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# Software auto desk as a teaching media in the subject of advertising

(Applied 3D. Max Based on Geometry and Shape Images in Improving Student Learning Outcomes)

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Abstract: The purpose of this study was to improve the learning outcomes of advertising courses by applying the three-dimensional softwares program to the FSD-UNM Visual Communication Design Study Program ". The application of the learning model by integrating several graphical Autodesk softwares on designing a product advertisement in advertising courses at the Visual Communication Design Program of the Faculty of Art and Design Makassar State University. The method used is a description of the stages of learning in a complete advertising course through the semester learning plan (RPS) of the responsible lecturer, external integration in the learning process of advertising courses using the Autodek 3ds software. Max as the material of the integrator / action, Continuing the material of the integration / action to make the product of advertising by utilizing the geometry and Shapes category drawing techniques as the goals to be achieved in the learning activities. The conclusion is that there is a clear advertising learning structure, there are exploration activities in determining the advertisement task model and students integrate three-dimensional softwares in planning the making of the final advertising product.

Keywords: Learning model, Product and Softwere graphic

#### 1. Introduction

The sharpening of Visual Communication Design Study Program curriculum in the future, as well as to anticipate technological developments, competitiveness of competitors and increasingly fast consumer / market demand in the field of visual communication design products, of course requires a more accurate strategy in terms of improving competencies for students and implementing models learning within the scope of a technology-based practice process. The development of science and professionalism that has taken place in the field of visual communication design in these two decades, requires all educators to push themselves to live and interact on the line of renewal of visual communication. Moreover, when viewed from the impact of the incision between scientific disciplines

Copyright © 2019, the Authors. Published by Redwhite Press. This is an open access article under the CC BY-NC license (http://creativecommons.org/licenses/by-nc/4.0). of visual communication design and other sciences (ITB Curriculum 2013-2018), it forces all educators to carry out an integration of competencies as referred to below:



Picture 1. Body of Knowledge Desain Komunikasi Visual FSRD ITB

As a scientific discipline based on graphic design, it is no longer merely engaged in the realm of practical aesthetics, but it requires a value of creativity in the development of several scientific slices including the study of communication and technology based on Autodesk computer graphics. The scientific slice referred to above becomes an arts development key in the application and addition of learning models in the Visual Communication Design Study Program and includes a form of a strategy to improve student competence in each of the courses it carries. The use and integration of Autodesk computer-based graphics technology in the student learning process is the subject of discussion in this study, especially in advertising courses.

The form of competence in advertising courses is audio and visual based graphic design material packaged in the form of provocative affective and effective information, as mentioned by Prof. Dr. Joni Emerson, SH., M. Hum. in his study said that: Advertising in a communication perspective is seen as a message delivery technique for an effective product (advertising and ethics; Master of Management, Sriwijaya University, 2014). When mixing information from several references above, namely between economic slices, technology and understanding of the advertisement itself, it can be concluded that in making an advertisement a mix of competencies is required in the learning system in the Visual Communication Design Study Program, including integration computer-based competency (Autodesk) in advertising courses at the Visual Communication Design Study Program at the Faculty of Art and Design Makassar State University.

The conditions that occur in the learning process of advertising courses at the current Faculty of Art and Design Visual Communication Design Study Program are reinforcement concentrated on the application of photo capture of a product that is integrated into an advertising planning system. Even more practical, most students integrate a model for advertising objects taken directly from a site on the internet, so that, it is possible to create an impact on the decision making of a design concept and the end result has implications for the final work of the course. With this research entitled: "Application of Autodesk Software in an Effort to Increase Student Learning Outcomes in Advertising Courses", the learning model was implemented by integrating several graphical Autodesk softwares on designing a product advertisement in advertising courses at the Faculty of Arts Visual Communication Design Program and Design of Makassar State University.

The description of the problems that appear simply above certainly requires an application of creative values so that the models, techniques and media used in the learning of advertising courses shift to a more advanced level. Based on the description, three problem formulations can be formulated as follows: 1) How is the application of the advertising learning model to students of Visual Communication Design Visual Communication Design study program, 2) What is the ability of Visual Communication Design Study Program students to integrate Autodesk software in advertising courses,

3) What is the form of integration of Autodesk software for advertising courses in Visual Communication Design students.

# 2. Method

#### 2.1 Types of research

This research is applied research with a learning model of application process engineering techniques and still caring for action research, which is to do a systematic action in the structure of teaching material with emphasis on sub-material that is considered to influence students' motivation and improvement in learning. advertising. The emphasis of the material in question is on advertising production work in the form of integration of three-dimensional software autodes (3ds. Max), which coincidentally is the activity of students of the Visual Communication Design Study Program of the Faculty of Art and Design Makassar State University to create advertising images in the form of three dimensions with computer applications (digital) which are translated from the previous sub-teaching material (design, sketch, and exploration concepts).

