i-SPiKE 2023

INTERNATIONAL EXHIBITION & SYMPOSIUM ON PRODUCTIVITY, INNOVATION, KNOWLEDGE & EDUCATION

"Optimizing Innovation in Knowledge, Education and Design"

EXTENDED ABSTRACT

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17.	PilgrimGuard Band: Pilgrimage Emergency Bracelet *Mohd Zulfahmi Bin Ashan, Debra Utih Anak Francis, Floria Ann Anak Dominic, Stephanie Pilem & Boyd Sun Fatt*	468-472
18.	Ecobloom *Annatasha Faythe Henry, Norfazierra Wara Binti Awang Latiff, Qurratu'Aini Binti Mohammad Ibrahim, Suhaiza Shazleen Binti Balamis & Mohd Arsy Ardy Mohd Hardy*	473-477
19.	Smart Bip Bottle *Ryliani Dahlya Binti Nawi, Waldina Fadila Binti Cabel, Nur'Ain Binti Muin, Nuraisyah Syahirah Binti Rody & Sairah Saien*	478-483
20.	AdaptCare *Nurul Zakiah binti Ramli, Enmmanuell Anak Ayang, Nurul Nazihah binti Asmad & Ahmad Fareez bin Yahya*	484-488
21.	Float-Flex *Ummi Syakirah Rosmini, Aini Nabihah Ahmadi, Nur Wafiqah Waki', Muhammad Farhan Azaham, Azmeer Hafizi Halimi, Nur Farahah Mohd Pauzi & Siti Azrina Adanan*	489-494
22.	SHOPFinder Application *Muhamad Atiq Fahim bin Buareng, Al Zikri bin Alkadzlie, Nurul Shafika Norkhatijah binti Abdul Rasit, Vassylysa Eirlys Paulus & Nurafiqah Mohamad Musa*	495-500
23.	Maya (Smart Mirror) *Dr. Vani A/P Tanggamani, Siti Fatimah Noor Binti Minhad, Nur Syazwani Binti Suhaimi, Dania Arisya Binti Isderis, Nor Hafizatul Madihah Binti Mohd Jaffar, Nurhuda Hanisah Binti Haizam & Puteri Fadlin Sakina Binti Megat Mahayudin*	501-505
24.	MudahTravel Mobile App *Carolena Mariana James, Nur Syuhadah binti Khir Juhari, Sharifah Aida Asyiqin binti Syed Anuar & Nurafiqah Mohamad Musa*	506-510
25.	E-Book "A Night in Gong Mountain" – A Tale on Environment and Space *Muhammad Azmeer Mohd Zahari, Juritah Misman & Nik Narimah Nik Abdullah*	511-514
26.	TLM On-the-Go: Online-Based Instructional Materials *Ellyza Ezlyn Blaise, Fazlinda Hamzah & Mohd Azlan Shah Sharifudin*	515-517
27.	PoemS: A Poem Sharing Application *Clarence Anak Laurence, Mohd Azlan Shah Sharifudin & Fazlinda Hamzah*	518-521
28.	Hair Extractor Comb *Noraini Binti Sa'ait, Agnes Anak Kanyan, Nur Liyana Binti Abdullah. Nur Balqis Amirah Binti Hamzah, Nur Ellyssa Azreen Binti Abdul Rahman, Siti Nasuha Nabilah Binti Mohamad Mokhaldin & Yusratul Wanie Binti Yusmandi*	522-526

Assalamualaikum warahmatullahi wabarakatuh,

First and foremost, I would like to express my gratitude to the organizing committee of i-Spike 2023 for their tremendous efforts in bringing this online competition a reality . I must extend my congratulations to the committee for successfully delivering on their promise to make i-Spike 2023 a meaningful event for academics worldwide.

The theme for this event, 'Optimizing Innovation in Knowledge, Education, and Design,' is both timely and highly relevant in today's world, especially at the tertiary level. Innovation plays a central role in our daily lives, offering new solutions for products, processes, and services By adopting a strategic approach to 'Optimizing Innovation in Knowledge, Education, and Design,' we have the potential to enhance support for learners and educators, while also expanding opportunities for learner engagement, interactivity, and access to education.

I am awed by the magnitude and multitude of participants in this competition. I am also confident that all the innovations presented have provided valuable insights into the significance of innovative and advanced teaching materials in promoting sustainable development for the betterment of teaching and learning. Hopefully, this will mark the beginning of a long series of i-Spike events in the future.

It is also my hope that you find i-Spike 2023 to be an excellent platform for learning, sharing, and collaboration. Once again, I want to thank all the committee members of i-Spike 2023 for their hard work in making this event a reality I would also like to extend my congratulations to all the winners, and I hope that each of you will successfully achieve your intended goals through your participation in this competition.

Professor Dr. Roshima Haji Said
RECTOR
UiTM KEDAH BRANCH

WELCOME MESSAGE (i-SPiKE 2023 CHAIR)

We are looking forward to welcoming you to the 3rd International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023). Your presence here is a clear, crystal-clear testimony to the importance you place on the research and innovation arena. The theme of this year's Innovation is "*Optimizing Innovation in Knowledge, Education, & Design*". We believe that the presentations by the distinguished innovators will contribute immensely to a deeper understanding of the current issues in relation to the theme.

i-SPiKE 2023 offers a platform for nurturing the next generation of innovators and fostering cutting-edge innovations at the crossroads of collaboration, creativity, and enthusiasm. We enthusiastically welcome junior and young inventors from schools and universities, as well as local and foreign academicians and industry professionals, to showcase their innovative products and engage in knowledge sharing. All submissions have been rigorously evaluated by expert juries comprising professionals from both industry and academia.

