



UNIVERSITI
TEKNOLOGI
MARA



Public Interest Centre
of Excellence

International Teaching Aid Competition 2023

Reconnoitering Innovative Ideas in Postnormal Times

iTAC

2023

iTAC 2023
INTERNATIONAL TEACHING AID COMPETITION
E-PROCEEDINGS

Copyright © 2023 is held by the owner/authors(s). These papers are published in their original version without editing the content.

The views, opinions and technical recommendations expressed by the contributors are entirely their own and do not necessarily reflect the views of the editors, the Faculty or the University.

Copy Editors: *Syazliyat Ibrahim, Azni Syafena Andin Salamat, Berlian Nur Morat (Dr.), Najah Mokhtar, Noor 'Izzati Ahmad Shafiai, Muhamad Khairul Anuar Bin Zulkepli (Dr.)*

Cover Design : *Asrol Hasan*

Layout : *Nurina Anis Mohd Zamri*

eISBN : 978-967-2948-51-3

Published by : Universiti Teknologi MARA Cawangan Kedah,
08400 Merbok,
Kedah,
Malaysia.

Zahir Zulkernain, Mohamad Haszirul Mohd Hashim

- | | | |
|-----|---|-----|
| 63. | <p><i>ELECTROCHEMISTRY TOOLKIT</i></p> <p><i>Dani Asmadi Ibrahim , Amal Hayati Jamali, , Noor Fatihah Zulkepely, Mohd Muazzin Mohd Yasin</i></p> | 425 |
| 64. | <p><i>ENHANCING STUDENT MASTERY OF SUBJECT-VERB AGREEMENT (SVA) THROUGH SVnoes</i></p> <p><i>Nursyuhada Zakaria, Sharifah Amani Syed Abd Rahman, Nadzrah Sa'adan, Maisarah Noorezam, PM Dr Aminabibi Satanihpy @ Saidalvi</i></p> | 431 |
| 65. | <p><i>FLIPPED LEARNING IN SCIENCE EDUCATION: USING HORMONE IN ACTION (POULTRY EDITION) AS A LEARNING TOOL</i></p> <p><i>Khairunnisa binti Othman, Norlizayati Ramlan, Aishah Zarzali Shah, Ruslan Achok, Puteri Noor Safura Megat Mahmud, Dr. Eric Lim Teik Chung</i></p> | 436 |
| 66. | <p><i>E-COMIC: SAVING MONEY MADE FUN</i></p> <p><i>Aqilah Husna binti Shah Rullnizam, Muhammad Harrith Daniel bin Asrul Efandi, Muhammad Mirza Haziq bin Aidil, Nur Syamimi binti Mohd Musa, Noorain Mohd Nordin</i></p> | 444 |
| 67. | <p><i>UiTM STREET LAW: A DIGITAL TEACHING AND LEARNING PLATFORM</i></p> <p><i>Haswira Nor Mohamad Hashim, Noraiza Abdul Rahman, Fazlin Mohamed Zain, Anida Mahmood, Nor Akhmal Hasmin, Mazlina Mohamad Mangsor, Mohd Nazim Ganti Shaari</i></p> | 450 |
| 68. | <p><i>UNI-ABODES: HOUSE RENTAL APPS FOR UNIVERSITY STUDENTS</i></p> <p><i>Muhammad Ibrahim bin Faridon, Nur Faeizah binti Mohd Shafee, Nur Fareeha binti Zuharizam, Nor Azrin Shamira binti Noor Jamal, Munirah binti Mohamed</i></p> | 457 |
| 69. | <p><i>“GROCERY EMPIRE” Board Game</i></p> <p><i>Nur Syahirah Binti Saharudin, Nur Fifie Afiera Binti Mohammad Faizal, Fariha Binti Nasharudin, Masyitah Ellysa Binti Mazlan, Ahmad Syafiq Bin Abdul Wahid , Wan Nurhafizah Fatin Binti Wan Mohd Yasin, Dr. Juan Rizal Bin Sa'ari</i></p> | 464 |
| 70. | <p><i>PENGGUNAAN MOMENT KIT BOARD SEBAGAI ALAT BANTU MENGAJAR BAGI KURSUS SAINS KEJURUTERAAN DI POLITEKNIK</i></p> | 470 |

