

Program Book
20th International Conference
on Business Studies and
Education (ICBE)
30th – 31st March 2026

e-ISSN: 2785-9479

Publisher: ICBE Publication

Twentieth Conference

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PUBLISHER : ICBE PUBLICATION
SSM REGISTRATION NUMBER : 202003126875 (NS0237611-W)
e-ISSN : 2785-9479
CONFERENCE : LIVE PRESENTATION
EMAIL : chief_editor@icbe.my
REVIEWERS : <https://www.icbe.my/board-of-icbe/>

INTRODUCTION

The International Conference on Business Studies and Education (ICBE) has registered with the National Library of Malaysia (e-ISSN: 2785-9479). ICBE is a scientific society dedicated to the promotion of international education and university cooperation in the field of business, management, education and social sciences. ICBE believes that this is best achieved through international cooperation and promotes the development of closer links among relevant institutions and individuals around the world. ICBE supports that such international cooperation can help countries learn from each other and promotes the dissemination of business, management, education and social sciences.

PUBLICATION

1. 20th e-Proceeding International Conference on Business Studies and Education (ICBE)
2. *Jurnal Penyelidikan Pendidikan dan Teknologi Malaysia (JPPTM)*
3. International Journal of Business Studies and Education (IJBSAE)

TENTATIVE

20th ICBE International Conference on Business Studies and Education

Moderator: Dr. Melor Masdoki

Dates: 30–31 March 2026 (Monday & Tuesday)

Venue/Platform: Live Virtual Presentation via Google Meet

Website: <https://www.icbe.my>

Contact: farhana@icbe.my | info@icbe.my

e-ISSN: 2785-9479

A. *IMPORTANT DATES & TIMELINE*

- Peer Review Period: 15 March 2026 – 24 March 2026
- Notification of Acceptance: 24 March 2026
- Live Presentation Date: 30 March 2026

B. *CHAIRPERSONS*

Dr. Melor Masdoki

Kolej Mara Banting, Malaysia

Dr. Oh Zi Jian

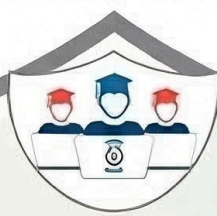
Kolej Vokasional Batu Lanchang , Malaysia

Dr. Geetha Nadesan

Politeknik Tuanku Sultanah Bahiyah, Malaysia

























Dr. Anusuya Kaliappan

IPG Kampus Pendidikan Teknik, Malaysia



20th International Conference on Business Studies and Education (ICBE)

TENTATIVE PROGRAM

-  **8.00 AM – 8.15 AM** Introduction by Moderator to Audience and Presenters
-  **8.15 AM – 9.00 AM**  Three presenters deliver their presentations
 Snapshot session by Moderator
-  **9.00 AM – 10.00 AM**  All participants return to the Main Room (Moderator will inform)
Keynote Session 1:
Associate Prof. Dr. Siti Arni Binti Basir
Department of Shariah, Economics and Governance,
Academy of Islamic Studies, University of Malaya
- 10.00 AM**  Presenters return to their respective rooms
-  **10.00 AM – 11.00 AM**  Four presenters deliver their presentations
 Snapshot session by Moderator
-  **11.00 AM – 12.00 PM**  All participants return to the Main Room (Moderator will inform)
Keynote Session 2:
Dr. Jagriti Mishra
Associate Professor & Center Coordinator,
FMS Department, NIFT, India
-  **12.00 PM**  Presenters return to their respective rooms
-  **12.00 PM – 1.15 PM**  Five presenters deliver their presentations
 Snapshot session by Moderator
-  **1.15 PM – 2.00 PM**  Break
-  **2.00 PM – 4.30 PM**  Ten presenters deliver their presentations
 Snapshot session by Moderator
-  **4.30 PM**  Closing Remarks – Appreciation to all Audience and Presenters

🏆 AWARD WINNERS 🏆

A. 🌟 *Best Presenter Award*

1. **Aaron Ismanto Anggang**
 2. **Amirah Zawani Binti Wakhi Anuar**
 3. **Nor Afzan Binti Ariffin**
 4. **Norliza Ramli**
-

B. 📄 *Best Empirical Paper Award*

- **Abdul Aziz Bin Ab Nasir , Wan Ahmad Ramzi Bin Wan Yusuf , Mohd Faizal Bin Yahaya**
-

C. 🎨 *Best Presentation Slide Design Award*

- **Nik Hasnira Binti Nik Pa , Siti Fatimah Tuzzahrah Binti Abd Latif**
-

D. 📖 *Best Conceptual Paper Award*

- **Wan Nor Hafiza Wan Sulaiman , Hanis Aliaa Ramley , Siti Norizan Hassan**
-

🌟🌟 *Congratulations to all the winners!*



2026 ICBE 20th

International Conference on Business Studies and Education

Management, Accounting, Business and Education (e-ISSN: 2785-9479)

