

# Enhancing Education and Skill Building through Eduskill Program

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**Abstract:** Department of Statistic has release the computer literacy rate in Malaysia and shows that the rates was increasing every year for both urban and rural area. The definition used in census was based on the ability to use computer with one of the reference that was playing computer games. The study explores the combination of education, skill and games which mainly involved in children growth development. The children nowadays are mainly exposed to the world of technology. Games are one of the results from technology development, while education and skill play an important role in our life. This objective of this study is to inquire the possibility of combining this three aspect in order to form new way of studying and developing skill of the children. Methodology that used for this paper was literature review and nine blocks of Business Model Canvas framework. With this method of studying, it is expected that the literacy rate in Malaysia can be increased and children also can learn more beneficial skill from this EduSkill program.

**Keywords:** education, skill, games, EduSkill, collaboration, Business Model Canvas.

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## I. INTRODUCTION

This paper is based on the combination of three aspects; enhance education, develop skill and games method. Education is a main prospect in life. From Islamic perspective, Syed Muhammad Qutb said that education is a process to establish a comprehensive and balanced human. According to him, the main purpose of education is to develop the potential of intellectual, physical, emotional and spiritual human being to the level of perfection.<sup>1</sup> While from Western points of view, Plato had said that education is a process to shape every individual with a good manner. From both scholars' opinion, it shows that both are encouraged people to learn and get benefit from what he knows. In this case, benefit from education is interpreted as having a balance in Intelligence Quotient (IQ), Emotional Quotient (EQ) and Spiritual Quotient (SQ).

IQ is an ability to solve problems. "Your EQ is the level of your ability to understand other people, what motivates them and how to work cooperatively with them," says Howard Gardner, the influential Harvard theorist. While SQ is an access to deep meaning, fundamental values, and a sense of abiding purpose in our lives, and the role that this meaning, values and purpose plays in our lives, strategies, and thinking process.

The researchers such as Ross and Willigen (1997), Bird and Ross (1993), and Mirowsky and Ross (1992) found that individuals who have a good level of education have a higher rate of self-control in some situations such as work management, leadership, gain money, household management, and the burden of housework, compared with individuals who are less educated. Individuals with higher education followed by high levels of self-control were found to have psychologically low stress levels (Mirowsky and Ross, 1992). This is due to high self-control which helps individuals control the behavior, emotions and mind in a positive and flexible in dealing with various problems. High self-control also enables individuals to prepare themselves to deal with something that cannot be avoided<sup>2</sup>.

The different is both have their own purpose in education. From Islamic perspective, according to Imam Al-Ghazali the ultimate aim of education was the development of character including the promotion of moral and ethical qualities such as

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<sup>1</sup>Atan Long (1976-1978), Psikologi Pendidikan, Dewan Bahasa dan Pustaka, Kuala Lumpur

<sup>2</sup>KEPENTINGAN PENDIDIKAN DALAM PENBENTUKAN KUALITI HIDUP SEJAHTERA. DrAffizal Ahmad. Pusat Pengajian Sains Kesihatan, Universiti Sains Malaysia, Kubang Kerian, Kelantan

obedience, humility, simplicity and the good attitudes such as complete surrender to the will of God, reliance on God, and thankfulness to Him alone. Education should make a child aware of the laws of Islam through the study of Quran and Hadith. Otherwise, within Western societies, John Dewey said that education is a process of individual development. Furthermore, education is an effort to add for natural knowledge which he acquires to be more useful.<sup>3</sup> From that, education should be helping tools to a Muslim to close to God and at the same have better live in world.

Skill is a value added to a person. Skill is the ability to do something that comes from training, experience or practice. For example, communication skills play a very important role in making presentations. The patten is a talent of its own, but communication skills are something that must be learned (Dr. Mohd Fadzilah and Ahmad Naim, 2006. According to Abdul Rahman Abdul Aziz (2000), the ability to communicate is the most precious of human achievement because this ability has enabled humans connected among each other.<sup>4</sup>

Last but not least, games as an entertainment which mainly related to information system (IS). Generally, part of our lives uses information and communication technology (ICT) in our lives either in business transaction, interaction between two person and search for information. So the idea proposed has an aim to use educational games as designed to help people to learn about certain subjects, expand concepts, and reinforce development. Games also encourage the player to understand and experience things with interesting method. The children are given the opportunity to express themselves while learning and engaging in social media. While, the student can participate in educational games that offer deeper and meaningful knowledge in academic areas.

