Online Interactive Activities to Learn Ramayana Epic by Primary Tamil Students

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Abstract

The Ramayana epic has many moral values that can be used as guidance in our daily life especially for the development of a person towards a better direction. Besides this, there are many other lessons that can be learned from within each Ramayana epic stories, for example, the values and norms, customs, mannerism lessons and the various characteristics of people and so on. But today's digital or Net Generation teenagers do not find reading Ramayana as fun or interesting because of its text form. The technology is more advanced and Ramayana epics look very ancient in the eyes of this Digital Natives. This study used the idea of gamification, a game play mechanics to create meaningful learning experiences and make the learning more interesting and fun. Gamification also looks at games and learning from a different angle on how to make learning more meaningful, engaging, interactive, fun and interesting. In view of this, this research aims to seek if the use of online interactive activities could encourage and motivate teenagers to read Ramayana epics. Forty Primary Tamil students participated in this study voluntarily. The data were collected through a questionnaire. Based on the pre-questionnaire data regarding respondents' prior knowledge on Ramayana, it was found that respondents had minimal knowledge about it. 37% said they would like to read the epic through comic books and 63% claimed that they would prefer computer. This study has some implications for computer assisted language learning.

Keywords: digital teenagers, Gamification, online interactive activities, Ramayana epic

1. Introduction

1.1 Background to the Problem

Learning provides intellectual growth that leads to scientific reasoning, abstract thought, and formal operations (Loughlin, 2012). As information technologies like virtual workspaces and digital libraries have evolved, they have formed new environments for learning and have given rise to new areas for research. Learning enhanced by information technologies is gaining momentum. This is partially in response to the demand for reduction in time-to-competency in the knowledge-based economy, spurred by intensive competition (Zhang, Zhao, Zhou, & Nunamaker, 2014). In addition, the globalization and cultural communication has added to this matter (Muthusamy & Farashaiyan, 2016). E-learning has recently become a promising alternative to the traditional classroom learning, helping society move toward a vision of lifelong and on-demand learning. It has become one of the fastest-moving trends and aims to provide a configurable infrastructure that integrates learning material, tools, and services into a single solution to create and deliver training or educational content quickly, effectively, and economically. Not only can instructional material be made available on the Internet but online collaborative learning and discussions can also occur (Wang, 2013).

Online interactive activities are an important aspect of distributed learning situations, wherein online communities and learners' motivational levels evolve and thrive. Through the thoughtful integration of interactive activities into the online learning process, learners and instructors gain considerable exposure to reciprocally favorable occurrences among learners, content, interface, instructor, community, and self. The

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thoughtful design and development of a distributed learning environment aids the use of interactive activities in moving beyond mere online interactions towards a more theoretically productive level of interactions. Within a theoretically productive level of interaction wherein the learners obtain information, develop conceptual frameworks through which the information is not only derived but becomes useful knowledge, develop higher-level thinking skills, and continue to be internally motivated to continue with the content, the learners conceptualize a learning community which can be sorely lacking within distributed learning situations that do not integrate appropriate interactive activities (Ong Lai & Wang, 2012). Among different online interactive activities, the researcher made use of gamification which is a process that changes the learner's learning behavior.

Ramayana had originated from India and had spread widely throughout the world. Ramayana is one of the greatest Indian epics. The Ramayana tells about life in India around 1000 BCE that models on dharma. Most ancient Indians learnt the characters and incidents of these epics and applied the principles and knowledge in their life. The epics not only help to bind the people of India from different caste, distance and language but also focused on how the Ramayana taught Indians to perform their dharma. People learned to pick out examples of characters who were faithful to their dharma and those who violated their dharma. In fact, Mahatma Gandhi dreamed that one day modern India would become a Ram-rajya (Muthusamay, Wickramasinghe & Shanmuganathan, 2014). In the olden days, Ramayana was staged to the audience through shadow-play or drama and it was an interesting activity for both the adults and teenagers. Many would come to watch the plays as it was the only recreational activity. But in today's digital world or more famously known as Net-Gen, the Ramayana is slowly losing its popularity among many people especially, the young generation or Net-Gens (Ting Sebastian & Anang Tri, 2014).