MBOT
CPD Points



LIVE VIRTUAL PRESENTATION | <https://www.icbe.my>



- Eligible CPD Points for MBOT Members ✓
- Engaging 20th ICBE Book Programme ✓
- Inclusion in the 20th e-Proceeding ICBE Book ✓
- Dynamic Presentation Schedule ✓
- Opportunity to Publish in MyJurnal Indexing Journals ✓
- Reviewer Form will be Provided ✓



FEES RM200

CALL FOR PAPERS

30th - 31st

MARCH 2026

Early bird : **RM 100** only claim before
08th MARCH 2026

IMPORTANT DATES

Final Paper Submission:
15th MARCH 2026

Notification of Acceptance:
25th MARCH 2026

Virtual Presentation :
30th - 31st MARCH 2026

Publishing Poces Begin :
31st MARCH 2026

ICBE AWARDS 2026

Best Conceptual Paper
Best Empirical Paper
Best Virtual Presenter
Best Presentation Slide Design

FINAL PAPER SUBMISION

Each final full manuscript
(.doc/.docx)
Submit to Editor-In-Chief
Email : chief_editor@icbe.my

e - CERTIFICATES
 FOR
 PRESENTER
 &
 PARTICIPANTS

for further
 information,
 please contact :

Registration or have Questions, Please Contact
 Research officer and Conference Secrerariat
Ms. Farhana binti Hj.Nordin
 Email : farhana@icbe.my or info@icbe.my



VIRTUAL CONFERENCE



Moderator
 Dr. Melor Binti Masdoki
 Social Science Department,
 Kolej MARA Banting, Selangor, Malaysia



Keynote Speaker
 Associate Professor Dr. Siti Arni Basir
 Associate Professor
 University Malaya
Keynote Topic: Quality and Innovation practices in Malaysia's higher education institution



Keynote Speaker
 Dr. Jagriti Mishra
 Associate Professor and Centre Coordinator, FMS Department
 NIFT, India
Keynote Topic: AI + Humanity: The Future of Collaboration, Not Competition

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Further Information



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All Accepted Paper will be published on ICBE official website with e-ISSN: 2785-9479 and indexed Google Scholar



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Presentation Schedule

MAIN ROOM

20th International Conference on Business Studies and Education (ICBE)

Moderator: Dr.Melor Binti Masdoki

Date: 30th March 2026 (Monday)

Venue/Platform: Live Virtual Presentation via Google Meet

Website: <https://www.icbe.my>

Contact: farhana@icbe.my | 011-33026480

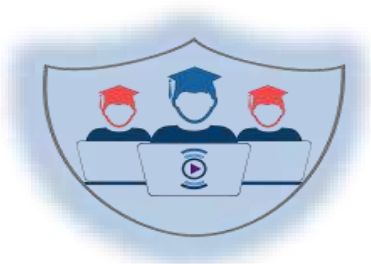
e-ISSN: 2785-9479

Presentation Schedule

Moderator Introduction: 8.00 AM

Session 1

No	Presenter	Title	Time	Link (Google Meet)
1	Muhammad 'Aqil Bin Anuar	Determinants of Marketing Skill Competency Among SPM Leavers	8.15am- 8.30am	https://meet.google.com/hte-quhg-skt
2	Muhammad Haris Mikael Mohd Hamezan	Perceived Curriculum Market Alignment and It's Impact on Enrolment Intentions: a Case Study of Diploma in Marketing at Kolej Professional MARARA Seri Iskandar	8.30am- 8.45am	https://meet.google.com/hte-quhg-skt
3	Nurfikriyah Auni	Behavioral Patterns of SPM Graduates in Choosing a Marketing Diploma: A Comprehensive Analysis of Kolej Profesional MARARA Seri Iskandar	8.45am- 9.00am	https://meet.google.com/hte-quhg-skt



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Presentation Schedule

Moderator Welcoming Keynote Speaker 1: 9.00 AM

Keynote Speaker 1

Associate Prof. Dr. Siti Arni Binti Basir

Department of Shariah, Economics and Governance

Academy of Islamic Studies,

Universiti of Malaya

Topic: Quality and Innovation practices in Malaysia's higher education institution

Place: Main Room

Link: <https://meet.google.com/hte-quhg-skt>

Time: 9.00 AM – 9.45 AM



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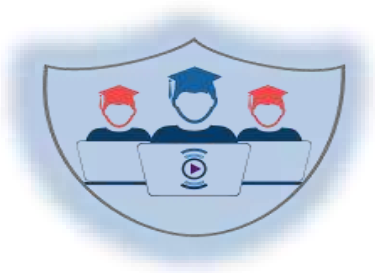
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WEB: <https://www.icbe.my/>

