Development of Animation Teaching Media on the Topic of *The Property of The Father*

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Abstract: The objective of this research was to develop animation teaching media on the topic of *The Property of the Father* to teach for students to understand the concept of sufficiency. The animation was developed to evaluate the performance of a sample of 50 grade 4-5 students at Wat Don Sali School. The results were as the achievement of the students who were taught with the animation was .05 significantly and students had a high level of satisfaction with the animation.

Keywords: Animation, Teaching media, Sufficiency

Introduction

Humans have different ways of learning. Some can assimilate in a better way the knowledge received visually, auditory or through a certain sense. Educational systems generally provide a unique and standardized teaching material such as books to all learners which tend to benefit to those whose learning style and background knowledge fits well with the teaching material. If the teaching style employed closely matches the student preferred style of acquiring knowledge, learning becomes easier and more natural, results improve and learning time is reduced (Shannon, 2009). On the other hand, if for example a student is more visual than verbal and everything is written on the blackboard without auditory resources, student will experience difficulties in attaining the pedagogical goals in the requested time (Adisor, 2008.). In few words, traditional teaching material and strategies generally tend to benefit some students more than others.

Society today is bringing the benefits of technology, graphics, animation, and application development of such instruction, film and media production, advertising which is very interesting and easy to understand. One major tool set teachers/instructors can use is animation, which presents content in a way that helps students understand content (Patcharin & Suwich, 2012). Animation is a powerful instructional device to help explain and reinforce concepts of content which promote imagination and entrepreneurial skills to come up with fun and enjoyment.

There is a great amount of research related to learning studies, including behaviorist research, cognitive research, experiential learning, including behaviorist research, cognitive research, experiential learning, humanistic research and social learning. Martyn Stewart (2011) has highlighted the major contributors, and has argued that learning is a complex process that includes both mentally cognitive and emotional affective factors from social and individual perspectives.

The increasing number of students has found that cultural and background differences have influenced their learning processes (Vygotsky, 1962, 1978); these differences have also influenced the design of teaching, which now must take into account the need to help students from very different backgrounds. Cartoons and animation can help students learn concepts correctly and consistently (Sweller, 1994; Akamca et al., 2009). Connor (2009) found that cartoons help students who have difficulty in quickly processing large tracts of written text or dialogues, and increase both learning efficiency and students' interest in learning. This, in turn, has a positive influence on students' achievements (Akamca *et al*., 2009). Therefore, many teachers have adopted and examined the usage of animation in teaching (Hall, 2005; Becker *et al*., 2006; Klein & Bauman, 2010; Luccasen & Thomas, 2010). Cingi developed animation to investigate the use of animation in teaching theoretical medical information and especially surgical procedures to teaching a group of 20 medical students. Animation is a very useful tool to teach difficult procedures in medicine especially in teaching complex topics (Cingi, 2013).

The research objective was to develop animation teaching media on the topic of the property of the father to teach students to understand the concept of sufficiency which was a real reflection of the society through the motions. The story talks about on luxuries of everyday society in Thailand. The incentives cause inappropriate behavior to get what they want and get the final result that is a loss of their loved ones because of their insatiability. The hypothesis of the research is satisfaction of the participants to develop animation teaching media on the topic of the property of the father at a high level.

Materials and Methods

A. Defining the Concept of Story

Defining the concept of story sets the featuring of story which is the process of writing the incident from the start and continues to the end. It allows viewers to understand and have a sense that the story is set.

B. Character Design

Character Design is the process of drawing characters on paper to simulate the character of the imagination. The characters are extremely important to make the animation look more attracttive. The character design attempts to make the characters come alive in both appearance and attire (Figure 1).

Figure 1. Character design

C. Design Background

Design background is considered no less important than the character design. The backdrop

to the atmosphere, as well as the character of a different color and lighting, shall mood and make the audience understand the story to offer (Figure 2).

Figure 2. Design background of school

D. Defined Outline

Defined outline (Storyboard) is defined as the image into the sequence of the story overview of work to do if anything happens to be solved can be modified to change (Figure 3).

Figure 3. Defined outline

E. Develop Animation

From defined outline process we will develop animation in part of characters with Paint tool SAI and creates a scene with Adobe Illustrator CS6 software development process animation using Adobe Flash Professional CS6 process of recording the voice of the storyteller. And the voice of the character then cut a piece of work with Adobe Premiere Pro CS6 (Phunchan, 2013) to follow the plot of defined outline and the concept of story (Figure 4-6).

Figure 4. Drawn characters with software

Figure 5. Draw background with software

Figure 6. Develop animation

F. Measurement and Evaluation

The animation was developed to be used as teaching materials to teach for the sample consisted of 50 by selecting a sample of student's grade 4-5 at Wat Don Sali School, Tumbon Don Yai, Aumpur Bangpae, Ratchaburi Province (Figure 7). They were drawn using cluster sampling techniques. After that we measure achievement learning from the pretest and posttest with quiz sufficiency of 10 items by switching the question of the pretest and posttest (Sumitra, 2014). Questions pretest and posttest of finding the ICO from 5 experts that the questions have IOC value greater than 0.5 and we evaluate satisfaction of animation (Terada & Adisai, 2009).

