



INSIGHT JOURNAL

UNIVERSITI TEKNOLOGI MARA CAWANGAN JOHOR

**International, Refereed, Open Access,
Online Journal**

Volume 4 2019

eISSN : 2600-8564

Indexed in MyJurnal MCC

INSIGHT JOURNAL (IJ)

UiTM Cawangan Johor Online Journal Vol. 4: 2019

eISSN :2600-8564

Published by UiTM Cawangan Johor

insightjournal.my

Siti Farrah Shahwir

Siti Nuur-Ila Mat Kamal

Suhaila Osman

Zuraidah Sumery

About

INSIGHT Journal is an online, open access, international refereed research journal established by Universiti Teknologi MARA Cawangan Johor, Malaysia. It is indexed in MyJurnal MCC.

INSIGHT Journal focuses on social science and humanities research. The main aim of INSIGHT Journal is to provide an intellectual forum for the publication and dissemination of original work that contributes to the understanding of the main and related disciplines of the following areas: Accounting, Business Management, Law, Information Management, Administrative Science and Policy Studies, Language Studies, Islamic Studies and Education.

Editorial Board Editors

Associate Professor Dr. Saunah Zainon
(Editor-in-Chief)

Dr. Noriah Ismail

Associate Professor Dr. Raja Adzrin Raja Ahmad

Associate Professor Dr. Carolyn Soo Kum Yoke

Associate Professor Dr Mohd Halim Kadri

Associate Professor Dr. Intan Safinas Mohd Ariff
Albakri

Dr. Noor Sufiawati Khairani

Dr. Akmal Aini Othman

Dr Norashikin Ismail

Dr Syahrul Ahmar Ahmad

Dr. Faridah Najuna Misman

Associate Editors

Aidarohani Samsudin

Deepak Ratan Singh

Derwina Daud

Dia Widyawati Amat

Diana Mazan

Fairuz Husna Mohd Yusof

Fazdilah Md Kassim

Haryati Ahmad

Ida Suriya Ismail

Isma Ishak

Nazhatulshima Nolan

Norintan binti Wahab

Nurul Azlin Mohd Azmi

Puteri Nurhidayah Kamaludin

Rafiaah Abu

Rohani Jangga

Rosnani Mohd Salleh

Sharazad Haris

Editorial Review Board

Associate Professor Dr. Ahmad Naqiyuddin Bakar
Rector
Universiti Teknologi MARA Cawangan Johor,
Malaysia

Professor Dr. Kevin Mattinson
Associate Dean and Head of School of Education
and Social Work
Birmingham City University, United Kingdom

Associate Professor Dr. Steve Mann
Centre of Applied Linguistics
University of Warwick, United Kingdom

Assistant Professor Dr. Ilhan Karasubasi
Italiano Language and Literature Department
Rectorat's Coordinator for International Relations
Ankara University, Turkey

Dr. Adriana Martinez Arias
Director of International Relations,
Universidad Autonoma de Bucaramanga
Colombia.

Dr. Mahbood Ullah
Pro-Chancellor
Al Taqwa University Nangarhar Afghanistan

Professor Dr. Supyan Hussin
Director of ATMA
Universiti Kebangsaan Malaysia, Malaysia

Dr. Nuri Wulandari
Indonesia Banking School
Jakarta Indonesia

Associate Professor Dr. Norsuhaily Abu Bakar
Universiti Sultan Zainal Abidin Terengganu,
Malaysia

Mohammad Ismail Stanikzai
Assistant Professor
Laghman University, Afghanistan

Dr. Istianingsih, Ak, CA, CSRA, CMA, CACP
Indonesia Banking School
Jakarta Indonesia

Dr. Ira Geraldina
Indonesia Banking School
Jakarta Indonesia

Associate Professor Dr. Hj Amanuddin
Shamsuddin
Universiti Tenaga Nasional
Malaysia

Dr. Ahmad Fawwaz Mohd Nasarudin
Assistant Professor
International Islamic University Malaysia

Dr. Surachman Surjaatmadja
Indonesia Banking School
Jakarta Indonesia

Dr. Mahyarni SE, MM
Lecturer of Mangement in Economic Faculty
Universitas Islam Negeri Sultan Syarif Kasim
Riau, Indonesia

