Thai Students' Ethical Behaviors on Playing Game

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Abstract. The objectives of this research were 1) to develope online game for the development of responsible, economical, loyal and generous ethics, 2) to evaluate quality of online game,3) to study learners ethical behaviors on playing online game and 4) to survey players' satisfaction toward online game. The sample was randomized to 1 classroom of the third stage student. Tools were online game, test on ethical reasoning, observation form, and questionnaire. It was found that online game was rated in high quality. Students' ethical behaviors average score within 3 times increased continuously. The average of post test score was higher than the average of pre test score. The satisfaction evaluation was rated at a high level.

Keywords: Thai student, Ethical Behaviors and Game

1. Introduction

Game was one of various communication which were developed in accordance with modern period. In the past, there were only portable and VDO game players. But, at present, a plenty of game are developed and invented in the new form for children who like to play game to have an alternative to select. In order to attract the players to have the feeling of "eater to play, eager to try," the fun of feature in the game may make the players become addicted unknowingly.The forms of game which have been developed in the present time are plenty, such as computer game, game with play station. The game which is popular among children at present is online game.It consists of the strategies which several players have,with precise rules for order in which players choose the strategies, the information they have when they choose and how they rate the desirability of resulting outcome[1].

These games have various types of form available to players of all age [2], such as sport game, action game, adventure game or puzzle game. At present, most of the games which can be found easily in the market are action games, violence and amusing. Chockchaisatit explained impact of playing action game on the youth that players might misunderstand that fighting is something good. Besides this, it might incubate the habit of using violence in solving many kinds of problem [3].

2. Effect of Game Playing

Game design has made great progress in human-computer interaction [4].One principles of designing game is to have fun [5]. Games present pictures, sound, color and activities. It provides great experiences; such as put the player in his dreams, some games are bases on a story, some are puzzles [6]. The actors in the game look realistically. To design game the content and form of losing and winning have been developed to follow and dote on thus it is difficult to stop playing. Majority of Thai children spend time in front of the computer screen, to put on the soul of the actors in various kinds of game several hours each day without doing other activities. Having the apparent behavior change, such as easily-turned bad mood or judge the problems with 'lose' and 'win' only without having any compromising. These might be the effects from playing game. Children can find game to play easily, because almost every house has computer game. If any family does not

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have game player, then, children will go to use the service at the game shops in general and there are plenty for them to choose.

The psychologist from Rachanakarin Institute of Child and Teenager Psychology compared game addiction with drug addiction related from the desire part and the thinking part with the duty of controlling in the brain cell of human beings. Playing game will stimulate the desire part of brain cell all the time. If children are not trained or taught to exercise the thinking part of controlling, then the desire part will have more influence than the thinking part and causes the process of 'game addiction', without playing, this will trigger the craving symptom. We could notice their annoyed and aggressive behavior some children just want to watch others play and some even steal their parents' money to play the game [7].

Davis,R.A. pointed out the charm of playing game, particularly online game makes children to be addicted, because of their role of actors as in another real world, making people to have interaction, some games even create virtual marriage[8]. Everybody can be a hero and win over others, in the real life, it seems to be impossible or difficult to do so. To be lost in the world of virtual reality for a long time, making players stick into the make-believe world and step back from the real world and less interaction with people in the real world.

Children addiction will not stop playing, just stop for one day, they feel to be left behind thus it may be dangerous and causes very high impact. Pritiprasong,I.et al. inferred to the problem of game addiction which is likely to increase and aggravate all in Thailand and around the world. The negative effect occurs in various forms towards physical and mental health, towards people in the society including the quality of life, such as fail in study, lost a job or lost relation with people all around [9].

The study of Orzack found that children who addicted computer game may become mad. The players who play 3 hours each day for 15 consecutive weeks will release the same substance as amphetamine, substance from the drug addiction [10].

Hasithavech, explained the causes of boys' addiction is challenges, especially, challenges in thinking and racing. Game is able to present these activities for children to response, while in their lives they may not have them. The left side of boys' brain enjoys challenging and statistics. They need to make more and more scores. While girls need the passion and stability. Children addiction have a few friends, so they take game to avoid isolation. These situation causes damages in many side. Thus game influenced the quality of life. This situation become more serious problem day by day [11].