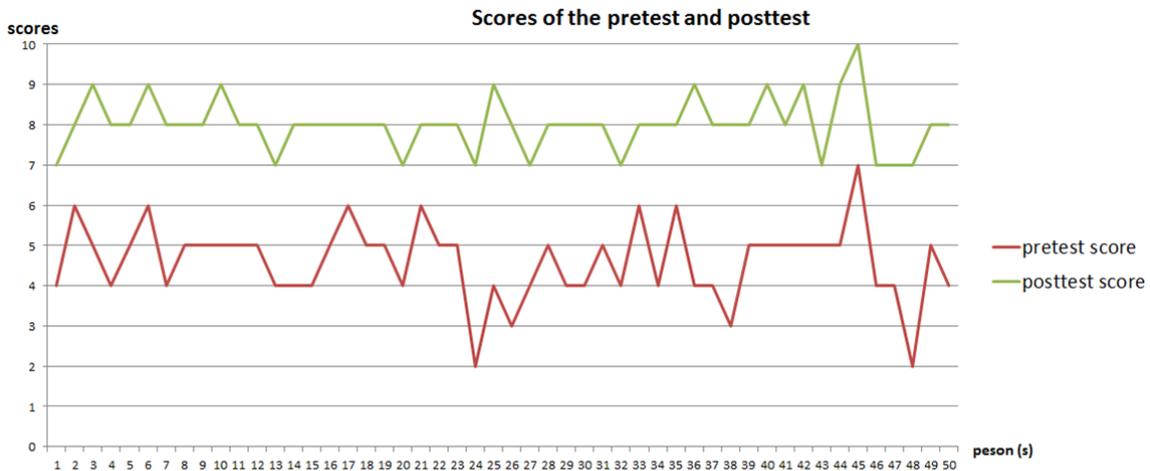**Figure 7.** Teaching with animation to the sample group

Figure 8. Achievement learning of a sample uses pretest and post-test

Results and Discussions

A. Measurement of Achievement Learning

Measurement of Achievement Learning of a sample group of students uses pretest and post-test. Found that higher posttest scores after the first pretest (Figure 8- previous page).

B. Evaluation of Satisfaction

Evaluate satisfaction of animation from a simple group uses the questionnaire with mean and standard deviation. Table 1 shows the list of questions and the level satisfaction levels of students in each part of the questionnaire that came from of a sample group of student's opinion and the overall satisfaction levels of students in each part of the questionnaire of animation is in more satisfaction level.

Table1. List of questions and the level of animation quality that came from a sample student opinion

Question List	Statistics Value and Meaning		
	$\bar{X}$	S.D.	Quality Level
1. Contest is clear and easy to understand	3.86	0.60	High
2. The consistency of content to viewers	3.78	0.67	High
3. Content can provide insight to the viewer.	3.90	0.61	High
4. The appropriateness of the use of time of story	3.96	0.75	High
5. The interest in the animation	4.10	0.70	High
6. The appropriateness of the use of music and sound effects	4.00	0.50	High
7. The appropriateness of the use of picture effects	3.94	0.65	High
Overall	**3.93**	**0.64**	**High**

Conclusions

This paper describes the development of animation Teaching Media on the Topic of *The Property of The Father* to teach self-sufficiency. The sample consisted of fifty 4th-5th year students at Wat Don Sali School, Tambon Don Yai, Amphoe Bangpae, Ratchaburi Province. They were drawn using cluster sampling techniques, then we measured learning and the satisfaction of the sample that an animation developed. The findings revealed the following: 1) the achievement learning of the students who were taught with the animation was significantly .05 higher when comparing the pretest to the post-test; 2) the students had a high level of satisfaction with the animation. The results were consistent with other research that said cartoons and animations can help students learn concepts correctly and consistently (Sweller, 1994; Akamca et al., 2009). Connor (2009) found that cartoons help students who have difficulty in quickly processing large tracts of written text or dialogues, and increase both learning efficiency and students' interest in learning. This, in turn, has a positive influence on students' achievements (Akamca et al., 2009). Therefore, many teachers have adopted and examined the usage of animation teaching (Hall, 2005; Becker et al., 2006; Klein & Bauman, 2010; Luccasen & Thomas, 2010). Cingi developed animation to investigate the use of animation in teaching theoretical medical information and especially surgical procedures to teaching a group of 20 medical students. Animation is a very useful tool to teach difficult procedures in medicine especially in teaching complex topics (Cingi, 2013). Therefore, it can be said the research objectives have been accomplished and the hypotheses of this research have been shown to be valid.

Future Work

For further research, we are leading an animation project for teaching media on the topic of *The Property of The Father* to training and measure learning achievement using pretest and posttest on two group of subject that determine the differences between with and without animation approach.

Acknowledgements

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