



UNIVERSITI
TEKNOLOGI
MARA

Kampus Cengalau, Kuala

i-SPIKE2025
INTERNATIONAL SYMPOSIUM ON PRODUCTIVITY, INNOVATION, KNOWLEDGE & EDUCATION

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

E-PROCEEDING

EXTENDED ABSTRACT

UiTM *di hatiku*

اوسها تقوى موليا

E-PROCEEDING

EXTENDED ABSTRACT



Copyright © 2025 by Universiti Teknologi MARA (UiTM) Cawangan Kedah

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher.

© i-SPIKE 2025 Extended Abstract Proceedings is jointly published by Universiti Teknologi MARA (UiTM) Cawangan Kedah.

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

Editors

- Prof. Madya Dr. Azlyn Ahmad Zawawi
- Dr. Anis Farawahida Mohd Karim
- Dr. Nursyazwanie Mansor
- Dr. Roshidah Safeei
- Azni Syafena binti Andin Salamat
- Hasniza binti Hassim
- Dr. Nur Zharifah Che Adenan
- Mohd Rozman Mohd Nasir
- Nurfaznim binti Shuib
- Norsyazwani binti Ab Halim

e ISBN 978-967-2948-91-9



UiTM Cawangan Kedah

Published by:
Universiti Teknologi MARA (UiTM) Cawangan Kedah
Sungai Petani Campus
08400 Merbok
Kedah
Malaysia

Welcome Message RECTOR, UITM KEDAH BRANCH

Assalamualaikum warahmatullahi wabarakatuh,

First and foremost, I would like to extend my deepest appreciation to the organising committee of i-SPIKE 2025 for their steadfast dedication and commitment in making this prestigious event a reality. My heartfelt congratulations to the committee for their tireless efforts in ensuring that i-SPIKE continues to grow as a meaningful and impactful platform for academics, researchers, students, and industry players worldwide.

The theme for this year, “Empowering Minds: Bridging Innovation, Knowledge and Education for a Sustainable Future,” is both timely and significant. It reflects our shared responsibility to not only embrace creativity and technological advancement, but also to ensure that innovation directly contributes to sustainable development, equitable education, and the well-being of future generations.

i-SPIKE 2025 provides a dynamic platform for showcasing innovations that address real-world challenges while opening new avenues for collaboration, engagement, and inclusivity. By bridging knowledge, innovation, and education, this symposium strengthens our collective capacity to design solutions that empower communities and inspire positive change.

I am truly impressed by the diversity and calibre of participants in this year’s event. The projects and ideas presented highlight the extraordinary creativity and determination of our innovators. I am confident that the insights and solutions shared here will pave the way for continuous advancement in teaching, learning, and innovation.

It is my sincere hope that you will find i-SPIKE 2025 an enriching experience, one that sparks new ideas, builds lasting collaborations, and strengthens our shared vision for a sustainable future. To all participants, I wish you every success, and to the winners, my warmest congratulations.

Once again, I thank the organising committee, partners, and contributors for their invaluable support. May i-SPIKE 2025 continue to inspire and empower minds for many years to come.

Professor Dr. Roshima Haji Said
Acting Rector
Universiti Teknologi MARA (UiTM) Kedah Branch

Welcome Message (i-SPIKE 2025 CHAIR)

It is my great pleasure to welcome you to the 4th International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2025 (i-SPIKE 2025). This year's theme, "Empowering Minds: Bridging Innovation, Knowledge, and Education for a Sustainable Future," reflects our collective commitment to advancing innovation and fostering meaningful collaboration across academia, industry, and communities.

i-SPIKE 2025 provides a platform for scholars, researchers, students, and practitioners from diverse fields to showcase their ideas, share knowledge, and inspire new solutions to global challenges. We extend our sincere appreciation to all participants and contributors whose efforts and dedication have made this symposium possible.