# 2.2 Type and Amount of Variables

In this study, the types and number of variables can be classified as follows: Visual Communication Design Study Program students and one class are selected among 2 classes who program 2 advertising courses in the 2017/2018 academic year. The considerations taken in this election are based on the results of the previous survey using several supporting indicators as a benchmark in the smooth running of research such as: Preparation of facilities, the existence of computers / laptops, and drawing software softwares.

#### 2.3 Operational Definition of Variables

The variables in this study are single variables, namely increasing student competency in advertising courses with the integration of autodest software integration (3ds.max), in the sub teaching material in this case students conduct structured and systematic learning procedures through advertising teaching materials and implement programs Additional applications on paractic actions draw a model of advertising projects in three-dimensional form.

#### 2.4 Research Model and Design

#### 2.4.1 Research model

Referring to the Riel model developed by Riel (2007), which divides the action research process into stages as shown below:



Figure 2. Research Model in the form of stages Riel (2007)

Study and Planning: learning model of advertising course 1 for students of Visual Communication Design Study Program with an internal integrative approach: analyzing learning activities based on teaching material in a reasonable and integrated manner through the material framework of the lecturer concerned.

Take Action: Prepare Pre-material integration of additional competencies as a form of action 1, which in this case Autodesk competency 3-dimensional vector graphics.

Action taking: Carry out actions in the form of integration of Autodesk 3-dimensional vector graphic competencies in the design of advertising design.

Event Collection and Analysis: Reducing action data through several indicators of analysis: observations, media softwares and data, integration techniques.

Take Action: Prepare material for the integration of additional competencies as a form of action two, which in this case Autodesk competency 3-dimensional vector graphics.

Reflection: Conduct a temporary evaluation of the results of the action.

#### 2.4.2 Research design

Before conducting research, researchers first make a research flow based on the advertising learning scheme II as shown below:



Figure 3. Advertising learning scheme II (Aswar ;2018)



Figure 4. Structure of the Research Design (Aswar ;2018)

#### 2.4.2.1 Population and Samples

This research was conducted at the Faculty of Art and Design of the State University of Makassar, Visual Communication Design Study Program, with the population being students who program advertising courses II for the 2017-2018 school year. The research material sample is a selected class of students who program advertising courses II.

#### 2.4.2.2 Data collection technique

As mentioned in the research design, to obtain data related to the research data collection techniques are needed through: observation (observation of the learning process of advertising courses), questionnaires (questioning additional competencies applied), pre-tests (measuring initial abilities), post-ttest (measuring final ability), evaluation (to synchronize test results with problems).

#### 2.4.2.3 Data analysis techniques

- Phase I analysis is the learning model of advertising course II on students of Visual Communication Design Study Program with an internal integrative approach: analyzing learning activities based on teaching material in a reasonable and integrated way through the material framework of the lecturer concerned.

- Phase II of analysis is the learning model of advertising subjects II in students of Visual Communication Design Study Program with an external integrative approach: analyzing learning activities based on teaching materials in a reasonable manner and integrating other relevant competencies as material / action to support the formation of products that can produce the new one.

- Phase III analysis, namely the form of the product is carried out through an exploration process based on several indicators of advertising product modeling techniques including: Geometric categories and Shape categories

- Stage IV analysis, namely product structure through integration of affect devices, lighting layout, camera (enggle), color aesthetics Then the actual product is applied through V-Ray rendering

- The stages of evaluation are carried out through advertising design products by students, and accompanying lecturers as evaluators, as well as the flow picture of the implementation actions below

## 3. Results and Discussion

## 3.1 Results

Analysis 1 (observation): Lecturer Activities: Learning activities that are accomplished by 2 lecturers As the person in charge of advertising courses II is carried out using the material structure as below: Design Concept 73%, Background 73%, Problems 72%, Exploration 75%, Selected exploration 69,4%.

