# **KETINGTING THINK: PROMOTING INNOVATIVE TRADITIONAL GAME TO YOUNG GENERATION**

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# ABSTRACT

In this era, smart phones and video games are the latest fads among the younger generation to preoccupy them with modern entertainment, distraction, and technology to pass their time. However, there is that one element that seems to be missing from most of those modern games - that physical and personal human interaction which usually incorporated in Malay cultural heritage. Ketingting game is one of the heritages which is still popular nowadays. It is a game that is not only entertaining but also beneficial for mental and physical development to the players. 'Ketingting Think' is an innovation of this traditional game created to add vibrantly and creativity of this game. With a new compelling shape and colours, 'Ketingting Think' is hoped to aroused curiosity and interest among the youngsters.

Keywords: Ketingting, traditional game, innovated game, interactive activity

# INTRODUCTION

Heritage as a whole can promote better development in young generation. Undeniably, heritage itself can produce a good physical, emotional, spiritual and intellectual social (JERI-*Jasmani, Emosi, Rohani dan Intelektual Sosial*) person. These criteria known as JERI have been listed as important role in the development of young generation in 'Falsafah Pendidikan Kebangsaan' (Kementerian Pendidikan Malaysia, 2012). However, rapid development in tele-communication and technology have been affected our young generation lifestyle and drove them away from our heritage and cultural value. They do not need to go out and find an area to play. They can play anywhere they want. There are many online games which can be played on tablet at home or application games which can be downloaded freely. People can even play a Lego without a Lego block. Games provide children with opportunity for intense mobility; games significantly contribute to physical and psychomotor developments. However, games can also be implemented as effective and functional learning tools in children's cognitive, affective, social, sexual, moral, and behavioural developments (Aypay, 2016).

Believing that heritage can still be promoted to young generation and the most relevant technique can be use is by playing traditional games. Traditional games are believed to have good value in promoting good social life practice (Andriani & Kassim, 2016). Congkak, wau, batu seremban and ketingting are among traditional games in Malaysia. However, these traditional games are hardly played by most of our young generation. Therefore, there is a need to give a new look to those games.

Ketingting is one of the traditional games which involve physical activity. Player needs to jump on one foot from one square to another. The traditional Ketingting is very uncolorful and need a space to draw the squares. Therefore, Ketingting Think is innovated to attract young generation to play the traditional game. With its colourful hexagon shapes, the aims of this game are to develop the communication and critical thinking skill in order to enhance their ability to solve HOT (Higher Order Thinking) problem.

# **RESEARCH METHODOLOGY**

Development of an innovative product required a structured framework (Figure 1) in order to produce a good end product. Visualising the process before it started can ensure systematic method and less defective. Started the first phase with generating idea from discussion and mind mapping, Ketingting game had been chosen as the traditional game to innovate. At the same time, information about Ketingting game is assembled on how it has been played originally (Figure 2) and why there is in need to innovate this traditional game. Based on the idea and information gathered, decision on choosing the material is made.



Figure 1: Framework on the process of creating Ketingting Think.



Figure 2: Among types of traditional Ketingting game design

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Phase two involved choosing material for the Ketingting mat, as it is decided that this game can be played indoor and outdoor. The requirements for the material must be sturdy (does not easily thorn out when played), durable (the players have to jump on it throughout the game), water proof (outdoor if wet surface or grass) and importantly low cost. Therefore, we choose tarpaulin banner (size 7x7 feet) as Ketingting mat designed base material because it suited all the requirements that needed.

The process of designing the Ketingting mat is an important phase in creating the Ketingting Think game. We gave a new look to the traditional Ketingting game by changing the usual shape which is square to hexagon shape. Hexagon is a six-sided polygon that is both equilateral and equiangular. It can fit together without leaving any gaps to tile the plane to fit the 7x7 feet mat. The arrangement of the hexagon is displayed in Figure 3. The choice/**use** of hexagon shape would provide 6 ways for players to strategize their movement to the next hexagon. To give the vibrant look to the mat, we used three primary colours, i.e. red, yellow and blue as these colours would attract the most attention from viewers.



Figure 3: Ketingting Think mat design

Once the material and design of the mat are finalised, the Ketingting mat is produced. Next phase is proceeded with an implementation of a pilot test to testing the feasibility of the product. The test is done to a group of students from secondary school and few teachers during a Science Carnival in UiTM Cawangan Pulau Pinang. The selected groups tried the Ketingting Think game and gave a feedback through a questionnaire that has been provided. The data gathered is then analysed during the last phase of the product development and its results would provide information on the effectiveness (objective achievement) of the product.

# 2.1 Product description

Ketingting Think game is an innovative and interactive game which required creative thinking skills to play. It can be played by at least two to four players, indoor or outdoor. This set of game includes Ketingting Think play mat, one Colour Dice, one Step Dice and Coloured House Stone for each player.

