



E-PROCEEDINGS

INTERNATIONAL TINKER INNOVATION & ENTREPRENEURSHIP CHALLENGE (i-TIEC 2025)

"Fostering a Culture of Innovation and Entrepreneurial Excellence"



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23 January 2025
PTDI, UiTM Cawangan Johor
Kampus Pasir Gudang

ORGANIZED BY:

Electrical Engineering Studies, College of Engineering
Universiti Teknologi MARA (UiTM) Cawangan Johor
Kampus Pasir Gudang

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PREFACE

It is with great pleasure that we present the e-proceedings of International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), which compiles the extended abstracts submitted to the International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), held on 23 January 2025 at **PTDI, Universiti Teknologi MARA (UiTM) Cawangan Johor, Kampus Pasir Gudang**. This publication serves as a valuable resource, showcasing the intellectual contributions on the invention and innovation among students, academics, researchers, and professionals.

The International Tinker Innovation & Entrepreneurship Challenge (i-TIEC 2025), organized under the theme "Fostering a Culture of Innovation and Entrepreneurial Excellence," is designed to inspire participants at various academic levels, from secondary students to higher education students and professionals. The competition emphasizes both innovation and entrepreneurship, encouraging the development of product prototypes that address real-world problems and have clear commercialization potential. By focusing on technological and social innovations, i-TIEC 2025 highlights the importance of turning creative ideas into viable, market-ready solutions that can benefit users and society. The extended abstracts in this e-proceedings book showcase the diverse perspectives and depth of research presented during the event, reflecting the strong entrepreneurial element at its core.

We extend our sincere gratitude to the contributors for their dedication in sharing their innovation and the organizing committee for their hard work in ensuring the success of the event and this publication. We also appreciate the support of our collaborators; Mass Rapid Transit Corporation Sdn. Bhd. (MRT Corp), Universitas Labuhanbatu, Indonesia (ULB), Universitas Riau Kepulauan, Indonesia (UNRIKA) and IEEE Young Professionals Malaysia, whose contributions have been instrumental in making this event and publication possible.

We hope that this e-proceedings book will serve as a valuable reference for researchers, educators, and practitioners, inspiring further studies and collaborations in both innovation and entrepreneurship. May the knowledge shared here continue to spark new ideas and market-ready solutions, advancing our collective expertise and fostering the growth of entrepreneurial ventures.

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B-SS064: THE STORYTELLER'S TOOLBOX: EMPOWERING CONFIDENCE IN LANGUAGE LEARNING

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ABSTRACT

Many Malaysians struggle with English proficiency due to public speaking anxiety and limited engagement in traditional classrooms, where the fear of judgement from peers and surroundings exacerbates their challenges. To address this, the Storyteller's Toolbox was developed as an innovative kit to enhance confidence and language proficiency through immersive storytelling. The kit integrates tactile tools, such as storyboards, AR-enabled situational images, facial expressions, and mirrors, with creative activities to promote active language use and emotional expression. By combining narrative-building with augmented reality (AR), the toolbox fosters imaginative and meaningful engagement with the language. The toolbox demonstrates strong market potential across education, corporate training, and home learning, offering versatile applications such as school curriculum, professional development, and customisable kits for specific age groups or cultural themes. A pilot study involving storytelling activities revealed its effectiveness, with participants reporting improved language proficiency and confidence with the mean score of 4.53. The Storyteller's Toolbox provides a scalable, sustainable solution for empowering language learners with its ability to boost employability, reduce public speaking anxiety, and promote confidence. It bridges the gap between language proficiency and confidence, making it a transformative tool in diverse learning and professional environments.

Keywords: Public Speaking Anxiety, Immersive Storytelling, Augmented Reality, Language Learning, Confidence Building

1. Product Description

The Storyteller's Toolbox is an innovative kit designed to enhance confidence and language proficiency among learners through immersive storytelling. The kit includes an instruction card, a digital drawing pad, blank storyboard cards, a marker pen, AR-enabled situational pictures, facial expression cards, and a mirror, offering a comprehensive set of tools for interactive engagement. By blending physical tools with augmented reality (AR), it encourages learners to create and visualise stories, explore emotions, and practice language fluency in a supportive setting. Figure 1 illustrates the process of storytelling in empowering confidence in language learning by using the toolbox, scaffolding learners' creativity by guiding them to construct narratives and experiment with various expressions and scenarios for storytelling. Once their storylines are planned, learners record their storytelling

performances and share them on digital platforms, further enhancing their confidence in public speaking and language use. Through its tactile and visual aids, the toolbox bridges the gap between language skills and self-assurance, making language learning both engaging and effective. By integrating narrative-building with innovative tools, the Storyteller's Toolbox provides a unique solution to help learners practice and master the language creatively.