Meanwhile, game play or online computer games have become popular among today's Net-Generation (Sinayah, Muthusamy, Narayanam, & Abd Rahim, 2015)This is because they use computer and other digital related gadgets like videogames, music players, video cams and handphones more often as digital tools (Prensky, 2010). These facilities that they utilize in their daily lives make them think and process information profoundly different from the previous generation (Prensky, 2010a). These learners like multi tasking parallel processes whereby they prefer graphics presented first before text. As such, reading Ramayana books in print form is no longer preferred by these Net Generation teenagers (Ting Sebastian et al., 2014).

1.2 Problem Statement

The Ramayana epic has many moral values that can be used as guidance in our daily life especially for a positive character development (Ting Sebastian & Anang Tri, 2014). One moral lesson that can be learned from the story Ramayana is loyalty to family and more specifically, to siblings. In the story, Lakshman gave up the life he was used to and live in the forest for 14 years just to be with his brother Rama. Another important moral of the story is protecting the weak, which was exhibited by Jatayu, an old demigod who has taken the form of a vulture. When Ravana kidnapped Sita, Jatayu disregarded his old age and fought Ravana, resulting in his death. Because of this deed, Rama was moved by the aged creature's courage amid overwhelming odds. Besides this, many other lessons can be learned from each story from the Ramayana epic, for example, the values and norms, customs, mannerism lessons, various characteristics of people and so on (Prachi, 2015).

Although, these moral values are exhibited in Ramayana, and are very close to the Hindu culture, not many teenagers are willingly reading the books (Prachi, 2015). Some teenagers read but they are forced or reminded by their parents to read. Even though these teenagers read, but they do not find reading Ramayana as fun or interesting because of its text form (Tripti, 2014). The technology is more advanced and Ramayana epics look very ancient in the eyes of the present day teenagers. Therefore, a strong and stern move must be taken to empower today's digital teenagers with Ramayana knowledge which is filled with moral values (Prachi, 2015).

Kapp (2012) has introduced gamification as a process that changes the learner's learning behavior. Gamification is the use of game play mechanics to create meaningful learning experiences and making the learning more interesting. Besides, gamification looks at games and learning from a different angle on how to make learning more meaningful, engaging, interactive, fun and interesting. It has high potentials to help solve problems. In addition, by gamifying an activity, learners who dislike participating in the activity, would now engage themselves with the activity and reach the target objectives in an enjoyable way (Garris, 2012). Although some studies (Aphilak, 2011; Parimalagantham, 2013; Tripti) have been conducted on different online interactive activities to learn oral stories and some lessons, there is a lack of study to examine the use of interactive activities to learn Ramayana epics. Therefore, this research aims to seek if the use of online interactive activities could encourage and motivate teenagers to read Ramayana epics.

1.3 Research Objectives and Questions

The main objective of this study is to investigate if online interactive activities can instill teenagers' interest to read Ramayana epics willingly. The study also seeks to explore teenagers' opinion on how they feel when reading Ramayana online. In view of the objectives mentioned above, the study seeks to answer the following research questions.

- 1. Are teenagers prepared to read Ramayana and gain knowledge from it?
- 2. What are teenagers' opinions when they play online interactive activities to learn Ramayana?

1.4 Theoretical Framework

This study was guided by the input-process-output game model developed by Garris, Ahlers, & Driskel, 2002). Some researchers agree that computer games are beneficial for learners due to the motivating nature of the computer games (Chang & Chou, 2008; Rajaravivarma, 2005). When learners are highly motivated they would take part in learning and learner motivation in playing games leads to greater attention and retention (Ricci, Salas, & Cannon-Bowers, 1996). Besides, motivated learners are also very enthusiastic, focused, engaged and are interested in what they do (Garris et al., 2012).