PREFACE

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

iTAC 2023 Committee
Special Interest Group, Public Interest Centre of Excellence (SIG PICE)
UiTM Kedah Branch
Malaysia

“GROCERY EMPIRE” Board Game

Nur Syahirah Binti Saharudin
Faculty of Business and Management,
Universiti Teknologi Mara, Kampus Bandaraya Melaka
2022819862@student.uitm.edu.my

Nur Fifie Afiera Binti Mohammad Faizal
Faculty of Business and Management,
Universiti Teknologi Mara, Kampus Bandaraya Melaka
2022830458@student.uitm.edu.my

Fariha Binti Nasharudin
Faculty of Business and Management,
Universiti Teknologi Mara, Kampus Bandaraya Melaka
2022643144@student.uitm.edu.my

Masyitah Ellysa Binti Mazlan
Faculty of Business and Management,
Universiti Teknologi Mara, Kampus Bandaraya Melaka
2022879986@student.uitm.edu.my

Ahmad Syafiq Bin Abdul Wahid
Faculty of Business and Management,
Universiti Teknologi Mara, Kampus Bandaraya Melaka
2022464366@student.uitm.edu.my

Wan Nurhafizah Fatin Binti Wan Mohd Yasin
Faculty of Business and Management,
Universiti Teknologi Mara, Kampus Bandaraya Melaka
2022828586@student.uitm.edu.my

Dr. Juan Rizal Bin Sa'ari
Faculty of Business and Management,
Universiti Teknologi Mara, Kampus Bandaraya Melaka

juanrizal@uitm.edu.my

ABSTRACT

Let us introduce our game innovation called “Grocery Empire”. This game brings the concept of spending in purchasing and managing groceries. The creation of this game happened to give fun to university students, besides the added new diverse features. This game is very suitable for people who want a new twist. The objective of this game is to teach students, enlightening them on the ways to manage their expenses on groceries and to develop essential life skills related to budgeting, financial responsibility and healthy eating habits. In addition, the knowledge gained from the board game can enhance the ability of an individual to manage their financial activities and thus contribute to the country's economic development. This game is created to solve students' problems of having limited financial resources, which makes it challenging to allocate sufficient funds for groceries while balancing other essential expenses. The difference between our board game and the rest of other board games out there is, we mainly focus on teaching the players on how to manage their expenses, specifically on grocery items to develop financial awareness on a daily basis. “Groceries Empire” includes strategy in choosing the cheapest grocery items and problem-solving components, encouraging players to consider financial decisions with choosing the most affordable stores to purchase grocery items cautiously. Students will also learn to differentiate between wants and needs. Our target market is university students, because they represent a crucial role in the market sector with distinct concerns. Our commercialization platforms include collaborating with grocery shops, food producers and even educational institutions which enable them to manage their groceries budget more effectively by providing incentives such as discounts or special deals, substituting the Chance Cards in Groceries Empire that offer exclusive savings or sales on grocery products to implement the game into their daily lives.

Keywords: game, students, groceries, financial

BACKGROUND

Grocery Empire is a board game based on the concept of grocery shopping, as this concept has never existed on the market before. Most of the board games are about real estate, however, Grocery Empire's concepts and features of this game are specifically based on real experience of students in managing their expenses on grocery shopping. The background of Grocery Empire can be rooted in the need to address the challenges and difficulties that students face when it comes to grocery shopping and managing their expenses effectively. Many students struggle with limited financial resources, lack of budgeting skills, impulsive buying tendencies, and a lack of knowledge about cost-saving strategies. These factors often result in financial stress and difficulties in maintaining a healthy lifestyle. Many students struggle with limited

financial resources and the rising cost of goods. The everyday experiences of students are infused into a board game to turn it into a delightful educational game. Overall, Grocery Empire aims to close a critical hole in managing money by presenting students with a fresh way to learn about budgeting and grocery shopping.