We hope that this e-proceedings serves not only as a record of the innovations presented but also as a valuable resource that continues to inspire long after the event.

Thank you.

Dr Junaida Ismail
Chair

4th International Exhibition & Symposium on Productivity, Innovation,
Knowledge, and Education 2025 (i-SPIKE 2025)

PREFACE

The 4th International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education (i-SPIKE 2025) marks yet another milestone in our ongoing commitment to fostering innovation, creativity, and collaboration across disciplines. Guided by this year's theme, "Empowering Minds: Bridging Innovation, Knowledge and Education for a Sustainable Future," the event provides a dynamic platform for students, educators, researchers, and professionals to share their ideas, showcase their innovations, and engage in meaningful knowledge exchange.

This year, we are pleased to report that i-SPIKE 2025 received approximately 50 initial submissions, with more than 35 projects successfully advancing to final presentation and exhibition. These projects reflect a rich diversity of innovation, ranging from educational technologies, digital applications, and gamified learning tools to sustainable materials, cultural heritage preservation, and community-focused solutions. Collectively, they embody the spirit of bridging innovation and education to address pressing societal and global challenges.

We sincerely thank all participants, reviewers, and committee members for their invaluable contributions in making i-SPIKE 2025 a success. It is our hope that this e-proceedings will not only serve as a record of the ideas and innovations presented, but also as an inspiration for future collaborations and advancements in the pursuit of sustainable knowledge and innovation.

Assoc. Prof. Dr. Azlyn Ahmad Zawawi
Editor-in-Chief, i-SPIKE 2025 Proceedings

TABLE OF CONTENTS

2.	BIZMATH-FAST (BUSINESS MATHEMATICS – FORMULA ACCURACY & SPEED TRAINER)	84
3.	COLLABORATIVE INNOVATION LAB: RATE & REFLECT SIMULATION	89
4.	ECONOSPHERE 1.0 – THE ECONOMICS E-FLASHCARDS	93
5.	ACC-TILE CHALLENGE 1.0: PERMAINAN INOVATIF UNTUK MAHIR DEBIT & KREDIT	96
6.	PRESERVING CULTURAL HERITAGE THROUGH AR-INFUSED STORYTELLING: PROMOTING KASUT MANIK VIA INTERACTIVE STORYBOOK FOR THE YOUNGER GENERATION	99
7.	FROM CLASSROOM TO COLLOQUIUM: STRENGTHENING SKILLS OF CTU271 (ISLAM AND COMMUNICATION) STUDENTS IN UiTM	103
8.	RABIES VACCINATION IN SARAWAK: VAXPAW	109
9.	ChanteQ: AN INNOVATIVE MOBILE APP FOR ENHANCING HAIR SALON APPOINTMENT MANAGEMENT	114
10.	REBER LINE 2.0	120
11.	THE APPLICATION OF DESIGN THINKING: CASE STUDY I-ROOM BHEA	124
12.	KICKRESEARCH V2 MODULE V2: THE FAST TRACK TO RESEARCH WRITING	131
CATEGORY 2 - SS (YOUNG)		
1.	CULTURE-LENS EDUCATIONAL KIT: A MODULE FOR CULTURALLY RESPONSIVE ANTI-CORRUPTION EDUCATION	139
2.	"MyJourney": A GEN-Z-CENTRIC DIGITAL INNOVATION TO IMPROVE JOB ENGAGEMENT AND DECREASE TURNOVER INTENTION IN THE HOSPITALITY SECTOR	144
3.	SPIRITUAL WELL-BEING MODULE BASED ON AL-DIHLAWI AND HAMKA SPIRITUAL (SWBDH)	148
CATEGORY 3 – PRODUCT RESEARCH DESIGN (ACADEMIC)		
1.	THE SWICI BOARD: A GAMIFIED APPROACH TO CAREER EXPLORATION AND DECISION-MAKING AMONG AT-RISK ADOLESCENTS	158
2.	EMPOWERING ABILITIES: THE 7 STEPS OF LIFE TRANSFORMATION MODULE FOR PERSONS WITH DISABILITIES	166
CATEGORY 3 – PRODUCT RESEARCH DESIGN (YOUNG)		
1.	SENSME SMART GLASSES (ASSISTIVE WEARABLE TECHNOLOGY FOR VISUAL IMPAIRMENT)	173