The survey of Viriyavejakul on Recreational Gaming Behavior of Undergraduate Students in Thailand reveal that students played computer games on the average of 7-15 times a month,1-2 hour each time. Most often, they played at home, whereas 31% of them played games in game shops for relaxation. Children can reach the game easily without any correct suggestion or advice from the adult, making them become game addiction [12]. However, there is not always harmfulness to children in playing game. If they know to manage time to play, to have self-discipline, so playing game may cause benefit as well. On crisis of game addict, to create online game for enhancement some positive behaviors which are in demand of Thai society. The study on other side of game may provide the good channel and to change this crisis to be a chance for the youth'behavior.

3. Objectives

- To create online game for the development of responsible, economical, loyal and generous ethics.
- To study the ethical behaviors of playing online game.

4. Scope of the study

Behavioral ethics to study are responsibility, economical ethics, loyalty and generous ethics. These variables are defined to be measured.

Population are students in junior high school level, grade 7-9.The sample was simple random sampling from two of four classes.

Tools: Adventure RPG Game; questionnaire; Observation form and Test.

Game development: Online game were developed according to theme of four ethics. Adventure RPD game in form of 2D side scrolling is presented together with actors. Players could control and participate in the

progress level of game with the actors. The content presented in the game are activities on responsibility, ecology, loyalty and generosity.

Game was designed for two types: 1) Players in role of the actor received and saw their scores which was the feedback after players attain their jobs which represent some aspects of ethics. 2) Players received no scores as feedback.

Questionnaires was developed to evaluate the quality of game.

Observation form to observe students' behavior

Test to elicit students' ethics. Its content covers four dimensions of scope of the study according to Koburgh's principle.

These tools were checked by experts for content validity and tried out for reliability and objectivity. It was found that test reliability were 0.87

The sample was divided into two groups: the first group played games with feedback of score they received, the second group played game without score of feedback. They were tested and observed to elicit their ethics before the experiment. They were tested and observed once a month. At the end of the experiment, they were asked to evaluate online game. Created online game was verified on web thus students could play whenever they prefer. However, students were offered schedule of three hours playing game each week. Their score and data were recorded. Students were observed before between and after the experiment which was three months long. Then the questionnaire was used to evaluate this game by the students.

5. Results

The created game online is Adventure RPG in form of 2D side scrolling. It focused on four aspects: responsible, economical, loyal and generous ethics. To collect the score, actor has to do some activities. Players on behave of the actor could control and participate in the game which could progress level.

The experts were asked to evaluate this game on page design, sound and interaction, contents and utility and attractiveness. Its quality were in high quality. (Mean = 4.44 to 4.52, S.D. = 0.50 to 0.51.) While the students were asked to evaluate game this game also. Mean and standard deviation were as in Table 1.

Table 1: Mean and Standard Deviation score for the evaluation of game.

Item	Experts		Students	
	Mean	S.D.	Mean	S.D.
1. Page design	4.52	0.51	4.55	0.57
2.Sound and Interaction	4.44	0.51	4.47	0.52
3.Contents and utility	4.57	0.51	4.64	0.49
4.Attractiveness	4.56	0.53	4.80	0.40
Total	4.52	0.50	4.59	0.52

From Table1 it was found that experts evaluated these components in good level in the aspect of sound and interaction. On the aspects of page design, contents and utility and attractiveness, experts evaluated them in very good level. The attractiveness score is the highest. While students' evaluation was concurrent with the experts.

The study on students' behavior related to responsibility, economical ethics, loyalty and generous ethics. The students were asked to do their self assessment for three time on behavior related to the ethics in several items. Students who received feedback of scores were as conclude in Table 2.

Table 2: Mean and Standard Deviation of Score of Students Self Assessment for Four Aspects

Type of Ethics	Before		Between		After	
	Mean	S.D	Mean	S.D	Mean	S.D
Responsibility	3.43	1.02	3.82	0.87	4.42	0.65
Economical Behavior	3.53	1.00	3.84	0.92	4.37	0.72
Loyal Behavior	3.34	1.07	3.80	0.86	4.34	0.80
Generous Behavior	3.46	0.99	3.96	0.85	4.49	0.63

From Table2, it is found that students' assessment scores before, between and after the experiment are progress in every aspects. For the beginning, students assessed themselves in average level for three in four aspects where as all aspects are evaluated in high level at the end of the experiment.

Students who received no feedback played less attention in game. They were tested before and after the experiment. Their score was less than the group with score feedback. Moreover, there was no progress.