Presentation Schedule

Session 2

No	Presenter	Title	Time	Link (Google Meet)
4	Norliza Binti Ramli	Bridging Digital Inequality: Enhancing Education and Skills to Support SME Growth in the Digital Era	10.00am-10.15am	https://meet.google.com/hte-quhg-skt
5	Iman Nadia Binti Mohd Muhayadin	Factors Shaping Students' Interest in Diploma in Marketing Programmes: A Behavioural Perspective	10.15am-10.30am	https://meet.google.com/hte-quhg-skt
6	Wafa Zulaikha Binti Mohd Zamberi	Factors of Perception Influencing Low Student Enrollment in The Diploma in Marketing at Kolej Professional MARA Seri Iskandar (KPMSI)	10.30am-10.45am	https://meet.google.com/hte-quhg-skt
7	Wan Muhammad Hidayat	Outdated Curricula or Outdated Perceptions? Unpacking SPM Leavers' Views on Marketing Diploma Relevance in Malaysia's Digital Era	10.45am-11.00am	https://meet.google.com/hte-quhg-skt



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Presentation Schedule

Moderator Welcoming Keynote Speaker 2: 11.00 AM

Keynote Speaker 2

Dr. Jagriti Mishra

Associate Professor and Center Coordinator,

FMS Department

NIFT, India

Topic: AI + Humanity : The Future of Collaboration, Not Competition

Place: Main Room

Link: <https://meet.google.com/hte-quhg-skt>

Time: 11.00 AM – 11.45 AM



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Presentation Schedule

Session 3

No	Presenter	Title	Time	Link (Google Meet)
8	Sharifah Zalia Latisha	The Push and Pull of Diploma in Marketing: Determinants of Gen Z's Enrollment Decisions in Marketing Programs	12.00pm-12.15pm	https://meet.google.com/hte-quhg-skt
9	Nur Yahzelina	Innovation Trends Among Students Based on Final Year Project Competition Winners: A Case Study of Politeknik Kuching Sarawak	12.15pm-12.30pm	https://meet.google.com/hte-quhg-skt
10	Melvin Mojikon	Psychological Capital and Career Advancement of Hospitality and Tourism Industry in Sabah	12.30pm-12.45pm	https://meet.google.com/hte-quhg-skt
11	Noor Fareeza	Redesigning Digital Marketing Learning: Innovative Pedagogies for Gen Z Engagement and Industry-Relevant Skills	12.45pm-1.00pm	https://meet.google.com/hte-quhg-skt

BREAK SESSION 1.00PM -2.00PM



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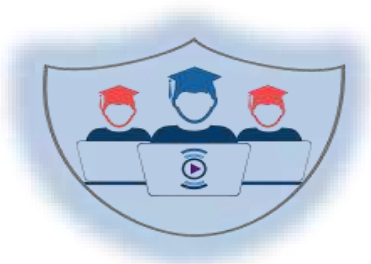
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Presentation Schedule

Session 4

No	Presenter	Title	Time	Link (Google Meet)
12	Mithli Nabilah Binti Mohd Shahrul Azmi	Rethinking Marketing Education for Gen Z: New Learning Approaches to Developing Future Digital Marketers	2.00pm- 2.15pm	https://meet.google.com/h-te-quhg-skt
13	Surina Binti Nordin	A study of customer satisfaction toward homestay service quality at merlimau, melaka	2.15pm- 2.30pm	https://meet.google.com/h-te-quhg-skt
14	Nur Aisya Binti Mohd Sabri	Last mile delivery quality and experience: key determinants of e-commerce customer loyalty of gen z	2.30pm- 2.45pm	https://meet.google.com/h-te-quhg-skt
15	Ts. Nik Hasnira	Project-Based Learning through the Documentation of Measured Drawings of Heritage Buildings in TVET Education: An Implementation Study of Selected Terengganu Heritage Houses	2.45pm- 3.00pm	https://meet.google.com/h-te-quhg-skt
16	Muhammad Azmil Bin Abdul Aziz	Inclusive Board Game Design Using Universal Design for Learning to Support Diverse Deaf and Hearing Students	3.00pm- 3.15pm	https://meet.google.com/h-te-quhg-skt
17	Ahmad Iskandar Bin Mohd Kamal	Artificial Intelligence Adoption in Higher Education Marketing: A Conceptual Framework Linking Student Engagement and Institutional Sustainability	3.15pm- 3.30pm	https://meet.google.com/h-te-quhg-skt
18	Nur Zahirah Binti Ahmad Razei	Kertas Konsep: Faktor Pemilihan Program Pelancongan Dalam Kalangan Pelajar Semester Satu di Kolej Komuniti Malaysia	3.30pm- 3.45pm	https://meet.google.com/h-te-quhg-skt