## II. BACKGROUND

This paper proposed the development of old education plans which introducing new learning method known as EduSkill. This method is a game based learning which is not specifically to school students only but suitable for all over the world and of all ages and backgrounds to both learn, teach and build skill. There is special portal that everyone can access to every game which in digital version. EduSkill has specific subject for primary school and secondary school which will help the students to sharpen their skill in certain subject where they are weak or not understand during class. EduSkill also focus on yield benefit games that can be played by non-student because it has games that assist them in learning a skill as they play for example quick thinker skill.

In the book of Digital Game-Based Learning by Mark Prensky, he writes that the research has proven that games are effective learning tools.<sup>5</sup>From the research has also concluded that "The role that fun plays with regard to intrinsic motivation in education is twofold. First, intrinsic motivation promotes the desire for recurrence of the experience. Secondly, fun can motivate learners to engage themselves in activities with which they have little or no previous experience" and "Enjoyment and fun as part of the learning process are important when learning new tools since the learner is relaxed and motivated and therefore more willing to learn."

The one that we are suggested are games of skill which the outcome are determined by the physical skill or mental skill. Although it has the element of chances, but the important role is played by the skill itself. The main benefit of the skills game is that the purpose is exploring one's capabilities. We can say that game based learning has an increasing success in the other country such as America. Mark Prensky also said that game based learning has an increasing success in United States. That is why we need this EduSkill program.

We need people to create interesting online educational games for example the teams from LangitIlahi Edutainment. This program is not limited for some group but for anyone who has Internet. They just need to register into EduSkill portal and choose which package that they desire. If the students which comes from rural area which cannot access into the Internet, they can access it at school. That is why we proposed to collaborate with Minister of Education to bring this program to every side of country.

<sup>3</sup>Swift, D.F (1969-1973), The Sociology of Education, Routledge & Keagan Paul, London

<sup>4</sup>KemahiranKomunikasiDalamMeningkatkanKeyakinanDiriPelajar. SatuTinjauan Di KalanganAhliJawatankuasaKolejMahasiswa, UniversitiTeknologi Malaysia. Yahya Bin Buntat&MuhamadShahabudin Bin Hassan. FakultiPendidikan. UniversitiTeknologi Malaysia.

<sup>5</sup> From Digital Game-Based Learning .Marc Prensky. McGraw-Hill. 2001

### III. PROBLEM STATEMENT

There are many games in the social network and easily can be downloaded into mobile phone and computer. The problem is these games are not gives benefit at all. Most of the games are just for entertainment and no other function. In one of the topic in Digital Game-Based Learning book, Mark Prensky said that the children nowadays are the 'games generation'. They prefer the things that can excite them up and boost their skill and technique.

Our love for the youth generation is mounting. They have huge potential. They still have many opportunities. They still have the power, ideas and creativity. It seems that the younger generation was imprisoned in an environment where they will move towards things in vain indeed.

How to enhance their education and skill with the uses of information system? With the developing information technology nowadays, one of the ways to solve is through the development of game-based learning. The target contestant is educators including teachers and lectures, parent and children from primary school and secondary school including student who is at the university as well as the games lover. The students can learn in a fun ways. The process not only makes the learning and training becomes enjoyable and compelling but far more effective as well as been said by Mark Prensky. Game based learning not only about fun and engagement but also coming with serious learning and interactive entertainment. John Seely Brown said in his interview that not only are scholars beginning to study gaming as part of contemporary society, but an increasing number of degree programs have emerged.

This is an expectation that education online based games will give benefit towards build self-esteem specifically in certain subject which the students are weak while enhancing the skills needed. It encourages children to keep learning in unstressed way. It also not focused to loaded students but can be used for unloaded people. This program is suggested to help teacher in teaching program at school so that all students from different background can involve in this program.

### IV. METHODOLOGY

Education in its general sense or meaning is a form of learning in which the knowledge, skills, values, beliefs and habits of a group of people are transferred from one generation to the next generation by using many ways which are through storytelling, discussion, teaching, training and research.