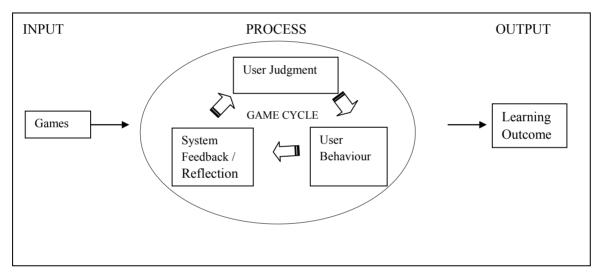


Figure 1. Input-Process-Output Game Model (adapted from Garris et al., 2002, p. 456)

The input domain comprises of online interactive activities that had been selected by the researchers for the respondents to play at home during their leisure time for a period of four weeks. Since playing online interactive activities needs internet connection, the selected online interactive activities were downloaded and saved in CDs. The CDs were distributed to respondents who do did have internet excess at their homes. When playing the games, the respondents will experience a process that is shown in the model's process domain as a Game Cycle. This game cycle includes user judgment or reactions, user behavior and system feedback or reflection. A key characteristic of game play or online activities is that learners will not play a game and stop immediately but rather they will play the game over and over again as game play is very engaging, engrossing and even addictive (Garris et al., 2012).

When learners play the games or online activities, they make individual judgments or ratings about whether the game is fun, interesting, enjoyable or engaging. Learner behavior regarding the online activities can also be observed when the learners are more interested and involved in the activities. Finally, feedback or reflections regarding the activity by the learners is a very crucial and important component of the judgment-behavior-feedback cycle. Individual learner judgment and behavior are matched by comparing the feedback to standards or goals. If feedback or reflections on the games by the learners indicate that they could complete the tasks and activities in the games, this means that the desired goal has been attained. Thus, feedback provides the learners with an evaluation of progress towards the goals and motivates learners to put in more effort and give more attention to the tasks. Finally, this engagement with the online interactive activities leads to specific objectives or learning outcomes that can be observed in the output domain as illustrated in Figure 1. An

affective learning outcome is expected to take place whereby respondents are expected to feel accomplished, happy and have fun reading and playing with the online games regarding Ramayana epics (Prensky, 2010).

2. Method

2.1 Participants

The respondents of this study were forty Primary Tamil students in a semi-urban primary school in Selangor, Malaysia who volunteered to participate in the survey. They were of mixed gender, both male and female respondents. Their age ranges between 10 to 12 years old.

2.2 Instruments

This study is a survey study. The data were collected through the questionnaires answered by the respondents before and after they were exposed to the online interactive activities on Ramayana epics. The two questionnaires were adapted from Roblyer et al. (2010). The pre-questionnaire was administered to obtain respondents' prior knowledge on Ramayana and the post-questionnaire was conducted to ascertain respondents' opinion and views of the online interactive activities on Ramayana. To capture the reliability of the questionnaire in this study, 20 Primary Tamil students were voluntarily chosen for the pilot testing. The inter-rater reliability estimate for the questionnaire was satisfactory at around 0.80% which is an acceptable index. With regard to the validity, the questionnaire was evaluated by three experts in the field of E-learning and they confirmed the validity of the questionnaire.

2.3 Data Collection Procedure

This survey was conducted in a semi-urban primary school in Selangor, Malaysia in 2015. Before the respondents participated in the online interactive activities, all the forty respondents were administered with a pre-questionnaire to find out their prior experience on reading Ramayana for pleasure and knowledge. Then, the respondents were instructed to use online interactive activities to read and understand about Ramayana for four weeks. Thirty of the respondents played the selected online interactive activities directly using the Internet; meanwhile the researchers gave CDs to the remaining ten respondents to play the same online interactive activities as they did not have the Internet facility. All the respondents played the games for four weeks. At the end of the study, they had to answer a post-questionnaire to gauge their opinion about the online interactive activities on Ramayana. They were given as much time as needed to answer the questionnaire.

2.4 Data Analysis

The questionnaire data were subjected to descriptive statistics through the Statistical Package for Social Science (SPSS) version 21 software. The mean of each item with the percentage was calculated.

3. Results and Discussion

In answering the first research question, based on the pre-questionnaire data regarding respondents' prior knowledge on Ramayana, it was found that respondents had minimal knowledge about it. Although most of them (87%) knew that Ramayana is a story, but only 25% of the respondents have read the story. The 25% of the respondents, who knew the Ramayana story, got the information from the comic books. None of the respondents have actually read the original text. Most of the respondents (75%) were ignorant about Ramayana because they did not have any exposure to the epic from books, parents or teachers (see Table 1).