PROBLEM STATEMENT

Many students face challenges and difficulties when it comes to grocery shopping and managing their expenses effectively. This is due to limited financial resources. Students often have limited income, making it challenging to allocate sufficient funds for groceries while balancing other essential expenses, such as rent, utilities, and tuition fees. Secondly, many students lack proper budgeting skills and struggle to create a realistic budget for their grocery shopping. They may not know how to estimate their expenses, prioritize their spending, or track their financial activities effectively. Other than that, majority students may be prone to impulsive buying, especially when it comes up to food and groceries. They constantly make unplanned purchases, buy unnecessary items, or overspend without considering their budget limitations. Moreover, most of them lack knowledge about cost-saving strategies. Many students are unaware of cost-saving strategies when grocery shopping. They may not know how to compare prices, utilize coupons or discounts, or take advantage of sales and promotions, missing out on potential savings. Addressing these problems and providing support, guidance, and resources to students through the Grocery Empire game can help them develop effective grocery shopping habits, manage their expenses responsibly, and lead healthier and more financially sustainable lives.

OBJECTIVES

Grocery Empire teaches students how to effectively manage their grocery shopping expenses while developing essential life skills in budgeting, financial responsibility, and healthy eating habits. The game challenges players to allocate a limited budget wisely, prioritize expenses and make informed financial decisions. It provides practical experience in budget management, expense tracking, and understanding trade-offs. Besides that, the game exposes the players with cost-saving strategies like price comparison, coupon utilization and smart purchasing decisions to equip students with valuable skills for real-life situations. Not only just that, the game also promotes healthy eating, as the game rewards players for making nutritious choices, fostering an understanding of balanced nutrition and healthy lifestyles. Decision-making skills are developed through various grocery shopping scenarios, where students analyze options, evaluate and align choices with financial goals and nutritional needs. Grocery Empire empowers students to become savvy shoppers and responsible expense managers, providing an engaging learning experience that promotes financial literacy, healthy habits, and decision-making abilities. Ultimately, it prepares students for the challenges of managing expenses and contributing to economic development.

NOVELTY

Every product created must have its own uniqueness. The difference between our board game and other board games out there is that we mainly focus on teaching players how to manage their expenses, especially on groceries to develop financial awareness. Grocery Empire includes strategies in choosing the cheapest groceries and a problem-solving component, encouraging players to consider financial decisions by choosing the most affordable store to buy groceries and possible outcomes carefully right after they make a decision. This can improve players' decision-making skills and help them develop a deeper understanding of the consequences of financial choices. As we already know, there are other board games available in the market which only randomly place the game content provided but in Groceries Empire it provides game content that is very close to ourselves as a university student when playing with daily food items. This makes it easier for us to deepen and understand finances after playing. In addition, our board games have their own advantages and disadvantages after we make a choice in the purchase while playing. This can test the gamer's mind in making wise decisions that can change or determine the financial future. In addition, our financial board game also provides an immersive hands-on experience in grocery shopping that encourages players to actively engage with financial topics through games, unlike other resources for learning finance such as textbooks or online courses. This is especially effective in teaching younger individuals, especially university students, about personal finance, as it makes the learning process more interesting and memorable.

COMMERCIALIZATION POTENTIALS

When creating a board game, the possibility for commercialization is a crucial factor to consider. This is because it enables us to assess the competition and find unique selling factors for our board game. This knowledge may be used to create successful marketing tactics and boost our product's success as a whole. Our target market is students, with a particular emphasis on university students, because they represent a distinct market sector with distinct requirements and concerns. They frequently have little income, face educational and living expenses, and may be developing credit for the first time. We may address their individual issues and give applicable solutions by designing a board game tailored for their circumstance. We collaborate with grocery shops, food producers, and even educational institutions. By collaborating with local grocery stores, it enables students to manage their groceries and finances more effectively by providing incentives such as discounts or special deals. Collaboration with food businesses aims to substitute the Chance and Community Chest cards in Groceries Empire with designated cards that offer exclusive savings or sales on the products of grocery organizations. We additionally partner with educational institutions to integrate board games into their economics or business programmes. The game may be used to educate individuals such as financial literacy, investing and negotiating skills.