CATEGORY 3
PRODUCT RESEARCH DESIGN
(ACADEMIC)

EMPOWERING ABILITIES: THE 7 STEPS OF LIFE TRANSFORMATION MODULE FOR PERSONS WITH DISABILITIES

Nordianah Jusoh @ Hussain
Faculty of Computer and Mathematical Sciences,
Universiti Teknologi MARA (UiTM) Cawangan
Melaka, Kampus Jasin Merlimau Melaka,
Malaysia
dianah642@uitm.edu.my

Norazlinda Mohammad
Faculty of Communication and Media Studies,
Universiti Teknologi MARA (UiTM) Cawangan
Melaka, Kampus Alor Gajah, Alor Gajah,
Melaka, Malaysia
linda333@uitm.edu.my

Nurul Hidayah Mat Zain*
Faculty of Computer and Mathematical Sciences,
Universiti Teknologi MARA (UiTM) Cawangan
Melaka, Kampus Jasin Merlimau Melaka,
Malaysia
nurul417@uitm.edu.my

Ong Boo Siong
Life Coach and Clinical Hypnotherapist at Empower Life
SSB Health Sdn Bhd, Kelantan, Malaysia
ongboosiong@gmail.com

Nadia Hanim Mohd Wasilan
Faculty of Hotel and Tourism Management,
Universiti Teknologi MARA (UiTM)
Cawangan Melaka, Kampus Alor Gajah,
Alor Gajah, Melaka, Malaysia
nadia7950@uitm.edu.my

ABSTRACT

The 7 Steps of Life Transformation for Persons with Disabilities (PWD) module was developed to meet the needs of PWD. This module combines hands-on, reflective, and social learning activities to promote meaningful personal growth based on educational psychology, particularly Bloom's Taxonomy and the Learning Pyramid. However, there are still limited structured learning programs that can cater for the broader psychological and developmental needs of the PWD community. Therefore, this present study explores the effectiveness of this module. The evaluation of this module focuses on 1) Content and Delivery, 2) Expectations

and Self-Perception, and 3) Outcomes and Personal Impact. The total number of participants involved in this evaluation is 20, which is categorized as PWD. The analysis that was implemented is standard descriptive statistical methods. The findings indicated the effectiveness of structured transformation modules aligned for PWD, which can offer evidence for the potential adoption in special education programs. Furthermore, the study reinforces the value of inclusive learning designs that align with Sustainable Development Goals (SDGs): SDG 3 for supporting health, SDG 4 for education and SDG 10 for equality.

Keywords: Persons with Disabilities (PWD), Life Transformation, Sustainable Development Goals (SDG)

INTRODUCTION

The empowerment of PWD has become a focus of global educational and developmental efforts for a more inclusive society. The 7 Steps of Life Transformation for PWD was developed as an inclusive learning module to support PWD individuals' personal growth. This module is developed based on Bloom's Taxonomy (Adijaya et al., 2023) and the Learning Pyramid (Kloos & Alario-Hoyos, 2021), which are two principles of educational psychology to facilitate meaningful and sustainable transformation through social learning experiences.

BACKGROUND STUDY

The 7 Steps of Life Transformation for Persons with Disabilities (PWD) module has a structured transformational journey that begins with self-awareness (Step 0: Choice) and is followed by gratitude, confidence-building, life planning, reflection, striving, practice, and contribution to the community. These seven steps empower PWD participants to take ownership of their personal development and develop actionable life goals. Besides, the module promotes experiential learning through various deliverables such as lectures, readings, audiovisuals, demonstrations, discussions, peer teaching and hands-on activities. PWD participants are equipped to improve their personal lives and contribute meaningfully to building an inclusive society.