Dr. Angeline Ranjethamoney Vijayarajoo
Lecturer
Universiti Teknologi MARA Cawangan Negeri
Sembilan, Malaysia

Dr. Eley Suzana Kasim
Lecturer
Universiti Teknologi MARA Cawangan Negeri
Sembilan, Malaysia

Dr Aida Hazlin Ismail
Senior Lecturer
Universiti Teknologi Mara
Kampus Puncak Alam Selangor

Zulaiha Ahmad
Universiti Teknologi MARA Cawangan Perlis
Malaysia

Tuan Sarifah Aini Syed Ahmad
Universiti Teknologi MARA Cawangan Negeri
Sembilan, Malaysia

Associate Professor Dr. Norsuhaily Abu Bakar
Universiti Sultan Zainal Abidin Terengganu
Malaysia

Dr. Zainuddin Ibrahim
Universiti Teknologi MARA
Malaysia

Ekmil Krisnawati Erlen Joni
Universiti Teknologi Mara Cawangan Melaka
Malaysia

Hazliza Harun
Universiti Teknologi Mara Cawangan Perak
Malaysia

Zanariah Abdul Rahman
Universiti Teknologi MARA
Malaysia

Zarina Abdul Munir
Universiti Teknologi MARA
Malaysia

Dr. Nor Azrina Mohd Yusof
Universiti Teknologi MARA Cawangan Kedah
Malaysia

Dr. Azizah Daut
UiTM Cawangan Johor
Kampus Pasir Gudang
Malaysia

Dr. Nurul Nadia Abd Aziz
Universiti Teknologi MARA Cawangan Kedah
Malaysia

Dr. Noraizah Abu Bakar
UiTM Cawangan Johor
Kampus Segamat,
Malaysia

Liziana Kamarul Zaman
Universiti Teknologi MARA Cawangan Kelantan
Malaysia

Siti Aishah Taib
UiTM Cawangan Johor
Kampus Pasir Gudang
Malaysia

Dr. Mazlina Mamat
Universiti Teknologi MARA Cawangan Kedah
Malaysia

Siti Masnah Saringat
Universiti Teknologi MARA Cawangan Johor
Kampus Segamat
Malaysia

Reprints and permissions

All research articles published in INSIGHT Journal are made available and publicly accessible via the Internet without any restrictions or payment to be made by the user. PDF versions of all research articles are available freely for download by any reader who intent to download it.

Disclaimer

The authors, editors, and publisher will not accept any legal responsibility for any errors or omissions that may have been made in this publication. The publisher makes no warranty, express or implied, with respect to the material contained herein.

TABLE OF CONTENTS

Paper Title	Page
Factors that Influenced Libyan Teachers' Decisions in Selecting Materials for EFL Reading Classroom	1
Determinants of Savings in Malaysia	12
Influence of Social Media on Consumers' Food Choices	21
Students' Opinion on a Language Game: A Preliminary Study on MonoEnglish	35
Analysis of Public Administrative Reforms: A Case in Afghanistan	46
Market Orientation and Brand Performance in Small and Medium Enterprises (SMES) in Malaysia Context	58
CDIO Implementation in Fluid Mechanics at UiTM Sarawak: Student Centered Learning	71
Critical Factors Influencing Decision to Adopt Digital Forensic by Malaysian Law Enforcement Agencies: A Review of PRISMA	78
Sustainable Solid Waste Management from the Perspective of Strong Regulation	94
Tourists' Tourism Experiences and Their Revisit Intentions to Skyrides Festivals Park, Putrajaya	109
An Evaluation of Learners' Level of Satisfaction using MOOC: Satisfied or Unsatisfied?	117
Carbon Dioxide Emission and Developing Countries: A Dynamic Panel Data Analysis	128
Factors Affecting Customers' Online Purchasing Behaviour: The Mediating Role of Purchase Intention	143
A Study on Precautionary Steps in Purchasing Goods Online	156
Gamification Intervention in Teaching and Learning Accounting: ComAcc Card	166
Factors Contributing to Mathematics Performance of UiTM Johor Students	175
Exploring Factors Affecting Public Acceptance Towards Tax Reform in Malaysia	194
The Relationship between Background Music and Customers' Emotion towards Duration of Stay in Restaurants	211
Organizational Justice, Organizational Reputation and Self-esteem in Improving Employability in Malaysia	220