2. Storytelling Process and Its Usefulness

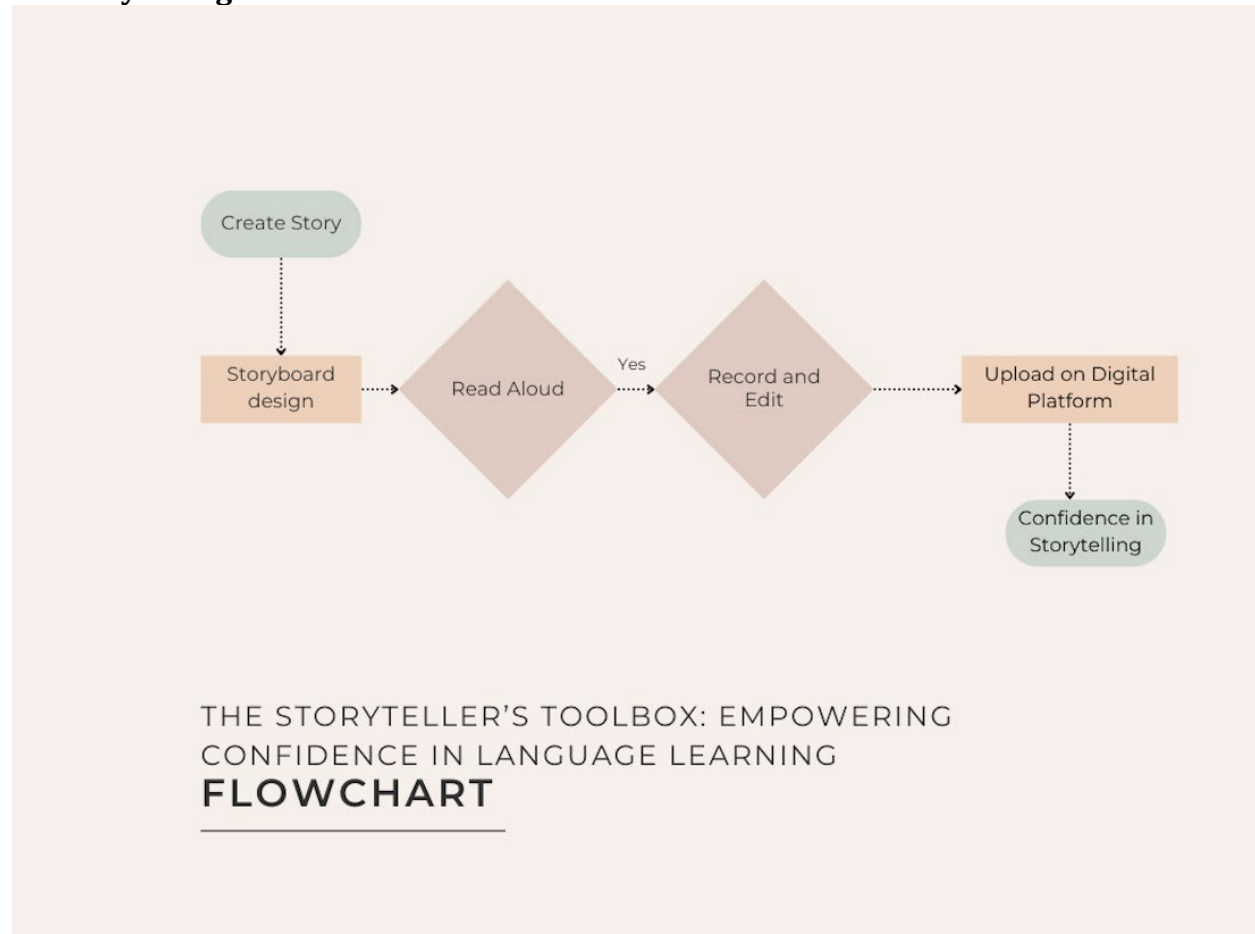


Figure 1. Process of storytelling in empowering confidence in language learning

Table 1. Students' Perception of the Usefulness of Storytelling to Improve Language Learning

