

Research Article

Explore Fun & Facts Board Games - Taman Ular Negeri Perlis

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Abstract: A gaming board called Xplore Fun Facts draws its inspiration from snake and ladder games. This game board's concept was developed based on Perlis Snake Park, one of the city's most well-known tourist attractions. Visitors to Snake Park can enjoy playing this creative toy. Students and the general public can also participate in the game to learn more about the different kinds of reptiles that can be found in the snake park. An interactive component like QR codes is one of the game's features. The participants can choose between three sets of questions by scanning the QR code. The ease of use and entertaining facts about the snake park's reptiles are two benefits of this innovative product. This product can be used to raise the degree of awareness of visitors to Taman Ular regarding the habitat that dwell in the garden, according to the questionnaire that was issued to the users.

Keywords: Game Board, Snake and Ladder, Perlis, Interactive



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1. INTRODUCTION

Teachers and students are motivated by educational creativity to research, learn, and use all of their resources to come up with something new. This calls for a fresh approach to problem-solving. Its learning cycle should aid pupils in developing their creative thinking and problem-solving abilities. As a result, innovation can also help students in the classroom's facilities, instructional methods, and the teaching and learning processes that take place there. The use of instructional games has gained popularity recently. It has been suggested that young individuals who were raised playing video games have changed in ways that make them resistant to conventional training (Prensky, Interactive Game-based learning, 2001). As a result of their practical and interactive nature, educational games have been said to boost learners' motivation and interest more effectively than traditional lectures. The students gain motivation, a more positive attitude toward the assessment procedure, and a decrease in test anxiety (Dziob, 2020; Greenblat, 1973). Another benefit of educational games is that they might improve the retention of learned knowledge and abilities (Pierfy, 1977).

Games that use an often-folding, typically planar board as the game's foundation are known as "board games" and are very popular and frequently omnipresent. Despite the fact that the first board games were classics like chess or checkers. As a result, a variety of rules and game concepts have been created for board games. In order to increase the board game's appeal, a variety of occasionally hilarious and brilliantly coloured appearances were used in its production. The gameboard's advantage,

meanwhile, is that it can reduce tension and help students in this course learn more. Then, it can also make it simpler for kids to comprehend and not grow weary of utilising a gameboard as a learning tool.

The hands-on learning of these concepts utilizing Snake and Ladder tends to speed the learning curve and anchor the information solidly, thus becoming a better foundation for subsequent tourist attractions. The implementation of a Snake and Ladder game board as a study tool, as a common catalyst, promotes a more positive learning attitude toward the content and increases the likelihood of student understanding of the jewels in Perlis.

Some components of the game have been innovated to a better version of the game board that is suitable for the current era, based on the 3R, Race, Reach, and Rich game board that has been used as an innovation product. Rolling dice on a 3R game board, for example, has been transformed into LED light. The next innovation is to incorporate Augmented Reality visual footage into the game's maps, where it can be used as a clue for the question or as more knowledge for players. Aside from that, question cards have been re-imagined and converted into Quick Response codes that are linked to Google Forms, allowing players to respond right away. With all these innovations, it's possible that people will be attracted to playing and experiencing the game board.

Perlis has a lot of potential in terms of tourist attractions. Based on the pre-survey that has been done, most of the students from PTSS still don't know fully about the uniqueness and attractions of Perlis. This statement caused a lack of information sources among students. Interactive game boards will be playing the main role in advertising for Perlis. An interactive game board will be helpful to students who are not interested in searching for information on the Internet. This is because all the important information about Perlis will be learned by the students of PTSS through playing the Interactive Game Board.