Gamification Intervention in Teaching and Learning Accounting: ComAcc Card

¹Nur Syafiqah Hussin, ²Naqiah Awang and ³Nurul Afzan Najid

**¹Faculty of Accountancy,
Universiti Teknologi MARA Pahang,
Kampus Raub, Pahang, Malaysia
*syafiqah89@uitm.edu.my***

**²Faculty of Accountancy,
Universiti Teknologi MARA Pahang,
Kampus Raub, Pahang, Malaysia
*naqiah0026@uitm.edu.my***

**³Faculty of Accountancy,
Universiti Teknologi MARA Pahang,
Kampus Raub, Pahang, Malaysia
*nurulafzan@uitm.edu.my***

Abstract

Gamification is expected to make students hooked by the idea of the game and make them engaged in the game's idea and activity, which eventually allows for the possibility of learning process. The features of the game encourage curiosity and exploration to enhance engagement and improve content comprehension. Eventually, students will be rewarded with knowledge and skills that the game offered. The game called as ComAcc Card was triggered by the importance of students to be able to understand the components in financial statements. Failure to do so will affect the process of preparation of financial statements which is part of the course requirements. The game is expected to encourage positive student attitudes in the learning process and strengthen the students' ability to classify items according to its components in accounting. Thus, the paper presents a simple method of accounting card game introduced to the non-accounting students, and it discusses students' perception towards the use of gamification in teaching and learning process.

Keywords: *Accounting, Gamification, Teaching and learning*

1. Introduction

Regardless whether university's performance is measured by research or teaching quality metrics, one cannot deny the fact that universities do hold a responsibility as a place of knowledge transfer between lecturers and students since it is fundamentally seen as a place of learning. Lecturers hold a freedom in ensuring the process of knowledge transfer is executed and for that Farhad (1995) has put the position of lecturers in universities and other educational institutions as a manager. Like a manager, lecturers are expected to utilise resources made available to them to fulfil their responsibilities of delivering knowledge or skills to students (Farhad, 1995).

Along with the evolution of information technology (IT) in education, the use of gamification in the process of knowledge transfer in higher education has been widely discussed. In fact, the use of gamification in the classroom has been promoted by the government of Malaysia as it is believed to be more interesting, interactive and engaging for students (Kamil, 2016).

Previous scholars were continuously studying the linkage between the teaching evolutions with the learner's digital native profile, learner's learning styles and modern pedagogical methods (Kiryakova, Angelova & Yordanova, 2014). Hitchens and Tulloch (2018) stated that students nowadays are so used with mediated platforms, such as video games and online environment, in their formative years that it affects their learning style in the classroom. This has challenged lecturers to use other approaches besides the traditional method in executing the knowledge transfer that suit the students' current needs and preferences.

Having the power in managing resources made available by the university (Farhad, 1995) and taking a consideration of teaching and learning evolution in the current education environment have triggered the development of an accounting game called ComAcc Card. It is a teaching aid to encourage students' engagement during the execution of knowledge transfer or for students to get familiar with the terms in the teaching and learning process. It is customly made for an accounting subject. It was designed to help the non-accounting students to get familiar with the accounting terms as an early introduction for the students to prepare financial statements.

In Universiti Teknologi MARA (UiTM), an accounting subject is offered to the non-accounting students under the code ACC106 Introduction to Financial Accounting. As it is not a core subject but compulsory to certain faculties, the use of gamification is expected to encourage positive students' attitudes in the learning and teaching process rather than solely relying on the traditional method. Thus, this paper presents a simple method of accounting card game introduced to the non-accounting students. It also provides students' perceptions towards the use of gamification in the teaching and learning process.

2. Literature Review

2.1. Learning Style

Students come from diverse degree of motivation, commitment, ability, and learning styles or approaches (Kirkland & O'Riordan, 2008). Therefore, educational practitioners need to find alternatives for the teaching and learning process so that it can be delivered effectively. Educators have to reconsider traditional, uniform instruction methods and stress the importance of considering student learning styles in the design and delivery of course content. Studies showed that learning styles may be defined in multiple ways, depending upon one's perspective.