Education is very important for our lives. A Muslim is therefore required to acquire both religious and worldly knowledge. In fact, Islam advocated knowledge at a time when the whole world was engulfed in ignorance. In a matter of years the early generation of Muslims became a learned and refined people, for Islam had awakened in them the faculty of intellect. Those early Muslims understood from the teachings of their religion that useful knowledge is necessary for the benefit of the self and of humanity. Islam calls upon Muslims to pursue knowledge in the broadest sense of the word.

Prophet Muhammad said, "Seeking knowledge is an obligation upon every Muslim." [Narrated by Ibn Majah] He also said, "For one who treads a path to knowledge, Allah will make easy the path to Paradise." [Narrated by Muslim] And the Qur'an contains numerous references to knowledge and its importance, such as:

"Indeed, in the creation of the heavens and the earth and the alternation of night and day are signs for those of understanding. [3:190]

Usually, education take place with the guidance of others such as parents, teachers and friends but the learners may also educate themselves. For instance, any experience that has a formative effect on the way one thinks, feels, or acts may be considered as educational.

According to Merriam-Webster dictionary, education is a field of study that deals with the methods and problems of teaching that you get from attending a school, college or university. Basically, formal education is classroom-based, provided by trained teachers. In Formal education it commonly divided into stages such as preschool, primary school, secondary school, and then they will be in university, collage or other institution.

However, nowadays, globalization is an overwhelming world trend and education not only classroom-based but there is educational technology. Educational technology is the effective way in learning because for example, people nowadays used to play games on their gadgets and automatically they can learn and play at the same time.

Online educational games for kids have proven to be very beneficial learning tools. These games help kids learn many of the skills needed throughout their early childhood education.

For instance, Arcademic Skill Builders is one of the online educational games. It taps into the excitement of video games to engage today's students and help develop their 21st Century Skills. Originally born as a side project in the research department of the University Of Kansas School Of Education, Arcademic Skill Builders learning tools ([www.arcademicskillbuilders.com](http://www.arcademicskillbuilders.com)) are now used by millions of teachers and students worldwide. The students can customize game content to fit their lesson plans, and assign different content to different student and if students struggle with a specific problem, they can watch a video that shows a lesson on the problem. They began with Dr. Jerry Chaffin's idea that engaged, rate-based practice of basic math facts would lead to higher automaticity and fluency for students. According to Mr. White, he says that “. The math games have improved the student's grades in timed tests and have boosted the student's confidence in their math abilities<sup>6</sup>.

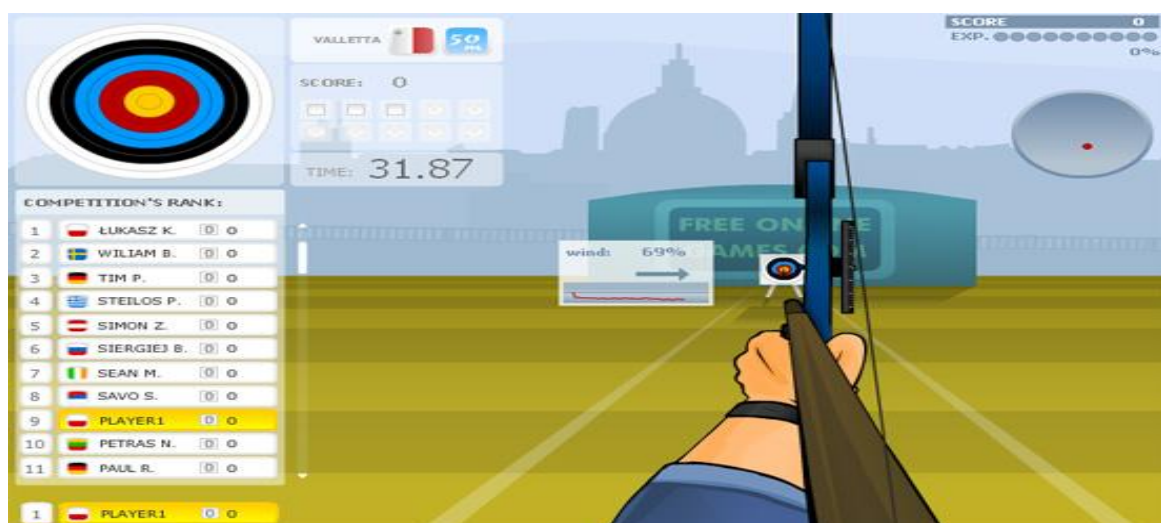
The rationale behind Arcademic Skill Builders emerged as a challenge to make certain aspects of classroom instruction as effective in creating persistence and involvement as observed in video game players. It is a program that incorporates the features of video games with educational content to obtain a high rate of learning through rapid and focused repetition, motivational, excitement and involvement. We just have to log into the website and it is applicable in Malaysia.