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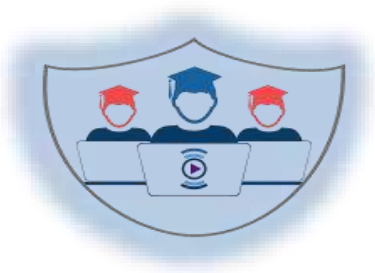
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Presentation Schedule

19	Ruhana Wati Binti Iran	Producing an organic anti-fogging bar for cleaning goggle surface	3.45pm- 4.00pm	<a href="https://meet.google.com/h
te-quhg-skt">https://meet. google.com/h te-quhg-skt
20	Kanchana Kannan	Digital Workforce Readiness in Supply Chain Management Determinants: Evidence of a Malaysian TVET Institution.	4.00pm- 4.15pm	<a href="https://meet.
google.com/h
te-quhg-skt">https://meet. google.com/h te-quhg-skt



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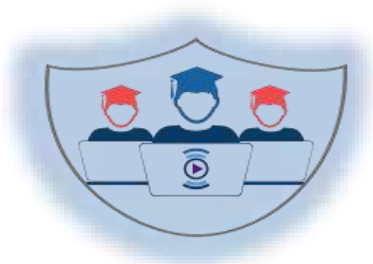
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Presentation Schedule

Moderator - Photo Session

Followed by session conclusion and closing remark



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Presentation Schedule

SECOND ROOM

20th International Conference on Business Studies and Education (ICBE)

Moderator: Dr. Geetha Nadesan

Date: 30th March 2026 (Monday)

Venue/Platform: Live Virtual Presentation via Google Meet

Website: <https://www.icbe.my>

Contact: farhana@icbe.my | 011-33026480

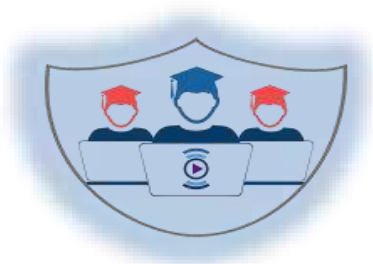
e-ISSN: 2785-9479

Presentation Schedule

Moderator Introduction: 8.00 AM

Session 1

No	Presenter	Title	Time	Link (Google Meet)
1	Dr Divya Rose Peter	No Child Left Behind? From Policy to Practice: Exploring Inclusive Education through Malaysia's Zero Reject Initiative.	8.15am- 8.30am	https://meet.google.com/hja-ccwe-icu
2	Roslinda Binti Ismail	Integrating PLC-Based Automated Beverage Dispensing Systems into Engineering Education: A Sustainable and Hygienic Approach to Service Optimization	8.30am- 8.45am	https://meet.google.com/hja-ccwe-icu
3	Tay Lee Chee	Teaching and Delivery Methods in Computer Science Higher Education (2020–2025): A Systematic Review	8.45am- 9.00am	https://meet.google.com/hja-ccwe-icu



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Presentation Schedule

All presenters and participants are requested to proceed to the Main Room

Moderator Welcoming Keynote Speaker 1: 9.00 AM

Keynote Speaker 1

Associate Prof. Dr. Siti Arni Binti Basir

Department of Shariah, Economics and Governance

Academy of Islamic Studies,

Universiti of Malaya

Topic: Quality and Innovation practices in Malaysia's higher education institution

Place: Main Room

Link: <https://meet.google.com/hte-quhg-skt>

Time: 9.00 AM – 9.45 AM



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Presentation Schedule

All presenters and participants are requested to return to Room 2

Session 2

No	Presenter	Title	Time	Link (Google Meet)
4	Hashamuddin Yaakob	Students Awareness of the ACCA – KPT Industry Accreditation Program at Politeknik Ungku Omar	10.00am- 10.15am	https://meet.google.com/hja-ccwe-icu
5	Abdul Aziz Bin Ab Nasir	Strengthening Teaching Innovation through Digital Preparedness: Evidence from Malaysian Polytechnics and Community Colleges	10.15am- 10.30am	https://meet.google.com/hja-ccwe-icu
6	Zur Ain Mohd Nawawi	Physicochemical Characteristics and Sensory Acceptance of Mayonnaise Formulated with Soursop Vinegar	10.30am- 10.45am	https://meet.google.com/hja-ccwe-icu
7	Komathi D/O Elangovan	Teacher Readiness and Challenges in Early Career Transition Program for Primary School Students with Special Educational Needs: A Case Study	10.45am- 11.00am	https://meet.google.com/hja-ccwe-icu