Brown (2000) defines learning styles as the manner in which individuals perceive and process information in learning situations. He argues that learning style preference is one aspect of learning style, and refers to the choice of one learning situation or condition over another. Celce-Murcia (2001) defines learning styles as the general approaches, for example, global or analytic, auditory or visual, that students use in acquiring a new language or in learning any other subject. Learning style is sometimes defined as the characteristic cognitive, affective, social, and physiological behaviors that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment (MacKeracher, 2004).

A benchmark definition of learning styles is characteristic cognitive, effective and psychosocial behaviours that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment (Curry, 1983). Learning styles are considered by many to be one factor of success in higher education but until now there is no single commonly accepted method exists, but alternatively several potential scales and classifications are in use. Most of these scales and classifications are more similar than dissimilar and focus on environmental preferences, sensory modalities, personality types, and/or cognitive styles. One

of the most important uses of learning styles is that it makes it easy for teachers to incorporate them into their teaching (Gilakjani, 2011).

The VARK questionnaire which was developed by Neil D. Flaming in 1995 uses four common modes for learner's information exchange which are visual (V), auditory (A), read / write (R) and kinaesthetic (K) learners (Brozik & Zapalska, 2006). Visual learners take in information better via colours and layout as they think in pictures and learn best in visual images. They depend on the instructor's or facilitator's non-verbal cues such as body language to help with the understanding. Sometimes, visual learners favour sitting in front of the classroom. They also take descriptive notes over the materials being presented (LdPride, 2009).

Auditory learners discover information through listening and interpreting information by the means of pitch, emphasis and speed. These individuals gain knowledge from reading out loud in the classroom and may not have a full understanding of information that is written (LdPride, 2009). The third type of learners of read/write prefer information to be printed in order for them to receive the information. Learners enjoy the lecture notes and repetitively write out the information for better understanding (Brozik & Zapalska, 2006). Whereby, kinaesthetic learners learn best with an active "hands-on" approach. These learners favour interaction with the physical world. Most of the time kinaesthetic learners have a difficult time staying on target and can become unfocused effortlessly (LdPride, 2009).

2.2. The Effectiveness of Gamification in Education

Nowadays, educational system has evolved in line with changes in lifestyle. This reformation gives challenges to academicians in educating young generations to retain their attention in classroom, enhance their motivation and involvement, and at the same time providing them with fun learning experience (Zamora & Aranda, 2017). Students demand for more attractive, interesting and engaging learning medium through electronic devices, online learning and educational games. According to Maroney (2001) games is a form of play with determined objectives and structures that provide attractive and active activities which at the same time develop problem solving skills. In this new era, new term has been used that applies games structure in non-game setting called gamification (Urh, Vukovic & Jereb, 2015).

Various studies conducted in different settings have proven the effectiveness of gamification in education system. Mackey, Park, Robinson and Gabrieli (2017) who conducted a research on fifth-grade students at a charter school discovered that students' score results improved significantly after intervention of board games in the classroom. The result also revealed lower performing students gain more benefits through gamification compared to performing students. This is due to the nature of games that permit players to make mistake, learn from their mistakes and recover their mistakes by restarting the game again. A paper reviewed by De Aguilera and Mendiz (2003) on video games and education has concluded that several features of the games make it one of the most interesting teaching and learning tools. Besides encouraging book reading related to the game, it also allows wide social interaction with the surrounding players and keep the students engaged in an active activities without feeling pressured. Therefore, it stimulates students' motivation and train students to think critically and fast.

Another study by Garneli, Giannakos and Chorianopoulos (2017) suggested that games should be counted in as a pedagogical tool in engaging students in teaching and learning process. They performed a study on eighty 13-years-old students in the first grade of middle school. Their findings disclosed that students react differently towards learning through games as compared to traditional paper-based method. Students were more motivated and excited to start the game and willing to take part in the learning session which showed how

gamification can attract students' attention and keep them engage during teaching and learning process. This findings was supported by Arnold (2014) who said that gamification stimulates the mood by creating fun learning activities. He also proposed that games could help students in promoting critical thinking by applying game-like simulation through incorporation of real world situation in the game structure.