2. METHOD & MATERIAL

2.1 Method

The management of the creation of novel ideas for interactive board games was carried out using the Innovation Idea Development Template (IIDET), as shown in Table 1.0. The actions of information searching and the conversations with the two specialist individuals have developed the concept of innovative product development. IIDET has been utilised to identify several key pieces of knowledge that assist innovators in coming up with the concept of an interactive board game, including the definition of interactive board games, their possible future users, and its scope. In addition, five components of relative advantage, usability, and compatibility have been identified utilising the innovator perspective technique. Meanwhile, by using an empirical research approach, five elements for relative advantage and ease of use have been discovered. Using the same approach, one element of compatibility has been determined. By using IIDET, the final idea of the Interactive Board Game has

been fixed and was used wisely in the next phase of the Interactive Board Game, which is the prototype development.

Table 1. Prototype Development

TITLE OF PROJEK			
Interactive Board Game			
PROBLEM STATEMENT			
<p>Perlis have a lot of potential in terms of tourism attractions. Based on pre - survey that have been done, majority of the students from PTSS are still don't know fully about the uniqueness and attractions of Perlis. This statement caused to lack of information sources among students. Interactive game board will be play the main role on advertising about Perlis. Interactive game board will be helpful to students who are not interests in searching information in Internets. This is because all the important information about Perlis will be learn by the students of PTSS through playing the Interactive Game Board</p>			
OBJECTIVE ON PRODUCT INNOVATION DEVELOPMENT			
<ol style="list-style-type: none"> 1. To develop interactive game board based on Perlis tourism attraction. 2. To evaluate the effectiveness of interactive board game to PTSS student. 3. To improve the interactive game board. 4. To promote interactive game board. 			
NAME OF EXISTING PRODUCT REFERRED TO	3R Game board	INNOVATION PRODUCT NAME	Attraction Exploration Game Board in Perlis
SCOPE OF INNOVATION PROJECT	Students PTSS	POTENTIAL ADOPTER	Students
DEFINITION OF INNOVATION PRODUCT			
Interactive Game Boards are products that can help students improve their knowledge of tourism specific in Perlis state. At the same time it will help students learn about the state of Perlis in a very fun way.			
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PRODUCT INNOVATION CHARACTERISTICS			
RELATIVE ADVANTAGE	EASE OF USE	COMPATIBILITY	
Get knowledge	Tangible	Suitable for all ages	
Time saving	Easy to use	Community	
Life and practical lesson	Durable product		
Enjoyable	Relaxing and reduce stress		
Get exposure	Stylish		

2.2 Material

Planning and organising every part of a project, including choosing materials, creating a budget, and delegating tasks to team members, is called project development. It also covers the steps involved in finishing a project, such as revising plans as work advances and identifying problem areas to make the project run more efficiently.

Here, there will be two different kinds of product development costs: administrative and production. The production cost will include the cost of making the product. The administration of costs comes with additional charges. The following table is the material used to develop this game board.

PRODUCT DEVELOPMENT	QUANTITY
Wood	2
Sandpaper	3
Cat	1
Screws	15
Glue	5



Figure 1: Finishing Product

3. FINDINGS

A total of 46 questionnaires were used in this survey. All variables were measured based on 5 Likert Scale strongly disagree, disagree, neutral, agree and strongly agree.

3.1 SECTION A: Demographic Characteristic

The questionnaires were distributed to the student in Polytechnic Tuanku Syed Sirajuddin and tourist in Perlis Snake Park. They need to play the board game before answering the questionnaire. The

demographic data required the questions, consisting of four parts from gender, age, ethnicity, and origin.

After the questionnaires were returned, the researchers summarized demographic data and the details as shown in Table 2.

Table 2: Frequency and percentage of demographic information from the samples (N=46)

General Information	Frequency	Percentage
Gender		
Male	21	45.6%
Female	25	54.3%
Age		
Below 18	2	4.3%
19-24	35	76.0%
25-29	6	13.0%
Above 30	3	6.5%
Ethnic		
Malay	32	69.5%
Chinese	7	15.2%
Indian	7	15.2%
From		
Perlis	11	23.9%
Other	35	76.0%

The demographic data revealed that there were 25 respondents overall, or 54.3% women, and 21 respondents, or 45.6% men. The majority of people who answered the survey were women.

