The Development Gamification on the Concepts Teach Less Learn More for Vocational Education

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Abstract
This research To study the components of the development the gamification on the concepts Teach Less Learn More for learning in vocational education. This study was a qualitative research. Using data were collected by interview. Semi-structured Technique of a Focus group discussion. from the experts 9. 7 male, 2 female expert at Game 2 of the media and technology education, 2 people, moral three people and professionals to promote moral ethics to students 2 analysis. to find an element in the development of gamification by finding the IOC of the elements of 4 main components can be divided into 21 sub-elements. And interviews On the practice of formatted according to the Teach Less Learn More.
The results showed that the elements in the development of vocational education students gamification fits. By the IOC 1.00 has 3 components: 1) the reinforcement of activities 2) Ratings 3) indicate the level. And the IOC 0.88 has two components: 1) prize of activity, 2) the reverse effect on learning. And the IOC 0.77 was to evaluate the behavior of the participants, included the 6 components of the interview. Found that the practice of formatted accorded to the Teach Less Learn More.: 1) the creation of self-knowledge, 2) interaction with others, 3) interaction with the environment 4) enthusiasm of learning 5) evaluation of behavioral observation.

Keywords: Gamification, Teach Less Learn More, Vocational Education

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Introduction

According to the natural statistics Bureau the amount of students registered in the system of vocational education there are 684,760 students and students are not in the study, among study on the private vocational college there are 369, 622 students The government has the idea and policy to reform the educational for the second decade (2009 to 2018) which will emphasize to improve the quality , the value and vocational deviational standard since the vocational education is the main organization to produce and develop manpower in vocational field, workmanship level, technical level and technology level to be able to work in the businesses and establishments and self employed which will setup activities to develop for those who study vocational education with desirable feature which have the competency in the way of society and establishment needs if there is learning management of tech less but

1   Qualifications of vocational students (Anand Ngamsaad:2010)
      1.1   Has knowledge and ability in vocational field both in theory and practice.
      1.2   Has knowledge and ability in everyday daily life, such as basic computer knowledge, Thai culture, arts and literature, sports, foreign languages, skills of thinking and group process.
      1.3   Has knowledge and ability in management.
      1.4   Has morality, can live in a good society with pride.
      1.5   Has Thai uniqueness.
      1.6   Has good social values, such as has responsible, discipline, friendliness good human relations, public mind, democracy preference, team work, royalty to organization.
      1.7   Follow the philosophy of sufficient economy.

    2. Activities to develop vocational students:
    Extra Curriculum Activities, Co–Curricular Activities, Semi Curricular Activities, Extra Activities, School Activities, Group Activities and Initiate Activities, etc..
    3. Guidelines for activities to develop learners:
    The following guidelines should be considered:
    3.1 The activities that can develop the standard of vocational education and vocational long-life learning, the career standard, the basic effectiveness curriculum, the vocational speciality, communication, IT language, the analysis thinking and career skills. This is to cope with the economical competition. Learners are to have morality, public mind and emotional maturity.
    3.2 The activity that can develop potential of vocational learning, create vocational learning system, encourage the vocational long-life leaning.
    3.3 The activities that create community network in vocational knowledge.

In order to set have activities to develop vocational learners to serve the needs of the organization and society, there should be suitable methods. If the "Teach Less" method is provided, meaning more self learning, less theory teaching, focusing on practices, learners can learn happily, have fun while learning amidst the pleasant learning environment. Learners can find the learning interesting and challenging. This is to abide with the "Teach Less Learn More." method in Singapore (Mr. Thaman Chanmugaranam Singapore ministry of Education .2005) The concept is under the

vision of Thinking, Schools, Learning, Nation (TSLN) which is aimed to change the education system to be more effective. The vision of the Thinking Schools is to allow schools to develop their schools to have Thinking student. The learning nation is the leaning vision that allow the learners to have more knowledge on innovation and creative ability in order to apply in daily life. It is the changing of the quantitative educational management to qualitative educational management which is to increase the qualitative educational management and to decrease the quantitative of the educational management.   The increase of the qualitative educational management is to increase the interaction between the teachers and the learners, to allow learners to express their ideas, to encourage the lifelong learning and to use the effective teaching method so that learners can learn successfully.

