



## SUITABILITY OF GAMIFICATION AS A NEW MEDIA PLATFORM FOR PRIMARY EDUCATION IN SRI LANKA

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### INTRODUCTION

The word education means learning something new in a formal way or informal way, may be an unknown thing or may be a known thing, rather than someone knowing or getting or giving some information about something. The definitions from Oxford languages defined education as “*the process of receiving or giving systematic instruction, especially at a school or university*”. (Oxford Languages 2021)

In every country in the world has their own education system, the ages which children learn will be changed according to their social, political, economic environment. The formal ways and the informal ways, non-formal ways can be seen in every education system. Education will bring positive attitudes and a perfect behavior in human life. It can be shown as “*a process of acquiring knowledge through study or imparting the knowledge by way of instructions or some other practical procedure. A child gets education from his experiences outside the school as well as from those within on the basis of these factors. There are three main types of education, namely, Formal, Informal and Non-formal. Each of these types is discussed below*”.

(Passion in Education 2019)

In Sri Lanka, there are three main stages in the education system. The grade 1 to 5 classes can be defined as the primary classes. Primary education is a critical stage of a child in the education system. The child will grow up, Improve his or her knowledge, skills, attitude during this period. If he or she is able to get a better education in this period, it will be a great chance to build the best human and this era makes way to take the child to the next level of education. Normally in Sri Lanka the education is based on traditional learning. Normally, face - to - face learning system can be seen in every school. A traditional teacher talk centered classroom would be considered as ineffective as it requires students to concentrate for long periods of time and could an obstacle to student learning and engagement. Instead practical activities aid in helping students to focus as well as increase engagement in activities.

#### New Media platform

The new generation is digital natives and they normally use new technologies. They are very familiar with new devices and normally they are combined with laptops, tabs and smartphones. The world is more competitive than the past. Using smartphones and the new media can make a child wiser than in the past. Children will be more interested in this method than ever. Learning in a classroom with the help of a teacher somewhat reduces interest of a

Child to concentrate the lesson, but having smart phones or tabs will help them to learn more willingness.

Children always used mobile phones and computers to connect with the new media. so they are combined with each other. Various types of communication systems in new media can be mentioned as below.

- Websites
- Blogs
- Social media
- Wikis
- Video games (gamification) etc.



New media can be mentioned as; a form of media. It is based on computer technology and it is related to computers. It is working under the internet. New media can be defined as below. “*New media are new technologies such as the internet and digital television and radio*”.

(Collins Dictionary 2021)

### Gamification in Education

Digital games are one type of new media. People are used to playing video games through computers and mobile phones. It can be mentioned as below; the video game is an electronic game which someone can play through the monitor or any other display. it can be used as an individual game or it can be played by one person. Video games are normally based on entertainment. Video games are based on a story. Moreover, video games can be defined as below. “*a game in which the player controls moving pictures on a screen by pressing buttons*”.

(Cambridge Dictionary 2019)

According to Kapp gamification is “*using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems.*”

(Kiryakova1, Angelova, Yordanova 2014)

Normally in the education sector children learn using traditional learning. But gamification can be used as a new media tool in the primary education system. Applying subjects to a video game and using video games will help children to learn more practically and willingly. “*Gamification is the use of game thinking, approaches and elements in a context different from the games. Using game mechanics improves motivation and learning in formal and informal conditions*”.

(Kiryakova1, Angelova, Yordanova 2014)

### Objective

The objective of the research was to identify the effectiveness of gamification in the field of primary education in Sri Lanka and to identify the most suitable gamification models.

### Hypotheses

The most Suitable and practical methodology is gamification for primary education sector in Sri Lanka as a new media tool.

### Questions

How to adapt and apply teaching via games and learning via games into the Sri Lankan education system and how to create the most effective story line for designing the games to get attraction among the primary students?

### METHODOLOGY

Research discipline: This research is based on quantitative and qualitative data.

