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PROGRAM  
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ABSTRACTS BOOK

The 9th International Innovation, Invention  
& Design Competition  
INDES2020

17th May – 10th October 2020

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Published by: Department of Research, Industrial Linkages, Community & Alumni  
Networking (PJIM&A)  
Universiti Teknologi MARA, Perak Branch  
Bandar Seri Iskandar, 32610, Seri Iskandar  
Perak Darul Ridzuan, Malaysia

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# **THE APPLICATION OF URBANISE MOKSHAPAT EDUTAINMENT (U.M.E) IN TEACHING AND LEARNING FOR TOWN & REGIONAL PLANNING PROGRAMME**

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## **ABSTRACT**

Teaching and learning should escape from the traditional approach that only focuses on content and one-way learning. Hence Education 4.0 was introduced as a desired approach to learning that aligns itself with the fourth industrial revolution. UiTM then made an advance follow-up with Education 5.0 @ UiTM, with a vision where teaching and learning are supposed to be more flexible and adaptive. Many approaches have been used by lecturers to encourage active learning in class. These includes lectures and blended learning which integrate technology in learning. However, there are issues where students still face difficulties to understand the subjects they learnt especially when these subjects are related to facts and theories. The question is, does technology really help to encourage active learning in class? The objectives of this research are to develop an edutainment board game that integrates the knowledge of Town and Regional Planning as well as to promote active learning among students to increase their attention in class and understanding of the subject matter. The existence of traditional games including board games has increasingly been eroded, and over time these traditional games will be replaced by gadgets if educators and parents did not introduce them to students. The physical board game not only encourage students to be active in class, but it also encourages cooperation among themselves, hence strengthening their relationships.

**Keywords:** edutainment, board Game, active learning, town and regional planning

## **1. INTRODUCTION**

Good educators cultivate their skills and abilities through constant and deliberate efforts. Teaching is one of the instruments of education with special function to impart understanding and skill (Korth, Erickson, & Hall-Kenyon, 2009). Learning on the other hand is about a shift, which is brought about by creating a new capacity, knowing a scientific law, and shifting an attitude (Sequeira, 2017). Students tend to be more enthusiastic if involved in play activities. How can games be used in educational programmes? This study explores the integration of traditional board games in classroom setting and the values of cooperation and active learning in the classroom.

There are many traditional board games around the world such as monopoly, scrabble, checkers, chess, sudoku, ludo, mokshapat and many more. They come from different cultures, ethnics and nations. For instance, monopoly is a board game designed and patented by Lizzie G. Magie in 1904 in the USA (Augustyn, 2020), sudoku is originated from Japan (Radovan, 2019) and mokshapat is a game of Indian origin (Bhaktivedanta, 2015; Ekhwar, 2020; Headstreams, 2020). This article attempts to focus on mokshapat because it is strongly believed that this traditional board game is able to teach the students about aspects in life such as gratitude, motivation and patience in life. Mokshapat is also given other

names including chutes and ladders, bible ups and downs, as well as snakes and ladders. It is a game which can be participated by many students in the classroom. In this game, they will face many opportunities (ladders) and obstacles (snakes) in order to complete any given task. Students will be given several questions related to a certain subject during the games. Hence, this idea hopefully can rejuvenate the process of teaching and learning for the Z Generation nowadays at the same time can enhance the understanding and performance of them as stated by Nachiappan et al. 2014 that the usage of snake and ladder game can enhance the cognitive development of students with difficulties.

## **2. PROBLEM STATEMENT**

There are issues where Town Planning students cannot pay full attention and understand the subject in class especially those involving facts or theories. The subject Fundamental of Town Planning, which discusses the basics and theories of Town Planning, is one such example. A questionnaire survey was conducted to obtain the perception of first-year diploma students from the Town and Regional Planning Department. Findings from the survey is discussed below.

### **2.1. Preliminary Study on Current Teaching Approaches**

Based on a preliminary survey on first-year diploma students from the Department of Town and Regional Planning to assess their preferences on teaching and learning, several current teaching and learning techniques have been identified. The findings indicate that lectures, tutorials and online quizzes are the most preferred approaches by the lecturers recently (60 %), followed by lectures utilising interactive videos, and the standard lectures and tutorials (17.5 % and 22.5 % respectively). It also found that several students thought that the current approach of teaching and learning caused them difficulties in understanding and remembering the subject especially when the subject matter is related to theory and concept.