## V. CONCEPTUAL SOLUTION

EduSkill is a special portal that combines all the interesting games which use education and skill as main content for instance, customize game content to fit school lesson plans, and assign different content to different students. It turns out into specific package for school students and specific for non-students. Online report card is also available to monitor student progress and zoom in on problem areas. Furthermore, online notes are prepared for student to refer while playing games. It targeted to all ages and background, school students or non-students, educator, parents and gamers.

For education games, it is proposed to give school subject exercises which can help the students from Standard 1 until Form 5 to understand and learn about the subject at school in different method which is more interesting. For example, in Mathematics, students are usually weak in memorizing logarithms; EduSkill suggested a game that can help them to memorize it. The students also will be helped by short note about the related subject. Furthermore, EduSkill portal is equipped with online report card that will show their performance and which subject that they need to improve. Teacher and parents are welcomed to log on into EduSkill portal and register for their children or students. They also are able to monitor their children or students for how long they play, result from online report card and decide which game that suitable for them.

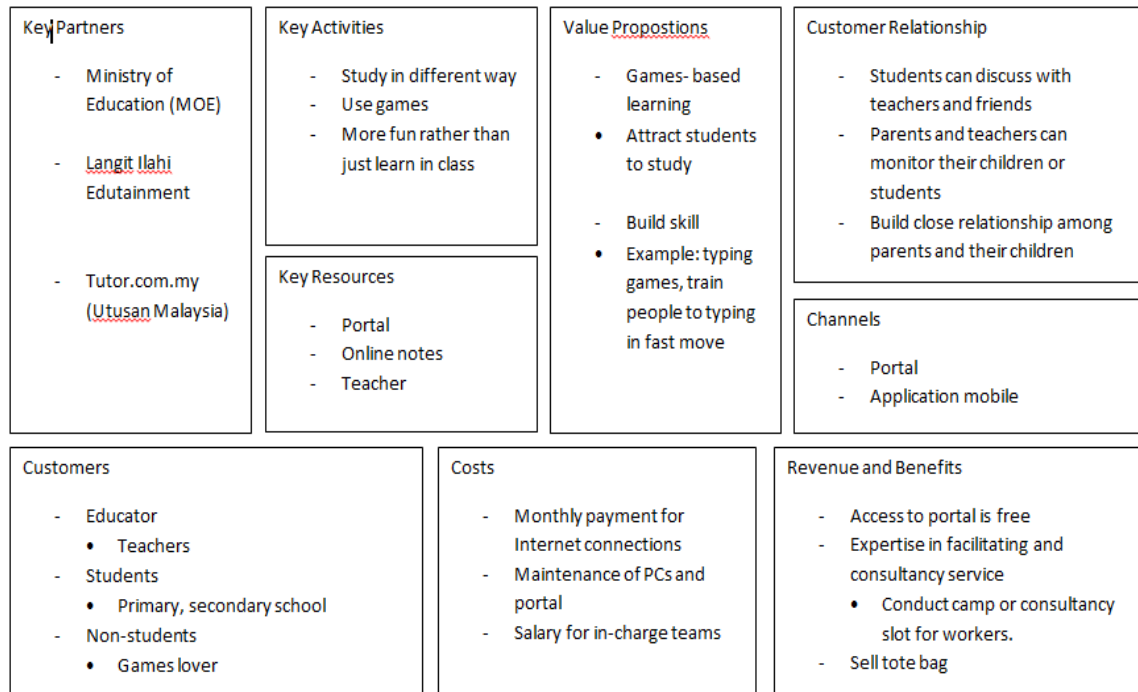
For build skill games, EduSkill is emphasized game that can help in mental focusing, quick thinking and application of good values. For example, EduSkill proposed to set up online archery games (Picture 1) which really good to help mind focus to achieve target which the target is bulls eye. Moreover, archery is one of the games that Islam encourages to learn.