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Presentation Schedule

All presenters and participants are requested to proceed to the Main Room

Moderator Welcoming Keynote Speaker 2: 11.00 AM

Keynote Speaker 2

Dr. Jagriti Mishra

**Associate Professor and Center Coordinator,
FMS Department
NIFT, India**

Topic: AI + Humanity : The Future of Collaboration, Not Competition

Place: Main Room

Link: <https://meet.google.com/hte-quhg-skt>

Time: 11.00 AM – 11.45 AM



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Presentation Schedule

All presenters and participants are requested to return to Room 2

Session 3

No	Presenter	Title	Time	Link (Google Meet)
8	Dr Yeap Sock Beei	Teacher Participation in Decision-Making and Its Influence on Professional Learning Communities in Malaysian Schools	12.00pm- 12.15pm	https://meet.google.com/hja-ccwe-icu
9	Nur Azreen Binti Zaidel	Tahap Pengetahuan Pelajar Jabatan Perdagangan Politeknik Kuching Sarawak Terhadap Penggunaan Kecerdasan Buatan (Artificial Intelligence) Dalam Membantu Proses Pembelajaran	12.15pm- 12.30pm	https://meet.google.com/hja-ccwe-icu
10	Nor Afzan Binti Ariffin	Keberkesanan Laman Sesawang MyHydrology dalam Pengajaran dan Pembelajaran Kursus DCC50212 Hydrology	12.30pm- 12.45pm	https://meet.google.com/hja-ccwe-icu
11	Caroline Binti P Eddy	Efikasi Kendiri Guru sebagai Peramal Kepuasan Kerja di Sekolah Rendah Luar Bandar: Bukti dari Keningau, Sabah	12.45pm- 1.00pm	https://meet.google.com/hja-ccwe-icu

BREAK SESSION 1.00PM -2.00PM



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Presentation Schedule

Session 4

No	Presenter	Title	Time	Link (Google Meet)
12	Shahidah Abdul Malek	Penggunaan Still Air Box Melalui plantelone Edu Kit dalam Pelaksanaan Amali Pensterilan Kultur Tisu Tumbuhan	2.00pm - 2.15pm	https://meet.google.com/hja-ccwe-icu
13	Helma Binti Mohd Ali	Kajian Ciri Apron Bagi Kanak-Kanak Tabika Perpaduan Di Daerah Rembau: Elemen Reka Bentuk, Bahan Sesuai dan Fungsi Nilai Tambah Dalam Aktiviti Seni	2.15pm - 2.30pm	https://meet.google.com/hja-ccwe-icu
14	Normala Sulaiman	Eco-GC-Bin: A Community-Based Composting Solution for Food Waste Management in Merlimau Permai	2.30pm - 2.45pm	https://meet.google.com/hja-ccwe-icu
15	Mohd Khairi Bin Nordin@Bah aruddin	Pengaruh Xenoglossophobia Terhadap Keberkesanan Pembelajaran Bahasa Inggeris dalam Kalangan Pelajar Politeknik Sultan Idris Shah	2.45pm - 3.00pm	https://meet.google.com/hja-ccwe-icu
16	Wan Nor Hafiza Wan Sulaiman	Zero-Waste Transformation: Functional Herbal Tea from Dragon Fruit Peel	3.00pm - 3.15pm	https://meet.google.com/hja-ccwe-icu
17	Rashidah Lip	Language Educators' Perceptions of Online Platforms and Micro-Credentials in Language Learning Contexts	3.15pm - 3.30pm	https://meet.google.com/hja-ccwe-icu
18	Mohd Baharuddin Bin Mohd Yusoff	Analisis Kefahaman dan Penerimaan Pelajar Semester Satu Politeknik Kota Kinabalu terhadap Penggunaan AI dalam Kejuruteraan Mekanikal	3.30pm - 3.45pm	https://meet.google.com/hja-ccwe-icu
19	Mohd Rusdan Hasan	Keberkesanan Pelaksanaan Peningkatan Kualiti Berterusan Terhadap Pencapaian Hasil Pembelajaran Bagi DUF10212 Bahasa Arab 1	3.45pm - 4.00pm	https://meet.google.com/hja-ccwe-icu
20	Muhammad Dzahirul Bin Norasri	Kajian awal kefahaman pelajar upnm mengenai isu perceraian dan solusi berdasarkan perspektif islam	4.00pm - 4.15pm	https://meet.google.com/hja-ccwe-icu
21	Nur' Aisyah 'Atifah Binti Ahmad Sazali	Hak-hak wanita dalam perkahwinan: kajian awal kefahaman dalam kalangan pelajar upnm	4.15pm - 4.30pm	https://meet.google.com/hja-ccwe-icu

Moderator - Photo Session

Followed by session conclusion and closing remarks.