METHODOLOGY

This present study has implemented a quantitative research (Jamieson et al., 2023) approach to evaluate the effectiveness of the 7 Steps of Life Transformation for Persons with Disabilities (PWD) module. The module is designed as an experiential learning program to promote personal growth among the PWD community. A survey instrument was developed to explore participants' perceptions of various aspects of their learning experiences after completing the program, which can also be used to assess the impact of this module.

3.1 The Survey Instrument

A self-administered questionnaire was used as the data collection tool. The participants were given a 5- point Likert scale, ranging from Strongly Disagree (SD) to Strongly Agree (SA), to measure their level of agreement with each item. The item questionnaire is categorized under four sections:

- • Section A: Content and Delivery
- • Section B: Expectations and Self-Perception
- • Section C: Outcomes and Personal Impact
- • Section D: Open Feedback

3.2 The Participants and Procedure

The PWD participants are the target respondents for this study, who have completed the learning module. A total of 35 responses were collected, but 15 were excluded due to incomplete data, resulting in 20 valid participants in the final analysis. All participants registered as OKU status and volunteered to participate in the survey. The survey was administered online using the Google Forms platform, ensuring accessibility of participation

RESULT AND DISCUSSION

This section presents the findings of the survey. The analysis focuses on PWD perceptions of how the module influenced their self-perception. The results are supported by descriptive statistics, which indicate how the module achieved its intended learning outcomes.

4.1 Section A: Content and Delivery

A total of 85% of participants agreed that the content was well-structured and easy to understand. Very few expressed uncertainties, and only 5% disagreed. The module is well-structured and easy to follow, though there may be room for slight improvements in clarity for a small minority. 100% positive responses; content is highly meaningful and applicable. The content was exceptionally relevant and beneficial to all participants. 90% of participants were satisfied with the clarity of delivery. Only 5% expressed difficulty, and another 5% were neutral. Delivery was effective overall, but slight adjustments might help ensure clarity for all learners. 85% of participants found the activities engaging and interactive. 15% were neutral, with no negative feedback

Interactivity is a strong point; however, enhancing engagement techniques could further reduce neutrality. Overall, participants responded very positively to the content and delivery aspects of the module. The structure, relevance, and clarity of delivery were praised, and engagement activities also received strong support. There is minimal neutral or negative feedback, suggesting the module is well received, with only minor refinements needed to optimize accessibility and interaction for all learners. Figure 1 shows the results of Section A: Content and Delivery.

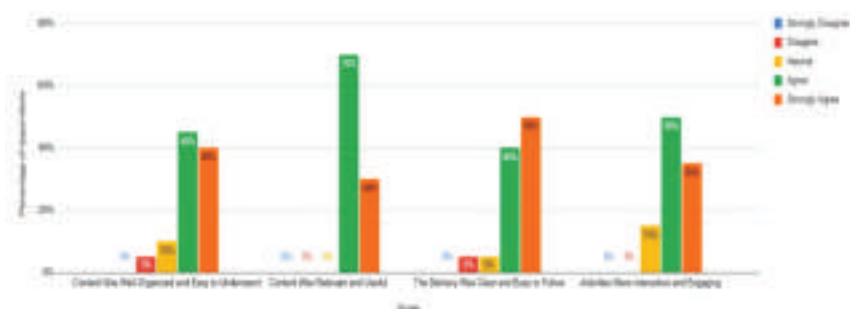


Figure 1. The result of Section A: Content and Delivery

4.2 Section B: Expectations and Self-Perception

Figure 2 shows that 55% expressed confidence, a large portion (45%) were neutral, suggesting uncertainty about future decisions. Decision-making skills need support and reinforcement. High levels of gratitude and emotional resilience even before the module. Gratitude is a strength that can be deepened further. Strong self-awareness among most participants. This awareness provides a good foundation for growth. While most have goals, some lack clarity or planning confidence. Additional guidance on goal setting would be helpful. Reflective practice is present but could be strengthened into a habit. Journaling or structured reflection exercises may benefit participants. Strong perseverance and a growth mindset. This trait should be nurtured and celebrated.