#### 2.1.1 Instruction on playing the Ketingting Think game

The following is the instruction of how to play the Ketingting Think game:

1. At the beginning of the game, each player required to roll the dice to determine their turn. The player with the highest number on the dice will start first. Followed by the second highest and so on.

2. Starting at Base (Figure 3), a player required to roll two dices, the Step Dice and the Colour Dice. The Step Dice will represent number of steps a player can take, and the Colour Dice will represent the last colour a player need to step.

For instance: Player A obtained number three (3) for Step Dice and Colour Dice shown red. This implies that the player need to step on one foot for 3 hexagons and the third hexagon must end with red hexagon.



Figure 4: Stepping procedure

3. To move, a player need to jump on one foot, from one hexagon to the nearest hexagon, according to Dices (Figure 4). Then, the next player will take turn and do the same. All players will repeat Step 2 and 3 until the player arrives at Goal.

4. Open hexagon (Figure 3) can represent any colour so that the players can use as their last step.

5. Upon arrival at Goal, the player will throw their Coloured House Stone. The hexagon where the stone falls will be belonged (House) to that player only and other players cannot step on that hexagon. Then, the player will repeat Step 2 and Step 3 from Goal back to the Base.

6. Player with the most number of House is the winner.

2.1.2 Rules and Regulations

Listed are the rules and regulations:

1. Coloured House Stone cannot be the same because the players can be tricky to distinguish.

2. A player is given one chance only during the selection of the House.

3. If Coloured House Stone fall on the line, or House of other players, players are considered lose turn and lose chance to own a House.

4. Players can jump in their own House but not on the other players' House.

5. Player loses his/her turn if he/she accidently steps on the House of another player.

# **RESULT AND DISCUSSION**

Ketingting Think game has been introduced to thirty respondents of student and teacher during a Science Carnival in UiTM Cawangan Pulau Pinang. 93% of the respondents are female and the rest are male (Figure 5).



Figure 5: Gender of the respondents

Figure 6 shows traditional games known by respondents. Most of them familiar with congkak (57%). Batu seremban is the second game most known by the respondents (23%). Both games are still being played in the school. Only 10% of the respondents know about tengteng (Ketingting) game. Less played by them is wau (3%).



Figure 6: Traditional games known by respondents

A set of question has been asked on criteria of innovated Ketingting Think game. Their feedbacks were grouping according three criteria which are; (1) attractiveness of the game (interesting), (2) must be played using strategy and creativity (creative), and (3) promoting teamwork (teamwork). From the result (Figure 7), 60% of the respondents strongly agreed that this innovated game is interesting. According to them, the vibrant colour and hexagon geometric design fascinated them to play the game. Meanwhile, 73.3% of respondents think that this game required strategy and creativity to become a winner through its unique way of playing. The highest number of respondents (76.7%) strongly agreed by communicating with each other while promote teamwork. playing the game could



Figure 7: Respondent feedback on Ketingting Think game

# CONCLUSION

Innovated traditional games are not meant to change the way it has been played, none the less change the culture. It is modernized so that the young generation today, who's already exposed to digital era, can get attracted to such innovated traditional games which have vibrant colours and shapes.

Ketingting Think is hoped to be a game that bring both new elements and past childhood culture together. New elements referred to the creativity and the ways to think while playing the Ketingting Think and the design of the vivacious material itself. At the same time, the culture of playing together with friends and communication skill developed by interacting with others really need to be revitalized.

# REFERENCES

(2010). *National physical activity recommendations for children 0-5 years*. Commonwealth of Australia: Department of Health and Ageing

(2012). *Pelan pembangunan pendidikan Malaysia 2012-2025*. Putrajaya: Kementerian Pendidikan Malaysia.

Adriani, T. (2012). Permainan tradisional dalam membentuk karakter anak usia dini. *Jurnal Sosial Budaya*, *9*(*1*), 121-136.

Jantan, R. (2013). Faedah bermain dalam perkembangan kanak-kanak prasekolah (4-6 tahun). Accessed January 10, 2018. <u>https://www.researchgate.net/publication/303897656</u>.

Mohamad Ashari, Z., Mohd. Kosnin, A. & Yeo, K. J. (2013). Keberkesanan modul belajar melalui bermain terhadap kefahaman pengalaman pranombor kanak-kanak prasekolah. 2<sup>nd</sup> *International Seminar on Quality and Affordable Education*, 305-312.

A. Aypay, (2016). Investigating the role of traditional children's games in teaching ten universal values in Turkey. Eurasian Journal of Educational Research, 62, 283-300, http://dx.doi.org/ 10.14689/ejer.2016.62.14