### **2.2. Z Generation (Gen Z) Attention Span**

The teaching and learning environment nowadays ought to be designed in line with the student's ability and interest to ensure that they can enjoy the teaching and learning environment and also to enhance their understanding. Previous studies identified that the new generation of students has arrived and they are called "Z generation". Z generation refers to those born beginning 1996 and ending approximately in 2010 (McNeil, 2018). Recent studies by Sparks & Honey (2017) identified that the attention span of 'Gen Z' are only 8 seconds, which is much shorter than earlier generations. In keeping and ensuring their focus, educators require numerous teaching and learning techniques of stimulation in connecting them to the learning environment.

## **3. AIM & OBJECTIVES**

The aim of this project is to provide entertainment in teaching and learning in order to exhilarate and enhance students' response and encourage active learning in class. The objective of this project is to develop a new edutainment board game that integrate the knowledge of Town and Regional Planning and to create active learning among students.

## 4. METHODOLOGY

Preliminary desktop research has been done to assess related information on the edutainment concept in teaching and learning. A questionnaire survey has also been conducted to gather the experiences of first-year diploma in Town and Regional Planning student in regard to teaching and learning sessions. The findings from these research and survey have been used to formulate the best possible innovative approach known as the Urbanise Mokshapat Edutainment (U.M.E) to encourage the student's understanding and enhance collaboration among students.

## 5. NOVELTY & BENEFITS

These kind of board games are widely being used in primary schools teaching and learning, but none has been applied at the university level specifically in Town and Regional Planning education field. This kind of edutainment will be able to attract student's attention especially in theory-based subjects and it may also benefit the first-year students that are still fresh and new to the programme. Furthermore, instead of focusing on technology-based game where students use their mobile phones or laptops to play the game, U.M.E. utilises the traditional game which is the board and dice. U.M.E is expected to encourage students to enjoy the game, mingle with their friends, and where at the same time, active learning takes place.

## 6. CONCLUSION

The emergence of the new millennial generations requires that teaching and learning environment to be designed according to the mold and needs of today's students so that the goal of developing the current generation can be well implemented. Educators must be committed and more responsive to the current fast-paced world of education. The world demands the educators to be able to transform the education environment from the classical, traditional approaches into the most sophisticated ways in teaching and learning in preparing students to adapt to their future careers. In addition, educators must always prepare themselves for the 21st Century teaching and learning approaches as it is crucial and essential for the development of our future generation.

## REFERENCES

- 1 Korth, Byran & Erickson, Lynnette & Hall-Kenyon, Kendra. (2009). Defining teacher educator through the eyes of classroom teachers. *The Professional Educator*. 33. 1-12.
- 2 Sequeira A. H. (2012) Introduction to Concepts of Teaching and Learning, SSRH.
- 3 Augustyn, A. (2020), Monopoly Board Game. Encyclopaedia Britannica, Inc.
- 4 Bhaktivedanta, (2015). Mokshapath: The Hindu Origin of Snakes and Ladders. IndiaDivine.org.
- 5 Nachiappan, S., Rahman, N., Andy, H. & Zulkafly, F. (2014). Snake and Ladder Games in Cognition Development on Students with Learning Difficulties. Retrieve from [http://rah-net.com/journals/rah/Vol\\_3\\_No\\_2\\_June\\_2014](http://rah-net.com/journals/rah/Vol_3_No_2_June_2014)
- 6 McNeil, H. (March 2018). Gen Z learning tendencies: A call for next-gen learning platforms. Training. Retrieved from <https://trainingmag.com/gen-z-learning-tendencies-call-next-gen-learning-platforms/>
- 7 Sparks & Honey. (August 2017). Gen Z 2025: The final generation. Sparks & Honey Management Consulting, NY, NY. Retrieved from <https://reports.sparksandhoney.com/campaign/generation-z-2025-the-final-generation>



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Kelulusan daripada pihak YBhg. Profesor dalam perkara ini amat dihargai.

Sekian, terima kasih.

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