While habits are understood, consistent practice varies. Focus on daily habit-building strategies may help. There is a strong belief in societal value, with slight hesitation for some. Encourage more exposure to opportunities to contribute. Empowering self-perception is mainly in place. Continue reinforcing identity and potential beyond disability, which is high motivation and strong expectations of the module. Participants are mentally and emotionally prepared for transformation. Participants entered the module with high levels of gratitude, perseverance, belief in their potential, and some uncertainty about decision-making, goal setting, and consistency in positive habits. In conclusion, the module is well-positioned to build upon emotional strengths while addressing cognitive and behavioural skill gaps such as goal clarity, daily discipline, and future planning. Figure 2 shows the result of Section B: Content and Delivery.

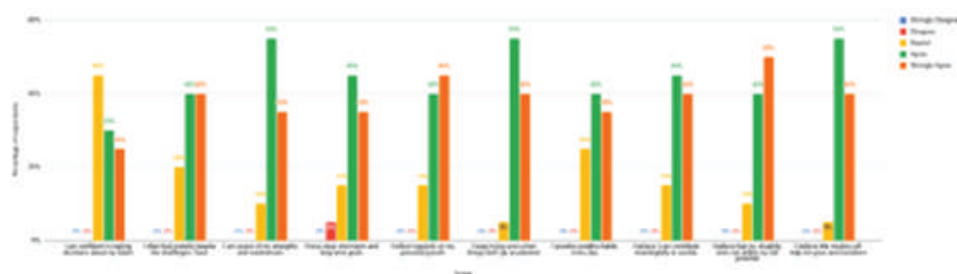


Figure 2. The result of Section B: Expectations and Self-Perception

CONCLUSION

In conclusion, the 7 Steps of Life Transformation for the PWD have contributed to fostering positive changes in PWD awareness. Section A revealed high levels of agreement about the module's content and delivery, which is easy to understand, while Section B indicates that the PWD build positive emotional strengths. Section C demonstrated that participants developed a more growth-oriented outlook on health, education and disability. This aligns with key principles of SDG 3, SDG 4, and SDG 10. Finally, Section D provided open-ended feedback that the results supported findings that the module was effective.

ACKNOWLEDGEMENTS

This research was supported by Entiti Kecemerlangan (EK) Media and Visual Communication (EK Tier 5) and EK Digital Science (DigiSci), Universiti Teknologi MARA, Cawangan Melaka. The supporters had no role in the study design, data collection and analysis, the decision to publish, or the preparation of the manuscript. The 7 Steps of Life Transformation for Persons with Disabilities (PWD) module is copyrighted with MyIPO registration number: LY2025M06644.

REFERENCES

- Adijaya, M. A., Widian, I. W., Parwata, I. G. L. A., & Antara, I. G. W. S. (2023). Bloom's taxonomy revision-oriented learning activities to improve procedural capabilities and learning outcomes. *International Journal of Educational Methodology*, 9(1), 261–270.
- Jamieson, M. K., Govaart, G. H., & Pownall, M. (2023). Reflexivity in quantitative research: A rationale and beginner's guide. *Social and Personality Psychology Compass*, 17(4), e12735.
- Kloos, C. D., & Alario-Hoyos, C. (2021). Educational pyramids aligned: Bloom's taxonomy, the DIGCOMPEDU framework and instructional designs. *2021 World Engineering Education Forum/Global Engineering Deans Council (WEEF/GEDC)*, 110–117.