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Presentation Schedule

THIRD ROOM

20th International Conference on Business Studies and Education (ICBE)

Moderator: Dr. Anusuya Kaliappan

Date: 30th March 2026 (Monday)

Venue/Platform: Live Virtual Presentation via Google Meet

Website: <https://www.icbe.my>

Contact: farhana@icbe.my | 011-33026480

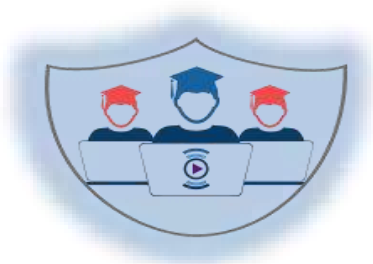
e-ISSN: 2785-9479

Presentation Schedule

Moderator Introduction: 8.00 AM

Session 1

No	Presenter	Title	Time	Link (Google Meet)
1	Vaasala Kaliappa	Transformation of English Language Teaching with AI Chatbots: A Conceptual Review	8.15am- 8.30am	https://meet.google.com/tgv-iaxj-nnh
2	Nur Syazwani Binti Meli	Assessing Users' Satisfaction in Using NDCLearnHub for the Network and Data Communication Course at Politeknik Balik Pulau	8.30am- 8.45am	https://meet.google.com/tgv-iaxj-nnh
3	Nur Shazwani Shuhami	The Implementation of Brain Breaks in ESL Classrooms: A Study among Diploma Students at Politeknik Ungku Omar	8.45am- 9.00am	https://meet.google.com/tgv-iaxj-nnh



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Presentation Schedule

All presenters and participants are requested to proceed to the Main Room

Moderator Welcoming Keynote Speaker 1: 9.00 AM

Keynote Speaker 1

Associate Prof. Dr. Siti Arni Binti Basir

Department of Shariah, Economics and Governance

Academy of Islamic Studies,

Universiti of Malaya

Topic: Quality and Innovation practices in Malaysia's higher education institution

Place: Main Room

Link: <https://meet.google.com/hte-quhg-skt>

Time: 9.00 AM – 9.45 AM



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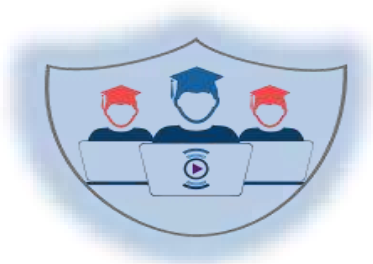
WEB: <https://www.icbe.my/>

Presentation Schedule

All presenters and participants are requested to return to Room 3

Session 2

No	Presenter	Title	Time	Link (Google Meet)
4	Nurfathonah	Tahap Pengetahuan Konsep Dan Peranan Keusahawanan Sosial Serta Hubungannya Dengan Minat Penglibatan Pelajar Kolej Komuniti Sandakan	10.00am-10.15am	https://meet.google.com/Tgv-Iaxj-Nnh
5	Fariza Binti Mohamad Tajuddin	Pendekatan Gamifikasi Melalui Inovasi Antara Dua Marhalah Bagi Kursus Pendidikan Islam: Satu Kajian Tinjauan Di Kolej Komuniti Sandakan	10.15am-10.30am	https://meet.google.com/Tgv-Iaxj-Nnh
6	Khairulfadilah Binti Mohamad Sazali	Production Of Paper From Cabbage Waste	10.30am-10.45am	https://meet.google.com/Tgv-Iaxj-Nnh
7	Khairulazam Annuar	Post-Covid-19 Tourism Recovery And Hotel Industry Performance In Melaka: Demand Drivers, Operational Challenges And Future Outlook	10.45am-11.00am	https://meet.google.com/Tgv-Iaxj-Nnh



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Presentation Schedule

All presenters and participants are requested to proceed to the Main Room

Moderator Welcoming Keynote Speaker 2: 11.00 AM

Keynote Speaker 2

Dr. Jagriti Mishra

**Associate Professor and Center Coordinator,
FMS Department
NIFT, India**

Topic: AI + Humanity : The Future of Collaboration, Not Competition

Place: Main Room

Link: <https://meet.google.com/hte-quhg-skt>

Time: 11.00 AM – 11.45 AM



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Session 3

No	Presenter	Title	Time	Link (Google Meet)
8	Sivaranjini A/P Sinniah	Camera to Classroom: Transforming STEM Learning through Digital Storytelling	12.00pm- 12.15pm	https://meet.google.com/tgv-iaxj-nnh
9	Sofiah Binti Bakar	Penggunaan ChatGPT Dan Hubungannya Dengan Pembelajaran Kendiri Serta Integriti Akademik Dalam Kalangan Pelajar Kolej Komuniti Arau	12.15pm- 12.30pm	https://meet.google.com/tgv-iaxj-nnh
10	Dr Mohd Norulhisham Bin Abd. Rashid	The Learning Styles of Polytechnic Students Based on the VARK Model	12.30pm- 12.45pm	https://meet.google.com/tgv-iaxj-nnh
11	Nurull Zuraida	Identifying Students' Learning Styles Using Interpretive Structural Modeling and MICMAC Analysis	12.45pm- 1.00pm	https://meet.google.com/tgv-iaxj-nnh