The teacher is also asked to evaluate students who play online game before, between and after the experiment. Students' behaviors of responsibility such as pay attention in classes, do the assignment, do their duty and come to class regularly are observed. Students' behaviors of loyal ethics such as tell the truth, be on time and follow the regulation are observed. Students' behaviors of economical ethics such as spending, saving, using according to its value and considerate to self. Students' behaviors of generous ethics such as giving, help the others, listen to other problem and contribute school activity are observed by the teacher. Mean and standard deviation score are as in Table 3.

Table 3: Mean and Standard Deviation Score of Students' Behavior by Teacher.

Type of Ethics	Before		Between		After	
	Mean	S.D	Mean	S.D	Mean	S.D
Responsibility	3.03	0.90	3.76	0.71	4.24	0.59
Economical Behavior	3.20	0.84	3.76	0.73	4.30	0.64
Loyal ethics	2.92	0.87	3.44	0.68	4.37	0.56
Generous ethics	2.80	0.80	3.65	0.72	4.14	0.73

From Table 3, Mean scores of students' behavior before the experiment were in average level where as their mean score of players' behavior of all aspects increased to high level at the end of experiment.

In group with no feedback of scores, their behavior were also observed as group with feedback of scores. They paid no attention on game and their behavior showed no trend of progress.

The study on students' ethics reasoning. Test on ethics reasoning on aspects of responsibility, economical ethics, loyal ethics and generous ethics are developed, according to Koburgh's principle. It was tried out with 35 students to find out for their quality. It is found out that their alpha coefficient is 0.87. The score were compared before and after the experiment by t-test as in Table 4.

Table 4. Mean and Standard deviation Score of Students' Reasoning of before and after the Experiment.

Type of ethics	Before		After		t-test
	Mean	S.D.	Mean	S.D.	
Responsibility	3.58	0.55	4.12	0.36	8.92*
Economical Behavior	3.32	0.40	4.02	0.32	10.845*
Loyal ethics	3.31	0.59	3.96	0.38	9.41*
Generous ethics	3.02	0.52	3.87	0.36	14.13*
Total	3.31	0.40	3.97	0.28	16.30*

* $p < 0.01$

From the Table4, it was found that mean score of students before the experiment on economical behavior, loyal behavior and generous behavior were in average level. Only mean score of responsibility on pre-test was in high level. On post- test score, their mean scores of all aspects were in high level. The t-test value is significant different at alpha 0.01.

6. Discussion

From the study, it was found that experts and students evaluated the composes of online game in good to very good level thus game was designed in trend of teenage favor. Presentation in game style attract them. They learned how to play easily. To get the score they had to control the actor where as they increased to high level at the end of experiment. Playing this online game become a strategy for students to learn ethics. Because they had to do some preferable behavior such as giving, helping etc. To play regularly time by time, players could learn these habits thus it might form their behavior and improve the rate of their habits from a average to be good to very good in all aspects. As the theory of Skinner tell about learning by practice, playing this game online allow them to repeat good behavior while they need more and more score. One principles of designing game is to have fun [5].Games present pictures, sound, color and activities [4] which make game fantastic. As Laird said that some games are bases on a story, some are puzzles. By playing game, players

can dreams where as in their real lives, they can't. With the created game,players might imitate the role of the actor which created good habits through game which they might not be trained appropriately in the family [6].

However, in group with no feedback of scores pay no attention on game and their behavior showed no progress. Feedback was necessary for this results. Thus it should be one important strategy to use for learning.

Noppadon said that children addiction is in the family which un-train children to have rule, lack of discipline, regulation at home, spoil them by omit the punishment when children done something wrong. Some families live together without having any interaction or do activities together[13].

From the study of students' reasoning, the result coincident with their behavior. Students who play game focused on ethics could give better reason than before the experiment.

By playing game, players can absorbed some information. Human beings can get information from things around all time. Information was developed in various forms in order to respond the convenience, the need and reach the receivers who are close and open to receive all kinds of information, such as radio, television, newspaper, telephone or internet. This information transmits the opinion, passion and learning both in positive and negative in this global and it is impossible to obstruct. Some families live together without having any interaction or do activities together. Game online could be an instrument to create favorable habits.

Since human beings need happiness, success and pride which come from various activities in life, such as to learn, to play. To support children to create activities is one way to prevent game addiction. If children cannot succeed in study nor enjoy studying and lack of other activity. Playing game is the way to make them enjoy with fun, challenges them to overcome the difficulty of game, and feel proud if they succeeded.

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