Table 1. Respondents' knowledge about Ramayana

Items	Total	Yes	No
Do you	(n=40)	(%)	(%)
Know what is Ramayana?	40	35(87)	5(13)
Learn Ramayana in school?	40	0	40(100)
Think reading Ramayana benefits you?	40	10(25)	30(75)
Get information about Ramayana from your parents?	40	10(25)	30(75)
Think you can learn values from this story?	40	10(25)	30(75)
Think it is interesting to read this story?	40	10(25)	30(75)
Want to read Ramayana if given an opportunity?	40	25(63)	15(37)

However, when respondents were asked in what form they like to read the Ramayana, 37% said they would like to read the epic through comic books and 63% claimed that they would prefer computer.

To answer the second research question, the data from the post-questionnaire showed that 87% of the respondents enjoyed playing the online activities related on Ramayana. All of them (100%) found it interesting because of the colorful illustrations, sound effects and the beautiful 3D features. However, only 63% of the respondents could understand the story and found it informative, the other 37% of the respondents could neither understand the story nor the immediate feedback given in the online interactive activities. In addition, 52% of the respondents were unable to grasp the underlying moral values found in the online interactive activities. All the respondents (100%) said that learning Ramayana was not time consuming (see Table 2).

Table 2. Respondents' opinions after engaging with online interactive activities

Items	Total	Yes	No
Did you	(n=40)	(%)	(%)
Enjoy playing the online interactive activities related to Ramayana?	40	35(87)	5(13)
Think it was interesting to learn Ramayana through online interactive activities?	40	40(100)	0
Understand the story?	40	25(63)	15(37)
Find learning Ramayana through online interactive activities informative?	40	25(63)	15(37)
Learn the moral values in Ramayana by playing online interactive activities?	40	19(48)	21(52)
Think learning Ramayana through online interactive activities time consuming?	40	0	40(100)
Like the colourful illustrations in the online interactive activities?	40	40(100)	0
Like the sound effect in the online interactive activities?	40	40(100)	0
Like the immediate feedback given in the online interactive activities?	40	25(63)	15(37)
Like the beautiful 3D features in the online interactive activities?	40	40(100)	0

Comparatively, the respondents preferred to learn about Ramayana by playing the online interactive activities. This could be due to a few reasons derived from the data. Respondents showed an interest to colorful illustrations found in online interactive activities that was similar to comic books. Further, the Ramayana was neither taught in the formal setting i.e school or by their parents. The respondents had to take their own initiative to learn about Ramayana. The Ramayana text that is available commercially is wordy and has very little illustrations, so it does not create an interest in the respondents to read it.

Similarly, a small number (13%) of the respondents who played the online interactive activities on Ramayana were not computer savvy and due to their mixed proficiency level they had problems understanding the language used in the activities. Hence, they could not respond correctly to the immediate feedback displayed in the interactive activities. Respondents were unable to comprehend the values displayed or found in the online activities due to the limited timeframe (four weeks) and with no additional input from either parents or teachers. The findings of this study are not in line with the findings of Parimalagantham, (2013) who found out that the students couldn't learn Ramayana through oral stories.

4. Conclusion

It can be concluded that the respondents were able to understand the overall story of Ramayana because they learnt it in a playful atmosphere through the online interactive activities that was enjoyable, fun and exciting. However, to learn the underlying values that were depicted in the story students would require further guidance from parents and teachers. Further, all the currently available online interactive activities on Ramayana are in English language and it will create a language barrier for the low proficiency students. Nevertheless, this problem can be rectified if the online interactive activities are available in multi-lingual to appeal to all proficiency levels.

This study has a number of limitations. The first limitation is the selection of the students. The participants were primary Tamil students from a semi-urban primary school in Malaysia. So, they may not represent all primary Tamil students. In addition, this study investigated one group, i.e. primary students. Future studies can examine other groups such as secondary school students or at other settings.

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