The demographic information from the poll showed that there were 2 (4.3%) respondents under the age of 18. Between the ages of 19 and 24, 35 respondents (76.0%) were present. Additionally, there were 6 (13.1%) respondents among those aged 25 to 29. There were 3 responses over the age of 30 (6.5%). Most respondents were in the age range of 19 to 24.

Three main races were identified in the demographic data based on the survey questions, with 32 (69.5%) Malay, 7 (15.2%) Chinese, and 7 (15.2%) Indians. This showed that the majority of responders are Malay.

According to respondents' places of origin, it was found that 35 (76.0%) respondents were from other countries, whereas 11 (23.9%) respondents were from Perlis.

3.2 SECTION B: Analysis on Level of Knowledge

This analysis was made to identify the level of knowledge the player of Xplore Fun & Facts Game Board on Taman Ular Negeri Perlis. The discussion of the data analysis will be investigated based on the six questions of study. Below is the result of the questionnaire.

Table 3: Frequency and Percentage Of Demographic Information From The Samples (N=46)

Tourist Knowledge After Playing Game Board	Minimum	Maximum	Mean	Level
Before Playing game board, my level of knowledge about Perlis Snake Park is not good	1	5	4.32	High
I am interesting by using this game board in learning activities	1	5	4.63	High
This game board make me easy to understand about Perlis Snake Park	1	5	4.73	High
This game board enhance my knowledge and make me interest to study about animals in Perlis Snake Park	1	5	4.54	High
I understand very well all the game rules and regulations easily	1	5	4.78	High
After playing this game, my knowledge of Perlis Snake Park is better than before	1	5	4.69	High

According to Jamil (2002), mean values can be categorized into three level: Low, moderate, and high for this study.

Low	1.00 to 2.33
Moderate	2.34 to 3.66
High	3.67 to 5.00

As reflected in Table 3, some of the means are higher than four (4), ranging from 4.32 to 4.78. This suggests that most respondents are strongly agreeing with most of the variables examined in this questionnaire.

4. CONCLUSION & RECOMMENDATION

This board game is excellent for encouraging learners to memorise this material, and it can draw players when combined with a cutting-edge technological innovation known as the Argument Reality (AR) aspect. These developments will motivate learners' comprehension both inside and outside of the classroom. The quality of the game board's components may one day be improved to make it more imaginative, alluring, robust, and ecologically friendly. The board game's quality is improved as a result of the learners' thorough feedback, questionnaires, and board game's lengthy lifespan. Consumer feedback indicates that this product is good since it teaches while you play. Additionally, a product's enhancement is crucial for market penetration in Malaysia.

4.1 Recommendation

4.1.1 Design Improvement

The concept of the snake ladder game has been faithfully recreated on Explore Fun & Facts, along with the addition of QR codes and educational movies. This is done to increase the players' interest in the game. This game board's design has been improved in response to comments and recommendations made by visitors and students. Other game boards typically look very similar and have the same rules for play. A map of Snake Park Perlis, freeze frames, and brief video clips about the location were used in the design and improvement of this game board.

4.1.2 QR Code Improvement

Improvements was made to improve the questions and information in the Google Form. There will be three sections that shows in the Google form after scan the QR code. The players can choose any section from it to select the questions. The attachment of a QR code on the edge of the game board will be scanned by the player before the game starts.

4.1.3 Informative Video Improvement

The informative videos about Snake Park have also been upgraded. In the video, more information and facts about Snake Park were added for players to view when they reached freeze point. It is very important for us to identify the shortcomings and elements that can be improved in the product through the reviews and suggestions of the respondents. This game board will also be given to Perlis Snake Park to be played by tourists who visit there.

4.1.4 Paper Improvement

As an acceptance of a suggestion from respondents, the surface for Explore Fun & Fact was changed. The designed map for the game was printed on thick and white plain paper at the correct size so that, it could be fixed on the game board. The quality and surface of the paper are also perfect for rolling the dice and moving the pawns while playing.

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