Table 1. Preparation of design concepts in making advertisements					
Observe	Indicator	Implementation			
		Yes	No	Score	
Making	Theme / title suitability	13	7	65	
advertising	Theme / title depth	13	7	65	
concepts	Theme / title interests	15	5	75	
1	Operational Themes / titles	16	4	80	
	Title / Theme title	16	4	80	
	<b>Total Score</b>			73	
Table 2. Background Description					
Observe	Indicator	Implementation			
		Yes	No	Score	
Make a	Theme / title suitability	13	7	65	
	Theme / title depth	13	7	65	

background	Theme / title interests	15	5	75		
	Operational Themes / titles	16	4	80		
	Title / Theme title	16	4	80		
	Total Score			73		
Table 3. Application in formulating advertising problems						
Observe	Indicator	Implementation				
		Yes	No	Score		
Make a problem	Theme / title suitability	18	2	90		
statement	Theme / title depth	12	8	60		
	Theme / title interests	15	5	75		
	Operational Themes / titles	11	9	55		
	Title / Theme title	16	4	80		
	Total Score			72		
Table 4. Application of advertising design exploration making						
Observe	Indicator	Implementation				
		Yes	No	Score		
Make design	Theme / title suitability	16	4	80		
make design	2					
exploration	Theme / title depth	12	8	60		
exploration	Theme / title depth Theme / title interests	12 15	<u>8</u> 5	60 75		
exploration	Theme / title depth Theme / title interests Operational Themes / titles	12 15 14	8 5 6	60 75 80		
exploration	Theme / title depth Theme / title interests Operational Themes / titles Title / Theme title	12 15 14 16	8 5 6 4	60 75 80 80		
exploration	Theme / title depth Theme / title interests Operational Themes / titles Title / Theme title Total Score	12 15 14 16	8 5 6 4	60 75 80 80 75		
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Observe       Choose the best exploration	Theme / title depth         Theme / title interests         Operational Themes / titles         Title / Theme title         Total Score         Table 5. Election in choosing t         Indicator         Theme / title suitability         Theme / title depth	12 15 14 16 he best exp Impleme Yes 17 12	8 5 6 4 entation No 3 8	60 75 80 80 75 <b>Score</b> 85 60		
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Observe       Choose the best exploration	Theme / title depth         Theme / title interests         Operational Themes / titles         Title / Theme title         Total Score         Table 5. Election in choosing t         Indicator         Theme / title suitability         Theme / title depth         Theme / title interests         Operational Themes / titles	12 15 14 16 he best exp Impleme Yes 17 12 15 13	8 5 6 4 entation No 3 8 5 7	60 75 80 80 75 5 <b>Score</b> 85 60 75 65		
Observe       Choose the best exploration	Theme / title depth         Theme / title interests         Operational Themes / titles         Title / Theme title         Total Score         Table 5. Election in choosing t         Indicator         Theme / title suitability         Theme / title depth         Theme / title interests         Operational Themes / titles         Theme / title interests         Operational Themes / titles         Title / Theme title	12 15 14 16 he best exp <b>Impleme</b> <b>Yes</b> 17 12 15 13 12	8 5 6 4 entation No 3 8 5 7 8	60 75 80 80 75 <b>Score</b> 85 60 75 65 60		

Analysis 2 (computer based modeling): Advertising course learning training by integrating the competencies of computer-based application programs (autodes): Work preparation: In this training previously students always prepared several things related to the implementation of integrating autodes software: Tools: one unit PC / laptop and Canon Scan

Material: Drawing paper and HVS.

Digital work processes: Install the application program, Modeling, Rendering.

Digital work: Publication and application in the field

Analysis 3 (questionnaire): Initial idea / design concept for making three adverts (dimensions): Total Score=85%, Applied creativity makes advertising: Total Score=68%, Use of the Autodes Application Program: Total Score=75%,

No	Question	YES	NO	Statement	Score
1	Do you conduct a learning process in a structured advertising course	16	4	-	80
2	Is needed an initial idea / design concept in making ad design	20	0		100
3	When you complete an initial idea / design concept, do you immediately explore / alternative sketches	18	2	-	90
4	If your reason is saying YES by giving a number of reasons, whether you make alternative design sketches more than 2 pieces	16	4	-	80
5	Whether the sketched image you selected has been considered related to the next work process	15	5	-	75
	Total Scor	re			85
	Table 2. Applied creativ	vity in r	naking a	dvertisements	
No	Question	YES	NO	Statement	Score
1	After you determine the design image that will be made the product is real, do you make a work drawing plan (guide works)	12	8	-	60
2	If you say YES, is the image made measurably	10	10	-	50
3	If you say NO, are you sure your work can be realized	16	4	-	80
4	In making a working picture (working guide), do you use certain methods	15	5	-	75
5	If you have used a working picture (working guide), are these methods applied manually / conventional or computer assistance	15	5	-	75
	Total Sco	r			68
	Table 3. Use of the Autod	esk Ap	plication	Program	
No	Question	YES	NO	Statement	Score
1	Are you used to using 3- dimensional computer application programs in advertising courses	12	8	-	60
2	If you say YES, are there programs like: Blender, AutoCad, max 3dimensions, ArchiCad, etc. can be used easily	12	8	-	60
3	If one of the programs above you have used as a medium to create work drawings, are you experiencing difficulties in technical matters (how to use the	18	2	-	90