Based on previous literature, it showed that gamification is an attractive and effective medium in teaching and learning process during this century. However, educational games should be structured accordingly to meet established learning objectives with appropriate instruction, tasks, activities and operation besides suitable environment that would play a vital role in determining the effectiveness of gamification in education.

3. Methodology

3.1. The Concept of the Game: ComAcc Card

ComAcc Card features both entertaining and educational values which capture students' attention and stimulate their motivation in the learning process through gamification, and encouraging the ability of strategizing to win the game. Multiple teaching methods are incorporated in the concept of the game especially to visual and kinaesthetic learners as the game involves visual images and accounting stimulations. Auditory and read/write learners might need further explanation upon the completion of the game but early introduction of accounting terms during traditional method could help those learners.

Cards in the game consist of two types of cards which are Question & Answer (Q&A) card and Special Card. Each Q&A card consists of two parts, a question and an answer. The questions might be presented in various way including scrabble, incomplete word, picture, business transaction and definition of an item to enhance player's ability to be creative in looking for the correct answer.



Figure 1: The Q & A Cards for ComAcc

To encourage the strategizing ability among players, the game provides several special cards that can be utilised whenever a player has no Q&A card to answer a question.



Figure 2: The Special Cards for ComAcc

There are three special cards that can be used as follows:

Table 1: Function of the Special Cards

Name Of Special Card	Meaning Of The Card
Stop Card	The next player will miss a turn and the game proceeds with the following player.
Reverse Card	The turn to play will immediately reverse back to the previous player and will resume according to the normal rule.
Immunity Card	Immunity card provides answer for all accounting components (asset, liability, revenue, expenses, drawing and capital).

The game needs at least a facilitator with minimum basic knowledge in accounting to ensure correctness of accounting component and classification. Minimum number of player is 2, but no maximum number is required. However, for easy monitoring purposes, it is recommended to have only 3-4 players at one time. Before the game starts, each player should receive 5 cards distributed randomly by the facilitator.

To start the game, take a card from undistributed card collection as the starting point. The card must be a Q&A card, not immunity or special card. Then the first player should answer the question from the first card using any of the 5 cards received before the game started. However, in any event that the players do not have the card with the correct answer, an extra card should be pulled out from the undistributed card until they find the card with the correct answer or utilise any special card. Subsequently, the second player will answer to the first player's answer card and this will continue until all players finish their cards. In answering a question, a player can pull out more than 1 card with similar answer. Where the question appears to be a business transaction, players need to justify their answers upon pulling out the answer card. In case when a special card is being used to answer a question, the player needs to put another card as a question for the next player to answer.

In case of any player wrongly answers a given question, he or she will be punished by taking an extra one card from the undistributed cards. The last card hold by the player must be a Q&A card, not an immunity or a special card. The player who first finishes his or her cards will be the winner of this game. Therefore, players should strategize their steps in playing to be the winner and at the same time applying the accounting knowledge in winning the game.

3.2. Instrument

In evaluating the students' perceptions towards the use of gamification in the process of teaching and learning, questionnaires were distributed and thereafter a brief interview was conducted pertaining to their experiences playing the game. A total of 105 respondents who were studying in Universiti Teknologi MARA Pahang, Kampus Raub participated in this study. The questionnaire consists of the demography, students' perceptions towards the course ACC106, and their perceptions towards the game (ComAcc Card) in terms of attention, relevance, confidence and satisfaction. A 5 point Likert Scale was used in this study ranging from strongly agree to strongly disagree.

The data collected through questionnaire were analysed using Statistical Package for Social Sciences (SPSS) with analysis involving mean value score. This study looked at four factors of students' perceptions towards the use of gamification in the teaching and learning process and each factor has its own measurements.