Picture 1: Online Archery games

<sup>6</sup><http://www.arcademicskillbuilders.com/success/white/>

Figure 1 show the 9 blocks of Business Model Canvas (BMC) and the functionality of key partners, key activities, key resources, value propositions, customer relationships, channels, customer segments, costs and revenue streams based on EduSkill program.



**Figure 1: Business Model Canvas for EduSkill**

### Key partners

#### *Ministry of Education (MOE)*

This is to get permission to make EduSkill as a tool that can reach at school. MOE with the mission 'Preserving Quality Education System for Developing Individual Potential to Meet National Aspirations' can set up EduSkill to achieve that mission.

#### *Langit Ilahi Edutainment*

Langit Ilahi Edutainment is a branch missionary and new company under Langit Ilahi which focus on producing games that are helpful and Sharia-compliant. The idea is to propose to have them and share the idea in the making of beneficial games.

#### *Tutor.com.my*

Tutor.com.my is among the first educational websites in the online learning industry. This web is one of major references for national examination candidate which the content is fulfill school syllabus.

### Key activities

EduSkill propose to be the alternative ways for them to learn and build skill at the same time. Other than that, it proposes to apply good values in their lives which they can play games and get benefit from it.

### Key resources

EduSkill suggested having special portal and online notes to help the students to understand more about the subject. The online notes will be provided from the special educator team which suitable with the level of study and ability of the students.

### Value propositions (VP)

Online educational games have proven to be very beneficial learning tools. These games help to learn many of the skills needed throughout education. Learning games are particularly useful for younger kids and can help build confidence

while enhancing the skills needed. EduSkill proposed paper provided here allow children to have fun while they learn. Fun educational games encourage children to keep learning, even after school hours. For non-students, EduSkill can be a different online game which have value on it rather than just a game.

### Customer relationships

In EduSkill, it proposes to the students to have a discussion with their friends and teachers or listen to their teachers' explanation if short note provided not helping them much. It also can help to build the relationship between the students with their friends and teacher. Moreover, it expects the relationship among parents and children can be closed because parents can monitor which games their children are played and decide which are suitable for them.

### Channels

EduSkill is provided in a portal because everyone can access to the Internet and they can view it easily even though not at school area. If the students are not available to access to the Internet, they can access with school computer. That is because it proposed to use this portal in school or private tuition. It also can be downloaded from mobile application and they can play by using their mobile phone, tab and notebook.

### Customer segments

This program is targeted to all the students which come from primary and secondary school either they have the Internet or not from rural area or big city. From the research, these groups are known to like something that fun and "People rarely succeed unless they have fun in what they are doing."-Dale Carnegie. The child will learn to slowly take interest in filling the gaps in his knowledge by himself as said "Play is the original way of learning things"-Danny Hillis. It also proposes to educators such as teachers for public or private school and tuition which can help them in teaching process and attract their students. From some research it proven that "Enjoyment and fun as part of the learning process are important when learning new tools since the learner is relaxed and motivated and therefore more willing to learn." Last but not least, EduSkill is proposed to non-students which we believe that when you are enjoying yourself and laughing, you will be more alert and it proven by current research that shows more play will improve learning and performance for work in the areas of stress, anxiety, creativity, and self-efficacy.

### Costs

To come up with this program, some preparations are needed in order to overcome the costs issues that are going to be faced such as maintenance of the PCs and portal, monthly payment of the Internet connections and also salary for the in-charge teams.

### Revenue and Benefit

Since this EduSkill is free but in order to gain revenue, to benefit the skills in facilitating and consultancy, the team will offer a facilitator services such as conducting motivation camp for students during school holiday or consultancy services for workers. Meanwhile, the activity of selling tote bags will be helped to gain more revenue.

## VI. CONCLUSION

EduSkill is a portal that provides all the interesting games which use education and skill as main subject. It targeted to all ages and background, students or non-students, and educator. EduSkill proposes to get permission from MOE to spread and use EduSkill as learning tools at school. It also proposes to share the idea of helpful games with Langit Ilahi Edutainment. To conclude, EduSkill with the aim of to provide educational games as designed to help people to learn about certain subjects or assist them in learning a skill as they play. It encourages all the portal visitors to get benefit from what they play.

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