The decrease of the quantitative educational management is the decrease the role of teachers to become guides, to stimulate learners to gain knowledge, changing the learning by memorizing, tests and looking for answers into playing activities that will help learners to learn, have objectives and the playing rules stimulate the fun from learning. The activities can help develop the thinking. Nowadays, techniques and technology are combined with games. New created games can be applied to daily life. The games are applied into the curriculum to make them more attractive. The games are designed so that participants can be measured and can be competitive. The games are designed for competition and participants can try to reach their goals steps by steps. This is called gamification which mean using of games and dynamic of games to create interaction of users and solve problems. Gamification is used in application and the process of improving user engagement, ROI, information quality, the on time delivery and the learning.

In Thailand, the most obvious design of gamification is to use game in marketing such as the point collection or other competition. It is quite rare in other fields which is good for a game developer and digital media such as the personnel development in an organization. The method is to have the compete the point collection in self development or taking care of your health, especially the design of e-learning which apply the game playing into the traditional online leaning. This is to develop the gamification in order to elevate the learning and develop the skills of vocational students to serve the needs of companies and the society that will join the Asean Economics Community-AEC.
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Research Objective

Objective for this research as follows
1. To study at the present and development Gamification on the concepts Teach Less Learn More For Vocational Education.
2. To study elements Gamification on the concepts Teach Less Learn More For Vocational Education.

Research Method

1. Data source is related research student to principle and concepts to development for vocational education.
      1.1 The elements of Gamification.
      1.2 The concepts Teach less learn more.

1.3 The principle and concept vocational education

1.4 Raise the moral to vocation to student.

Group discussion by 9 experts, assign the conceptual framework.

2. Informant group

Informant group is 9 experts at game 2 of the media and technology educations 2 people, moral 3 people and professionals to promote ethics to students 2 analysis.

3. Variable

3.1 The principle and concept Gamification.

3.2 The principle and concept Teach Less Learn More for learning.

3.3 The principle and concept the elements to promote ethics for vocational education

4. Tools for study

This study was a qualitative research.

4.1 Data were collected by interview. Sami-structure technique of a focus group discussion.

4.2 Evaluation form for the elements gamification on the concepts teaches less learns more for vocational education.

5. Statistical analysis

5.1 Statistics in education development gamification on the principle Teach Less Learn More for vocational education.

5.2 Index of Item objective congruence.

Method

1. Components of gamification (data from B2S Leader Marketo Increased Community:2014). Selection and divide is 4 topics, 21 elements. The theory in game is "Incentive Theory" in elements gamification.
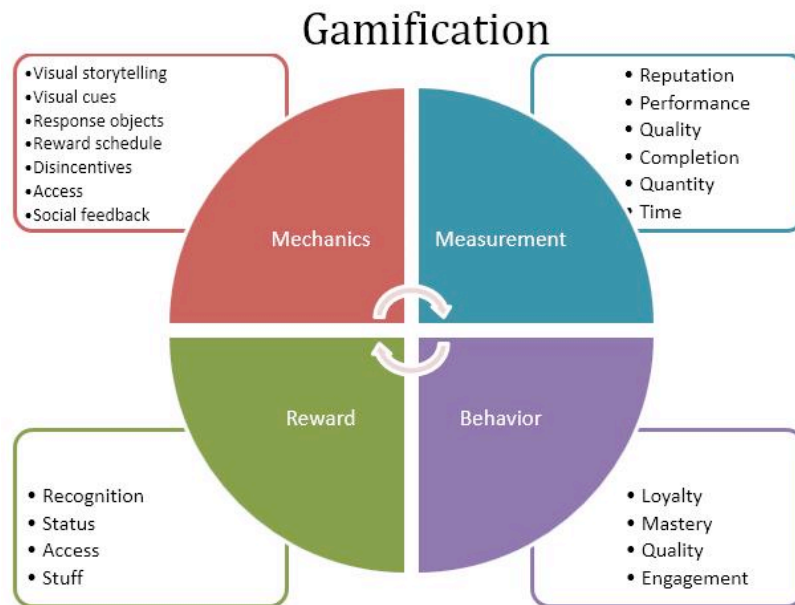

Figure 1: Elements gamification.

2. Using data interview, semi-structure of a focus group discussion from the experts' 9. 7 male, 2 females. Experts at game 2 of the media and technology education, 2 people, moral 3 people and professionals to promote moral ethics to students 2 analysis. Interview about learning activities and skills development in vocational education.