4. Results and Discussion

The results from the survey of 105 respondents of which 28% were males and the remaining were females are discussed below. For the first factor of attention, which is the learners' response to perceived instructional stimuli of the ComAcc Card, most of the students agree that the ComAcc Card does grab their attention to learn more about accounting based on the results below:

Table 2: Mean Score for the Measurement of Attention

1. ATTENTION	Mean
A_Q1: There was something interesting at the beginning of the game that attracts my attention.	4.27
A_Q2: The design of the game is eye-catching.	4.21
A_Q3: The concept of the game helped to hold my attention.	4.40
A_Q4: I enjoyed the game so much that I would like to know more about this topic.	4.38
A_Q5: I really enjoyed learning using the game.	4.48
A_Q6: I could relate the content of the game to things I have learned previously.	4.54

The second factor of relevance is the ability of ComAcc Card to help learners to associate their prior learning experiences with the given instruction in the gamification. It shows that gamification strengthens the understanding of the students towards the knowledge they have learned in the classroom based on the following results:

Table 3: Mean Score for the Measurement of Relevance

2. RELEVANCE	Mean
R_Q1: It is clear to me how the content of the game is related to things I have learned.	4.37
R_Q2: I believe the game helped me to understand the subject matterd	4.38

The third factor of students' perception towards the effectiveness of gamification in teaching and learning is confidence which reflects on learners' positive expectation towards their performance in their learning task. Based on the survey, the following results were obtained:

Table 4: Mean Score for the Measurement of Confidence

3. CONFIDENCE	Mean
C_Q1: The game has so much information that is was hard to pick out and remember the important points.	3.06
C_Q2: The game is so general that is was hard to keep my attention on it.	2.65

The last factor of students' perception towards the effectiveness of gamification in teaching and learning is satisfaction which reflects on learners' experience upon the completion of the gamification.

Table 5: Mean Score for the Measurement of Satisfaction

4. SATISFACTION	Mean
S_Q1: It felt good to successfully complete the game.	4.48
S_Q2: The game should be used in the classroom for this subject.	4.13

Based on the findings discussed above, students do find that ComAcc Card could grab their attention to be part of the process based on the features offered by the game and enhance their prior understanding pertaining to the subject matter. However, the confidence level of students towards the game is not too high perhaps due to the excessive element covered in the Q&A cards. Despite that, students are satisfied with the ComAcc Card and think that it should be adopted in the teaching and learning process. In addition, the current version of ComAcc Cards has excluded a few parts in the Q&A cards which are referred toas '*Accounting Adjustment*'.

The findings in this study are in line with Kiryakova et al. (2014) and Hitchens and Tulloch (2018) who found that gamification helps to address the problem of motivating the students to perform crucial task in the classroom such as participation during class discussion. The ComAcc Card would require explanation from players upon pulling out their card; therefore, it will indirectly make other players counter their explanation in resolving any question and enable the lecturer, being the instructor in the process, to elaborate further on some particular topics (Moncada & Moncada, 2014).

Moncada and Moncada (2014) stated that among the characteristics of well-designed gamification activities are pre-requisite knowledge or skills for the activity, a pleasing colour scheme and immediate feedback. Since the use of ComAcc Card is used only to assist the teaching and learning process without eliminating the traditional method, students have been introduced with the accounting knowledge beforehand and thus, it could strengthen their understanding. Furthermore, through interview conducted after the learning experience, one of the respondents commented on the design of the ComAcc Card as catchy and they are

comfortable with its handy size. In relation to the immediate feedback, the ComAcc Card does have the traits, as any answer provided by the player will be discussed among the players and the wrong answer will cause them a penalty.

However, based on the interview conducted there are some students who are not comfortable with such engagement offered by gamification as they consider it to be non-formal, trivial or childish. This is in line with a study by Moncada and Moncada (2014) who also conducted a study in relation to the gamification in learning accounting subject. In their study, they found that students prefer the lecturer's explanation from exercises such as discussion on past years' examination questions. This is where the function of lecturer as manager, claimed by Farhad (1995) is to properly plan and coordinate the activity in the classroom to be balanced among various types of learners.

5. Conclusion

The goal of this game is to provide interactive opportunities to the students where they can actively take part in the learning process instead of only listening during the lectures. The concept of the game provides an opportunity for the students to have fun and at the same time hold a brief discussion in learning accounting subject. Not only limited to the accounting knowledge, the special function holds by the special card encourage the students' ability to strategize in winning the game as well as offers them a platform to have a discussion while playing the game. Hence, that would help the students to have a better comprehension pertaining to the accounting knowledge.

