UNIVERSITI TEKNOLOGI MARA

INTERACTIVE LEARNING WITH PROBABILITY

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ABSTRACT

This project is focus on how to develop an interactive content as approach in teaching, 'Interactive Learning With Probability". This project use interactive contents its multimedia element to enhance student's study. Teaching probability using interactive content as technology approach in teaching is suitable ways for helping students in learn concepts of probability in class. One of the problems is current method of the learning not effective enough for students to make decision making in solving problem. Therefore, based on the problem one of the objectives of this project is to develop a interactive content for improve students understanding in learning the concepts. The first methodology that used is an analysis the problem statement by conducted from pre-data collection and interview. Next method is design phase which is the storyboard will be drawn to become a guideline in the next phase. The third method is development, in the development phase, all software and hardware will be used to conduct a project based on the storyboard. The fourth method is implementation phase that will be testing to the students to get an evaluation that will be used in the last phase. In the last phase, the measurement will be measured on the effectiveness of the project based on the testing. In conclusion, the final product of the project has achieved the objective and be able to use the approach for teaching and learning by using computer based learning in created a good content for material learning.

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Probability is a difficult subject have been admitted have existed that well documented and numerous research studies have been complete. (Garfield, 2003; Shaughnessy 1992; Konold, 1989a; Garfield & Ahlgren, 1988). The introductory probability course is a part of the curriculum for majors in elementary education (Koublanova. E, 2006).

The issues students have problems in understanding the concepts of probability topic. Students have the problem in seeing connections between basic probability models and word problems of a varying verbal content, (Koublanova. E, 2006). Moreover, a typical lemma for students to combine, in a proper way, perceptive and strictly mathematical approaches to problem-solving. Schwerd & Wuppermann (2011) the problem also in traditional lecture style teaching that has no detrimental effect on overall students learning.

Teaching style needs to be improved by combine the using current technology that can reduce difficulties student in understanding the concepts course. Furthermore, using technology can use as the tool to effective support students' learning (Manuguerra & Petocz, 2014). By developing an animation for teaching tool the teaching and learning can be more improve efficient and effective way.

Animation refers to a simulated motion picture depicting the movement of drawn (or simulated) objects. When usually animation is used in entertainment, we can review the potential of animation in the educational tool. Do students learn more from animation than from other modes of presentation? (Mayer. R & Moreno. R, 2002). By using animation is can help students get the illusion on how the question had been solved. The animation is exposed as means of improving representation, reasoning, and learning about probability (Kaplan. Danielle & Erin. C. W, 2006).