3. Conformity assessment elements as gamification from 4 topics, 21 elements to select and collect to coincide with the curriculum. Activities and promote skills development in vocational education. Performance Needs of enterprises and social on the concepts teaches less learns more.

Research Result

1. Concept teach less learn more for learning vocational education by gamification. Focus on the learner have ethics moral, have a good attitude for profession have vocation skill. A concept teaches less learns more is need to the learner study by themselves, enthusiastic. Can qualify and friendly with other people. Can evaluate from behavior correctly.

2. Rated by 9 experts. Collect the topic with leaning activities promote and develop skills of study in vocational education to performance needs of enterprises and social on the concepts teaches less learns more from 4 topics, 21 elements 6 elements. As flowing

Table 1.1 Index table showing the consistency of gamification by teach less learn more concepts.

Gamification elements For Vocational Education	IOC
Rating	1.00
Reinforcement of activities	1.00
Prize of activities	.88
Level	1.00
Reverse effect on learning	.88
Evaluation	.77

From table 1.1 IOC 1.00. 3 element is reinforcement ratings and 3 level 1. Have 3 elements is Reinforcement, Ratings, Level IOC 0.88 have 2 elements Prize of activities, Reverse effect on learning and IOC 0.77 is evaluation including with 6 elements.

Discussion

The core of gamification
1. Game mechanics are rules and responses in the games which will bring fun and can create something that is not a game into a game, such as points. Levels, score charts and the task challenge.

2. Game dynamicsare human behaviours who are driven by the games which are human needs such as rewards, acceptance, success, the self expression and the competition.
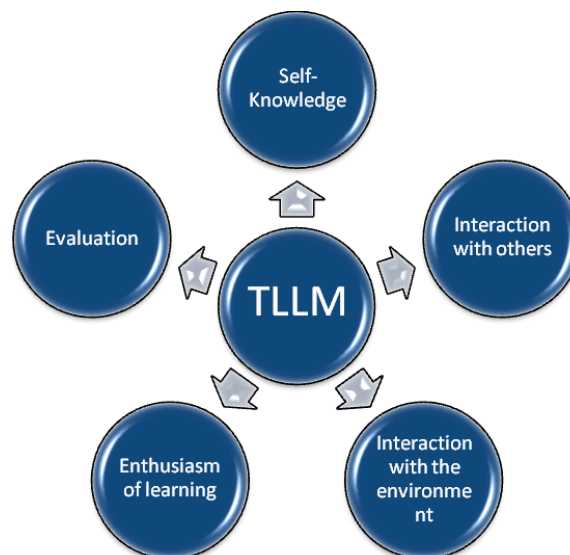

Figure 2: Teach Less Learn More element.

3. The elements of gamification to study of gamification by Teach less learn more concepts of vocational education focus on

　　3.1　Morality such as gratitude discipline honest tolerance sacrifice gentleman.

　　3.2 Skill such as information skill, have a good attitude for profession, profession skill and regulate of Teach Less Learn More concepts is Learning by self, Interaction, Interaction with the environment, Enthusiasm of learning and Evaluation.
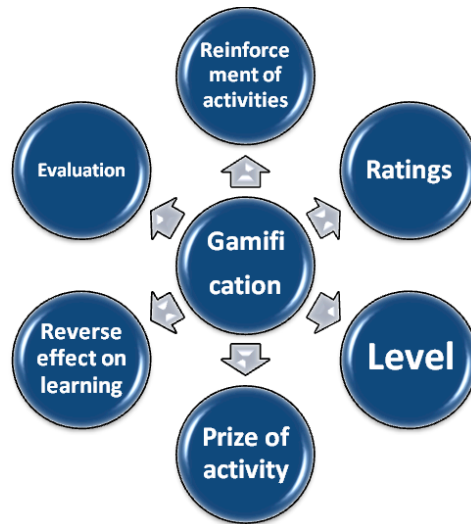

Figure 3: Gamification element for vocational education.

Gamification element
　　1. Reinforcement of activities
　　2. Ratings
　　3. Level
　　4. Prize of activities
　　5. Reverse effect on learning
　　6. Evaluation

Conclusions and Suggestions

Development gamification by teach less learn more by vocational education should to have many activities for activate student to learning such as goodness collet game moral developing game education project etc.