Based on the survey conducted, most of the students perceived that gamification does help to improve the teaching and learning process based on the factor of attention, relevance, confidence and satisfaction. However, the lecturer must not ignore the minority group of students that are not comfortable with the environment provided by gamification and not to forget the core purpose of teaching and learning goal.

There are a few limitations in using gamification as an additional tool in teaching and learning such as limited time during the lecture hours. As being stated, the traditional method is crucial to introduce students on the accounting knowledge first, and time needed for the gamification to be held in classroom could drag the lecture plan. Thus, there are few respondents who prefer the ComAcc Card to be digitalised so that they can spend time with the game during their leisure time but this could limit the possibility of having discussion while playing the game.

6. References

- Arnold, B. J. (2014). Gamification in Education. In (1 ed., Vol. 21, pp. 32-39). San Diego: American Society of Business and Behavioral Sciences.
- Brown, H. D. (2000). *Principles of Language Teaching and Learning*. White Plains, New York: Longman.
- Brozik, D., & Zapalska, A. (2006). Learning styles and online education. *Campus-Wide Information Systems*, 23(5), 325-335. doi:10.1108/10650740610714080
- Celce-Murcia, M. (2001). *Teaching English as a Second or Foreign Language* (3rd ed.). New York: Dewey Publishing Services.
- Curry, L. (1983). Learning Styles in Continuing Medical Education. *Canadian Med Asso J*. 1981;124:535-6.
- Farhad, A. (1995). Teachers as managers: an exploration into teaching styles. *International Journal of Educational Management*, 9(5), 16-19. doi:10.1108/09513549510095077

- Garneli, V., Giannakos, M., & Chorianopoulos, K. (2017). Serious games as a malleable learning medium: The effects of narrative, gameplay, and making on students' performance and attitudes. *British Journal of Educational Technology*, 48(3), 842-859.
- Gilakjani, A. P. (2011). Visual, auditory, kinaesthetic learning styles and their impacts on English language teaching. *Journal of Studies in Education*, 2(1), 104-113.
- Hitchens, M., & Tulloch, R. (2018). A gamification design for the classroom. *Interactive Technology and Smart Education*, 15(1), 28-45. doi:10.1108/ITSE-05-2017-0028
- Kamil, Y. A. (2016). Government moots flexi system for higher education. *The Star*. Retrieved from <https://www.thestar.com.my/news/nation/2016/01/19/govt-moots-flexi-system-for-higher-education/#7tXYz3DkbOCijV0y.99>.
- Kirkland, D., & O'Riordan, F. (2008). *Games as an engaging teaching and learning technique: Learning or playing*. Paper presented at the 1st Irish Conference on Engaging Pedagogies, Dublin, Ireland.
- Kiryakova, G., Angelova, N., & Yordanova, L. (2014). *Gamification in education*. Paper presented at the 9th International Balkan Education and Science Conference.
- LdPride, n. d. (2009). *What are learning styles?* Retrieved from <http://www.ldpride.net/learningstyles.MI.htm>.
- MacKeracher, D. (2004). *Making sense of adult learning*. Canada: University of Toronto Press.
- Mackey, A. P., Park, A. T., Robinson, S. T., & Gabrieli, J. D. (2017). A Pilot Study of Classroom-Based Cognitive Skill Instruction: Effects on Cognition and Academic Performance. *Mind, Brain, and Education*, 11(2), 85-95.
- Maroney, K. (2001). My entire waking life. *The games journal*, 5.
- Moncada, S. M., & Moncada, T. P. (2014). Gamification of learning in accounting education. *Journal of Higher Education Theory and Practice*, 14(3), 9.
- Urh, M., Vukovic, G., & Jereb, E. (2015). The model for introduction of gamification into e-learning in higher education. *Procedia-Social and Behavioral Sciences*, 197, 388-397.
- Zamora, J. C. F., & Aranda, D. A. (2017). Implementation of a Gamification Platform in a Master Degree (Master in Economics). *Working Papers on Operations Management*, 8, 181.



INSIGHT JOURNAL

UNIVERSITI TEKNOLOGI MARA CAWANGAN JOHOR

**International, Refereed, Open Access,
Online Journal**

Volume 4, 2019

eISSN : 2600-8564