frac{31}{40} \ge 100\%$	77.5%	0.576	.73786	feasible				
Number 17	$= \frac{32}{40} \times 100\%$	80%	0.576	.63246	feasible				

## Frame 1 – The Result of Media Worthiness

		on map.,, amao	1018/10:00 11	0/104 /011111/0	
Number 18	$= \frac{30}{40} \ge 100\%$	75%	0.576	.66667	Quite feasible
Number 19	$= \frac{31}{40} \ge 100\%$	77.5%	0.576	.87560	Feasible
Number 20	$= 32 \times 100\%$	80%	0.576	.63246	Feasible
Number 21	$= \frac{35}{40} \ge 100\%$	87.5%	0.576	.70711	Feasible

Source: Own Study

Based on the result of worthiness testing conducted by the experts, the result of material experts' percentage of 93%, media experts' percentage of 93%, language experts 85%, and students percentage in the frame 1 is 80%. Thus, the results show that Adobe Flash multimedia in Grading Course in Fashion Design Program from media, material, language experts and students are considered as feasible or worthy.

### 4. Discussion

According to the results which stated that learning process using Adobe Flash media is feasible, hence it is needed media development in purpose that the learning will be more interesting and encourages students' motivation to study, and can will provide psychologies influences on students.

The benefit of using learning media in learning process itself are: 1) it can make clearer the message and information conveyed, then it can ease and increase process and learning result; 2) It can improve and lead students attention to have motivation in learning; 3) learning media can overcome sense, space, and time limit, and; 4) learning media can provide similar experience to the students about current condition and situation in their environment (Azhar, 2007).

From several sources, it has been mentioned that there are some kinds of media which are completing each other. Thus, it can be conclude further that learning media can be in a form of visual, audio, silent projection, motion projection, audio visual, multimedia and object.

Afterwards, based on the explanation which stated if Adobe Flash media is worthy to use in Grading course, then this multimedia has fulfilled 3 aspects including learning, material, and media aspects. Learning aspect can be described as the use of interactive multimedia learning process that will lead into practice, efficient, and interesting learning. The material aspect is aimed to make the subject material become easier and clearer to

understand for student. Then, media aspect is used to ease the information conveying process to the students.

### 5. Conclusion

The result of this research shows that the used of Adobe Flash multimedia in Grading course in Fashion Design program, Malang State University stated as feasible or worthy by the media, material, language experts, and students. Afterwards, this multimedia can be used for large scale assay.

## 6. Suggestions

The suggestions provided are: 1) all of education institution should provide facilities for multimedia making; 2) giving more knowledge to the teachers dealing with the advantageous of using multimedia for learning process.

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