References

Aldrich, C. (2004). Lear*ning by Doing*. San Francisco: Pfeiffer Publishing.

Antonellis, I. and Bouras, C. and Poulopoulos, V. (2005). Game based learning for mobile users. *Research academic*. Greece: University of Patras.

Ausburn, L.J., and Ausburn, F.B. (1978). Cognitive styles: some informations and implication for instructional design. *Educational Communications and Technology Journal*. 26(4) 337-354

BBC News. (2011). 2 22. *Chinese online gamer dies after   three-day session*. Retrieved 3 1, 2011, from   BBC   News Asia Pacific: [On-Line] Available: http://www.bbc.co.uk/

B2B Leader Marketo Increased Active Community.(2014). *Game Design* [On - Line]   Available : http://badgeville.com/wiki/Game_Design

Bunchball.Com. (2010, 10). Gamification 101:*An Introduction to the Use of Game Dynamicsto Influence Behavior*. Retrieved 11, 2011, [On-   Line] Availabl:http://www.bunchball.com/gamification/gamification10   1.pdf

Cameron, D.J. (2004). Giving games a day job: *Developing a digital game-based resource for journalism*. Master thesis. Australia: University of Wollongong.

Chio. (2011). Gamification: *The Application of Game Design in Everyday Life*. IT University of Copenhagen

Chou Yukai. (2014). *Top 10 Education Gamification Examples that will Change our Future*. [On-Line] Available : http://www.yukaichou.com/ gamification-examples/top-10-education-gamification examples/#.UutXvD1_ s34

Gaytan, Jogde. (2000). *Multimedia Technology Integration and Instructional Practices in a College of Business Administration*. Dissertation   Abstracts International. 61(4) :1368-A ; October,

Hamari, J., & Lehdonvirta, V. (2010). Game design as marketing: How game mechanics   create demand for virtual goods. International Journal of Business Science and   Applied Management , 5 (1), pp. 14-29.

Hunicke, R., LeBlanc, M., & Zubek, R. (2004). MDA: A Formal Approach to Game Design   and Game Research. Retrieved 1 1, 2011, [On-Line] Available:http://www.cs.northwestern.edu/~hunicke/MDA.pdf

Joey J. Lee & Jessica Hammer. (2011). *Gamification in Education: What, How, Why Bother?*. Columbia University.
Kim, A. J. (2011, 2 28). *Gamification 101*: Design the Player Journey [Powerpoint slides]. Game Developers Conference (GDC) . San Fransisco.

Kuutti Julius. (2013). *Designing Gamification.* University Of Oulu. Finland.

Kuittinen, J., Kultima, A., Niemelä, J., & Paavilainen, J. (2007). *Casual Games Discussion*. Proceedings of the 2007 Conference on Future Play, (pp. 105-112).

Oblinger, D.G. (2006). *Games and learning: digital games have the potential to bring play back to the learning experience*. Unites States of America: Educause.

Owen, M. (2004). *An Anatomy of games*. United Kingdom. Futerelab.

Pivec, M. and Dziabenko, O. (2003). *It is time tp play a game or innovative learning approaches*. unigame paper.

Pivec, M. and Dziabenko, O. and Bouras, C. (2003). *A web-based game for supporting game-based learning*. unigame paper.

Pivec, M. and Dziabenko, O. and Schinnerl, I. (2002). *Aspects of game-based learning*. unigame paper.

Rowlands, C. (2005). *Let the games begin*. ABI inform global.

Taylor, T. L. (2006). Play between worlds*: exploring online game culture*. MIT Press. UNESCO. (2002). *Information and Communication Technology in Education*: a Curriculum   for Schools and Programme of Teacher Development. (Ed.Jonathan

Anderson and Tom V. Weert). Paris: UNESCO. Retrieved June 15, 2012, [On-Line] Available : http://unesdoc.unesco.org/images/0012/ 001253/125396e.pdf

Werbach Kevin. (2014). *Gamification*.Coursera. University of Pennsylvania.

Yavuz Inal and Kursat Cagiltay. (2007).   *Studying computer game learning experience through eye tracking*. British Journal of Educational Technology - Vol. 38 - Issue 3 (pp. 538-542)