Data collection: Quizzes and interviews were taken to collect preliminary data and research articles and the books were used to collect the secondary data.

150 questionnaires were allocated among 09 provinces in Sri Lanka in order to obtain enough data to the research. Data was obtained using google forms due to the Covid19 pandemic.

Data analyses: Quantitative data is analyzed in the manual system. Qualitative data is analyzed using content analysis.



## RESULTS AND DISCUSSION

The survey was able to obtain data covering the whole Sri Lanka. According to the data was collected through the survey, 67.1% of teachers between the ages of 20-35 were involved and the highest number of participants were in this age group. The minimum number of the participants was 10.1% and they are more than age 56. Of the other participants which was participated the survey, 16.55% were between the ages 36-45 and, 6.3% were between the ages 46-55.

96.2% of Primary teachers are using new media. 84.5% of primary teachers use smartphones to connect with new media. 48.1% use laptops and 17.3% use computers to connect with new media while 11% use other devices.

Zoom is the most popular new media among primary teachers. It is 77.2%. The second most used new medium is WhatsApp 73.4%, Microsoft Team 11.4%, and Viber 8.9% use among primary teachers. 6.3% in Messenger, 1.3% in Skype, and 7.6% in other new media use among primary teachers to teach children and the usage of new media has been increased during the pandemic.

The most used new media plat form for providing extracurricular activities is WhatsApp. It is 75.3 %. The lowest new media plat form is Viber. It is 7.4%. 65.4% of educational web site, 61.7% of you tube and 34.5% of face book plat form used by the teachers in order to share the extra activities. 18.5% of teachers use educational video games to provide extra activities while 17.3% of teachers use email.

Primary teachers highly recommended video games are suitable to teach primary children. 36.6% teachers recommend video games are very appropriate for primary education while 15.9% recommend it is suitable to teach and 20.7% recommend it is good to teach with video games. But similar group 19.5% teachers recommend is not so suitable. overall, 7.3% teachers recommend video games are not at all appropriate to teach children.

The category of Strategy game is the best to create educational video games. That is 26.8%. Life simulation and the role-playing games are in same equal. It is 25.6%.

25.6%. Teachers recommend action and adventure games are good to create video games. Adventure games 23.2% and multi-player role playing games 17.1% are also suitable for create video games. 2.4% teachers have proposed any other game categories.

## CONCLUSIONS

Sri Lankan primary teachers are using new media than in the past. The Smart phone is the most used device primary teachers use to connect with new media, and use Computers and Laptops. Primary education is the key to building a powerful person. New media is an essential part of society. Using Gamification than traditional learning will motivate children to learn. Even during a global epidemic like Covid-19, this method can be used very easily and the children reach their lessons easily. The schools are closed and the entire environment has been changed during the pandemic, everyone has to stay at home for sanitary issues. But applying, learning through video games (gamification) can continue education within the outbreak of any pandemic. During this pandemic, teachers are teaching using e-learning. Therefore, the most of the teachers use the Zoom app to connect with children. WhatsApp, Microsoft Team and Viber, skype use to teach children.

Through educational video games improved the children's knowledge and so does the level of reasoning ability. The process of the mind or brain increases and acquires learning opportunities and improves the intelligence and knowledge. The child is not just learning through educational video games, the child gets fun and mind relaxation. The child gets educational games with descriptive and colorful visuals, as same as child-friendly games, creative and age-appropriate and curiosity, attractive games.



The games are created related to the school syllabus. So the children can understand the facts, subject matters through self-learning. Children can understand the lessons since the games are not very complex. Games created with suitable external factors focusing on the social environment, games are simple to understand and enhance the quality of the education in addition to child's attitudes and skills.

Incorporating the correct spelling methods and basic mathematics are the best areas to create video games. Furthermore, matching identical numbers, arranging letters or number cubes, solving mathematics problems are the best areas to create educational video games. Gamification is the most effective media platform for the Primary Education sector in Sri Lanka.

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