Item No.	Items	Mean
2	Storytelling is useful in learning language.	4.58
5	The more I do storytelling, the more I improve my speaking skills.	4.67
7	I feel more confident speaking through storytelling.	4.42
16	Storytelling motivates me to improve speaking skills.	4.56
25	Using storytelling facilitates my learning to speak confidently.	4.44
26	Storytelling introduces a lot of new vocabulary and pronunciation to me.	4.42
29	Developing speaking skills through storytelling is useful.	4.62
Overall Mean		4.53

3. Novelty and Uniqueness

The Storyteller's Toolbox offers a unique, innovative approach to language learning by integrating augmented reality (AR) with interactive tools such as storyboards, facial expression cards, and mirrors. This combination creates an immersive and engaging experience that promotes creative expression and confidence in language use. By incorporating AR, the toolkit allows users to experience storytelling through visual narratives while building a personal connection with the overall process. The toolbox is flexible, supporting both individual and group activities, and is compact and user-friendly, making it accessible and suitable for learners of all ages. **Table 1** presents the average score for the usefulness of digital storytelling in enhancing speaking performance, which is significantly high, with a value of 4.53. This suggests that students generally agreed that storytelling is an excellent method for boosting their confidence in using the language. Furthermore, it is evident that most students believe that increasing their storytelling practice directly correlates with enhancing their speaking skills. The Storyteller's Toolbox is therefore an innovative product that combines the timeless art of storytelling with the current demand of AR technology in promoting a tool that is both educational and entertaining for the masses.

4. Benefit to Mankind

The kit's design encourages holistic learning through personalised storytelling, allowing learners to explore and visualise scenarios while enhancing their language proficiency. In doing so, this toolkit promotes the experience of human connection and personal growth

through the process of storytelling and Augmented Reality. The process allows individuals to cultivate their knowledge and cultural identity while fostering empathy, understanding, and shared experiences along the way. This benefits mankind as it transcends traditional barriers and expands over generations and cultures. Beyond educational benefits, the toolbox helps reduce public speaking anxiety, fostering personal growth and improved social interaction. It also builds confidence by scaffolding learners with tools like augmented reality (AR), facial expression cards, and mirrors, enabling them to explore their storytelling capabilities and promote self-assurance. This, in turn, addresses the issue of low English proficiency among Malaysian students, better equipping them for improved occupational opportunities, as English is a key global communication tool.

5. Innovation and Entrepreneurial Impact

The Storyteller's Toolbox promotes innovation by combining traditional storytelling with cutting-edge technologies like augmented reality (AR) to create an immersive and interactive learning experience. By integrating physical and digital tools, the project introduces a novel approach to language learning, encouraging creative expression and problem-solving. This innovation fosters a culture of entrepreneurship by empowering learners to take ownership of their language development while also providing opportunities for customisation and scalability in various sectors, including education, corporate training, and home learning. Additionally, the toolbox's adaptability to different age groups and cultural contexts creates potential for entrepreneurial ventures, such as creating tailored kits for specific markets. By encouraging learners to engage with language in a creative, confident manner, the Storyteller's Toolbox contributes to a culture of entrepreneurial thinking, where individuals are empowered to create solutions to real-world problems, thereby enhancing both personal and professional growth within the community and industry.

6. Potential Commercialisation

The Storyteller's Toolbox demonstrates strong market potential across diverse sectors, including education, corporate training, and home learning. It can be seamlessly integrated into school syllabi, classroom activities, and professional development programmes while also being customisable for specific age groups or cultural themes. Its adaptability, combined with its proven impact on language skills, confidence, and enhanced employability opportunities, positions it as a versatile and sustainable solution for language learners. By incorporating storytelling into language-learning activities, the toolbox helps boost students' self-confidence in using the target language. The immersive nature of storytelling engages learners in a supportive environment, free from the fear of criticism, which is essential for building confidence and mastery in language use.

7. Acknowledgement

The researchers express their gratitude to all participants and those who helped them complete the project.

8. Authors' Biography



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