On behalf of the conference organisers, I would like to extend our sincere thanks for your participation, and we hope you enjoy the event. A special note of appreciation goes out to all the committee members of i-SPiKE 2023; your dedication and hard work are greatly appreciated.

Dr. Junaida Ismail
Chair
3rdInternational Exhibition & Symposium Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023)

TLM ON-THE-GO: ONLINE-BASED INSTRUCTIONAL MATERIALS

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ABSTRACT
Gamification has emerged as a highly favored learning strategy among students due to its ability to empower learners, create a more relaxed environment for dealing with failure, and provide tangible evidence of their learning progress. While gamification yields benefit for learners across various contexts, its advantages are particularly pronounced in educational settings. With that, TLM On-the-Go: Online-based Instructional Materials is created as an initiative that delivers additional teaching and learning materials to English as a Second Language (ESL) teachers. Interactive slides and online quizzes designed based on Malaysia's public school's English syllabus are included in the materials and they are expected to assist teachers in generating student engagement. Other than that, the e-educational materials' versatility allows the teachers to use them however they see fit and ultimately make their lesson plans more diverse. Teachers can use features such as point scoring, peer competition, team effort, score tables, immediate feedback, progress indicators, and social connection to generate engagement among students and help students to assimilate valuable learning and test their knowledge. TLM On-the-Go: Online-based Instructional Materials serves the needs of ESL teachers in Malaysia in terms of digital resources especially in online learning environment. This solution offers significant time-saving benefits for educators, as they no longer need to individually create quizzes aligned with their curriculum. Instead, a comprehensive collection of pre-designed quizzes and interactive slides are readily accessible, requiring only minimal investment to access tailored online quizzes that align precisely with their scheme of work. Overall, this innovative solution caters to the requirements of ESL instructors, providing them with the digital resources essential for effective online teaching and learning. By embracing gamification and leveraging the associated benefits, educators can enhance student engagement, promote active learning, and foster an enriched educational experience for their students.

Keywords: Game-based, online-based learning, interactive, ESL teachers, e-education

INTRODUCTION

Gamification, as defined by the Cambridge Dictionary, is the practice of making activities more like games to make them more interesting or enjoyable. Gamification is a popular learning strategy because it gives learners a sense of control over their studies. Learners are

less likely to feel burdened by failure since they can simply try again because gamification provides a more relaxed environment when it comes to failure. Learning also becomes visible for the learners through progress indicators, which makes learning more enjoyable. Tashmuradovna (2023) mentioned that gamification has the primary benefit of increasing motivation for learning through participation in the game process. Thus, increased motivation aids in coping with challenging situations, demonstrating endurance and purposefulness, and seeking effective problem-solving solutions. Therefore, teachers can use game-based features in their Teaching-Learning Material (TLM) to generate engagement among students, such as point scoring, peer competition, team effort, and score tables and this help students assimilate valuable learning and test their knowledge. Immediate feedback, progress indicators, and social connection are all examples of game elements. All these features served as excellent supplemental tools for teachers to use to encourage pupils and increase their interest in the subject. Therefore, with the concept of gamification in mind, TLM On-the-Go: Online-based Instructional Materials was established to aid teachers to vary their Teaching-Learning Material (TLM).

OBJECTIVES

TLM On-the-Go: Online-based Instructional Materials is an initiative that delivers additional TLMs to English secondary teachers. By utilizing Quizizz to create e-materials, interactive slides and online quizzes are included in the materials, which adhere to the Scheme of Work (SOW). The materials are expected to assist teachers in generating student engagement. Thus, the objectives are:

1. To normalize online-based teaching and learning materials in a classroom setting.
2. To integrate game-like elements into educational materials.

ENTREPRENEURIAL OPPORTUNITIES

TLM On-the-Go: Online-based Instructional Materials generates revenue by selling curated online teaching/learning materials (TLM) that adhere to the Scheme of Work (SOW). It is a project that offers services to secondary teachers who teach English subject to create additional educational materials for their lessons. By collaborating with the teachers to create the materials, specific topics that the teachers need for their lesson plans are created. The teachers will only need to invest a small amount of money to get access to the materials.

CONCLUSION

In conclusion, TLM On-the-Go: Online-based Instructional Materials project has proven to be a remarkable endeavour with significant benefits for both educators and learners alike. Through diligent efforts, an interactive and engaging platform that revolutionizes the way students assess their knowledge and deepen their understanding has been successfully created. One of the key advantages of this project is its ability to foster active learning. By incorporating elements of gamification, such as timed quizzes, leaderboards, and rewards, it has motivated students to actively participate in the learning process. This approach not only enhances their retention of information but also cultivates a sense of competition and fun, making the educational experience more enjoyable and immersive.

Furthermore, the project has also provided valuable benefits to educators. With our platform, teachers can effortlessly access custom quizzes aligned with their curriculum, saving precious time and effort in preparing assessments. Additionally, the system provides detailed analytics and insights into student performance, enabling educators to identify knowledge gaps and adjust their teaching strategies accordingly. In summary, the innovation project to create quizzes for students has successfully harnessed technology to revolutionize the learning process. By promoting active learning, personalization, and easing the burden of educators, our platform has demonstrated its potential to enhance student engagement, knowledge retention, and overall academic success. As we continue to refine and expand our project, we anticipate even greater educational outcomes and a lasting positive impact on students' learning journeys.

REFERENCES

Tashmuradovna, N. Y. (2023). Gamification in teaching a foreign language in a non-linguistic university. *International Journal of Education, Social Science & Humanities*, 11(2), 912–917.https://doi.org/10.5281/zenodo.7689661

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