BREAK SESSION 1.00PM -2.00PM



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Presentation Schedule

Session 4

No	Presenter	Title	Time	Link (Google Meet)
12	Norasmah Binti Kamaruzama n	Rekabentuk Dan Pembangunan Mesin Mini Pencelur Dan Pencabut Bulu Puyuh Untuk Aplikasi Latihan Tvet	2.00pm - 2.15pm	https://meet.google.com/Tgv-Iaxj-Nnh
13	Norasmah Binti Kamaruzama n	Pembangunan Perangkap Serangga Glow-In-The- Dark Bersepadu Dengan Pembelajaran Mesin Bagi Pengesanan Dan Pengiraan Serangga	2.15pm - 2.30pm	https://meet.google.com/Tgv-Iaxj-Nnh
14	Rouney Saly	Problem-Based Learning In Mathematics Education: A Bibliometric Analysis On Research Trends, Contributions, And Thematic Analysis From The Dimensions Ai Database	2.30pm - 2.45pm	https://meet.google.com/Tgv-Iaxj-Nnh
15	Norazian Binti Jaafar	Kajian Faktor Yang Mempengaruhi Pemilihan Tvet Sebagai Laluan Kerjaya Dalam Kalangan Pelajar Kolej Komuniti Pasir Gudang	2.45pm - 3.00pm	https://meet.google.com/Tgv-Iaxj-Nnh
16	Adirah Bt Isa	Students' Perceptions Of The Effectiveness Of Cidos As A Learning Platform In Technical English Classroom	3.00pm - 3.15pm	https://meet.google.com/Tgv-Iaxj-Nnh
17	Norzieiriani Ahmad	Green Digital Marketing And Sustainable Consumer Behavior In Asean Economies: The Mediating Role Of Consumer Trust And The Moderating Effect Of Eco-Label Counterfeiting	3.15pm - 3.30pm	https://meet.google.com/Tgv-Iaxj-Nnh



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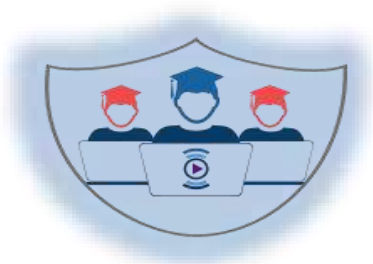
WEB: <https://www.icbe.my/>

Presentation Schedule

18	Amirah Zawani	Determinants Of Accounting Students' Career Paths: Evidence From Politeknik Muadzam Shah	3.30pm - 3.45pm	https://Meet. Google.Com /Tgv-Iaxj- Nnh
19	Faizah Binti Aboo Bakar	Keberkesanan Pengurusan Aset Dalam Kalangan Warga Kolej Komuniti Pasir Gudang	3.45pm - 4.00pm	https://Meet. Google.Com /Tgv-Iaxj- Nnh
20	Noor Yuslizawati Binti Yusof	Persepsi Pelajar Terhadap Pembelajaran Teknologi Percetakan Digital Bagi Program Diploma Teknologi Media Cetak Di Politeknik Muadzam Shah, Pahang.	4.00pm - 4.15pm	https://Meet. Google.Com /Tgv-Iaxj- Nnh
21	Khairulazam Annuar	Nearpod As An Innovative Teaching Aid In Basic Western Culinary Education At Politeknik Merlimau Melaka, Malaysia	4.15pm - 4.30pm	https://Meet. Google.Com /Tgv-Iaxj- Nnh

Moderator - Photo Session

Followed by session conclusion and closing remarks.



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Presentation Schedule

FOURTH ROOM

20th International Conference on Business Studies and Education (ICBE)

Moderator: Dr. Oh Zi Jian

Date: 30th March 2026 (Monday)

Venue/Platform: Live Virtual Presentation via Google Meet

Website: <https://www.icbe.my>

Contact: farhana@icbe.my | 011-33026480

e-ISSN: 2785-9479

Presentation Schedule

Note: All audience members and presenters from Room 4 will join the **Main Room** (<https://meet.google.com/hte-quhg-skt>) from 8:00 AM to 12:00 PM and return to **Room 4** at 12:00 PM, where the presentations will begin.