BENEFIT TO COMMUNITY

The benefit of the Grocery Empire to the community is firstly being able to enhance their financial literacy. This helps the players in their decision making for their financial future and be a catalyst to achieve a better financial outcome. This is because the Grocery Empire teaches the players on how to make strategic decision making where they learn on how to allocate their resources and manage risk. Secondly, the Grocery Empire helps in enhancing social skills. By interacting with other players, they could improve their skills in communication and negotiation whereby these skills are very valuable in the terms of personal and professional settings. Thirdly, by helping the players understand and manage their finances more effectively, this would help the players to reduce their financial stress and help them achieve financial stability in the long term. Overall, financial board games can provide a fun and engaging way to teach valuable financial skills and improve overall financial literacy. They can also have positive impacts on social skills, decision-making abilities, and financial well-being.

FEEDBACK FROM COMMUNITY

The extended abstract presents the findings of our research project on the effectiveness of the Grocery Empire game in promoting responsible grocery shopping habits among students. As part of our study, we actively sought feedback from the student community to understand their perspectives and experiences with the game. To gather community feedback, we conducted a series of surveys by allowing the university students who are our target community to take part in playing the Grocery Empire board game. Participants expressed both positive and negative opinions, allowing us to understand valuable insights into their engagement with the Grocery Empire game. The feedback from the participants we got was that students expressed a high level of engagement with the game, citing the interactive gameplay, challenges and rewards as motivating factors that kept them interested and encouraged them to learn. It was a positive feedback to the game Grocery Empire. As stated by the participants, this board game can benefit them as students because it can help students make smarter decisions for grocery purchases. It also includes quick and easy food alternatives such as instant noodles that save cost and time for someone who is a student. This is because their day is full of various activities. Additionally, some players believe that the game's user interface should be improved to improve the overall user experience, for example, by providing clearer instructions, more user-friendly controls, and better visual design. It's the negative feedback that gets to improve the board game for the better. From this feedback, the participants also put forward the idea that it would be better if every purchase of goods was accompanied by a purchase receipt so as not to confuse the player to remember every item purchased.

CONCLUSION AND REFLECTION

In conclusion, the development of the Grocery Empire board game successfully combines the principles of financial literacy and healthy eating, offering an engaging and interactive learning

experience for players. By focusing on meal planning, identifying healthy options, and making informed financial decisions, Grocery Empire equips students with essential skills for responsible grocery shopping. The positive feedback and engagement from students validate the game's effectiveness in promoting financial awareness, decision-making abilities, and overall well-being. With its unique approach and potential for commercialization, Grocery Empire has the opportunity to make a significant impact in educating and empowering individuals to become savvy grocery shoppers and effective managers of their expenses. Overall, Grocery Empire stands as a testament to innovation and collaboration, serving as a valuable resource for students and educational institutions alike. According to our research, board game strategies can be utilized to inspire students and get them ready to handle uncertainty, much like in real-world initiatives.

ACKNOWLEDGEMENTS

We would like to express our heartfelt gratitude to all the individuals who contributed to the development and success of the Grocery Empire Board Game. Their collective efforts and support were invaluable. Special thanks to our FIN533 subject lecturer, Associate Professor Dr. Maheran Binti Haji Katan and our group advisor, Dr. Juan Rizal Bin Sa'ari for their guidance and unwavering support throughout the project. We are profoundly grateful for their mentorship and their unwavering commitment to our team. The dedication and creativity of our team members, along with the valuable feedback from university students, played a vital role in shaping the final version of the game. We extend our sincere appreciation to all individuals involved for their significant contributions to the remarkable achievement of the Grocery Empire Board Game.

REFERENCES

- Hinebaugh, J. P. (2009). *A Board Game Education*. United States of America: Rowman & Littlefield education.
- Page, B. (2020, April 7). *GEORGE LUCAS EDUCATIONAL FOUNDATION*. Retrieved from Edutopia:<https://www.edutopia.org/article/10-free-financial-literacy-games-high-school-students/>



e-proceedings

International Teaching Aid
Competition 2023
Reconnoitering Innovative Ideas in Postnormal Times

iTAC **2023**

e ISBN 978-967-2948-51-3



9 789672 948513