Table 1. Initial ideas / design concepts for making three adverts (dimensions)

	drawing tool)				
4	If you say NO, are you motivated to learn about the program	15	5	-	75
5	According to you, the use of 3- dimensional computer application programs can help clarify the image elements, especially view (image position view)	18	2	-	90
Total Scor				75	

# 3.2 Discussion

Based on the research data collected using instruments, it can be obtained a general description of: SOFTWARE AUTODESK AS A TEACHING MEDIA IN THE SUBJECT OF ADVERTISING, can be reviewed and explained their validity in accordance with research in the field which has been formulated as follows:

# 3.2.1 Results of Phase 1 analysis:

Observations in questionnaire statement 1 (Design concept): From the table it can be concluded that, in general, students were stated to have preparation in making design concepts in the advertising course II, seen 73% of the statements (yes) of students from a total of 20 statements (table No.1).

Observations in questionnaire statement 2 (background): From the table, it can be concluded that, in general, students are stated to be able to make design backgrounds in advertising courses II, seen 73% of students' statements (yes) from a total of 20 statements (table No.2).

Observation in questionnaire statement 3 (Problem statement): From the table, it can be concluded that, in general, students are stated to be able to formulate problems in the advertising course II, there are 72% of students' statements (yes) from a total of 20 statements (table No.3).

Observations in questionnaire statement 4 (Exploration of design forms): From the table, it can be concluded that, in general, students are stated to have preparation in making design exploration in advertising courses II, 75% of the statements (yes) of students are seen from a total of 20 statements (table No.4).

Observations in questionnaire statement 5 (Exploration of selected design forms): From the table it can be concluded that, in general, students are stated to be able to see the best form in the exploration of selected design forms in advertising courses II, seen 69.4% (yes) student statements from a total of 20 statements (table No.5).

#### 3.2.2 Results of Phase 2 analysis:

Work preparation, From the results of the author's observation, it was explained that: there were about 10 people who had preparations for laptop media in the process of creating 3-dimensional autodes ad models.

Work process, From the results of the author's observation, it was explained that: students make group 3-dimensional ad models. Groups made by students consist of 4-5 people in each work group.

Work results, From the results of the author's observation, it was explained that: the results of student work in the form of 3-dimensional ad models based on autodes were based on their respective groups.

#### 3.2.3 Results of Phase 3 analysis:

Initial idea / design concept for making three adverts (dimensions): From the table, it can be concluded that, in general, students answer Yes and explore design concepts in advertising II subjects, there are 85% of students' statements (yes) from a total of 20 statements (table No.1).

Applied creativity makes advertising: From the table it can be concluded that, in general, students answer Yes and have applied creativity in advertising courses II, seen 68% of the students' statements (yes) from a total of 20 statements (table No.2).

Use of the Autodes Application Program, From the table it can be concluded that, in general, students answer Yes and have applied creativity in advertising courses II, seen 75% of the statements (yes) of students from a total of 20 statements (table No.3).

# 4. Conclusions

Based on the previous description, it can be concluded as follows: The results of the research in phase I (observation of the initial learning process), concluded that: the learning process began the process of making design concepts, design background, problem formulation, exploration of design forms and exploration of selected design forms applied well, by the Faculty of Visual Communication Design Study Program Art and Design

The results of the second phase (observation of program integration), concluded that: the learning process through work preparation, digital work processes, and work results was implemented well, by students of the Faculty of Arts and Design Visual Communication Design Study Program, despite obstacles in computer media readiness used by students



Figure 5. Visual brand material (2-dimensional graphics)



Figure 6. Render of 3-dimensional advertising products

The results of the study in the third stage (student responses to the use of the 3-dimensional application program), concluded that: in general students answer and respond well, by students of the Faculty of Art and Design Visual Communication Design Study Program II through the initial idea / design concept making three advertisements (dimensions), applied creativity in making advertisements, utilizing the Autodesk Application Program.

# 5. Suggestions

Forms of learning: to improve learning outcomes in advertising courses II it is recommended that the learning process be carried out by a learning model that integrates an application program drawing three (3) dimensions that are condescending to value the effectiveness of the process of assignments on student assignments

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Research team : Drs. Aswar, M.Ds., Hasan

Lecturers along with their partners are responsible for advertising courses, which always take the time to become the subject and research object of the Faculty of Arts and Design PNBP Makassar State University, about the integration of Autodesk software.

Object of research: Students in class 1 and class 2 who had been willing to be the object of research in the PNBP program at the Faculty of Art and Design of Makassar State University, about utilizing Autodesk software to make applicative (digital) advertising course assignments