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Presentation Schedule

All presenters and participants are requested to return to Room 4

Session 1

No	Presenter	Title	Time	Link (Google Meet)
1	Nor Izian Izzaty Binti Noor Azhar	A Study on Personality Traits and Academic Performance among Students at Politeknik Mersing Johor	12.15pm- 12.30pm	https://meet.google.com/kve-pfgx-vfa
2	Nurul Syahirah Mohd Nor	Implementation of the SAU10212 Telegram Bot in Vehicle Electrical Systems: An Evaluation of Usability, Acceptance, and Student Performance at Pasir Salak Community College	12.30pm- 12.45pm	https://meet.google.com/kve-pfgx-vfa
3	Sharmila Bt Md Isa	Kajian Keberkesanan Arena Usahawan JKE sebagai Medium Pembelajaran Keusahawanan Berasaskan Amali	12.45pm- 1.00pm	https://meet.google.com/kve-pfgx-vfa

BREAK SESSION 1.00PM -2.00PM



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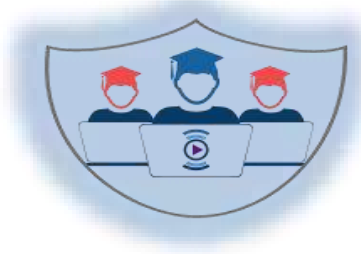
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Presentation Schedule

Session 2

No	Presenter	Title	Time	Link (Google Meet)
4	Aaron	Bridging the Water Literacy Gap: A Digital	2.00pm	https://meet.google.com/kve-pfgx-vfa
	Ismanto Anak Anggang	Approach to Promoting Sustainable Water Behaviour among Malaysian Secondary Students	- 2.15pm	
5	Mazlinda	Kajian Keberkesanan Campuran Bitumen-Getah	2.15pm	https://meet.google.com/kve-pfgx-vfa
	Binti Awang	terhadap Ketahanan dan Rintangan Kegelinciran Turapan Jalan Raya	- 2.30pm	
6	Azreen Binti	Digital Learning Tools And Student Engagement	2.30pm	https://meet.google.com/kve-pfgx-vfa
	Ahmad Tan	In Tvet Education: An Empirical Study At A Community College	- 2.45pm	
7	Norhayati	Kajian Pembangunan Sistem Amaran Halangan	2.45pm	https://meet.google.com/kve-pfgx-vfa
	Binti Md Sharif	Berasaskan Sensor Ultrasonik bagi menyokong Mobiliti Individu OKU Penglihatan	- 3.00pm	
8	Syaiful	Deep Learning-Based Structural Monitoring of Oil	3.00pm	https://meet.google.com/kve-pfgx-vfa
	Bachtiar Bin Nen	Palm Inflorescences for Early-Stage Pollination Assessment Using UAV Imagery	- 3.15pm	
9	Mazlinda	Kajian Keberkesanan Urea Formaldehyde dalam	3.15pm	https://meet.google.com/kve-pfgx-vfa
	Binti Awang	Meningkatkan Ketahanan Siling Kapur	- 3.30pm	
10	Emy	Digitalizing Institutional Quality Assurance: An	3.30pm	https://meet.google.com/kve-pfgx-vfa
	Zulyiana Binti Mohd Nor	Empirical Study on the Effectiveness of the Q-CORE Platform in a TVET Environment	- 3.45pm	
11	Nur Zahirah	Faktor Tekanan Dalam Kalangan Pelajar Kolej	3.45pm	https://meet.google.com/kve-pfgx-vfa
	Ahmad Razei	Komuniti Kota Tinggi	- 4.00pm	



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12	Sofiah Binti Bakar	Sokongan Sosial Sebagai Faktor Pelindung	4.00pm	https://meet.
		Kesihatan Mental Pelajar Tvet: Analisis Tahap	-	google.com/
		Sokongan Dan Hubungannya Dengan Kemurungan	4.15pm	kve-pfgx-vfa
13	Nurul Dayana Binti Mohd Dazid	The Effectiveness of Using BMCExpert on	4.15pm	https://meet.
		Computational Thinking among Students of the	-	google.com/
		DFT30033 Cyberpreneurship Course	4.30pm	kve-pfgx-vfa

Moderator - Photo Session

Followed by session conclusion and closing remarks.

No Child Left Behind? From Policy to Practice: Exploring Inclusive Education through Malaysia's Zero Reject Initiative.

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Abstract

This qualitative study examines how Malaysia's Zero Reject Policy (ZRP) is experienced by stakeholders navigating inclusive education in diverse school contexts. Anchored in the broader theme of inclusive and holistic education, the research investigates the lived experiences of parents of children with disabilities (n=12), educators (n=14), and school administrators (n=6) across urban and rural settings through semi-structured interviews analysed using reflexive thematic analysis. Findings reveal a significant policy-practice gap: while ZRP has increased formal enrolment and heightened awareness of inclusive education, substantial challenges persist in teacher preparedness, resource allocation, and systemic support, with many schools exhibiting patterns of "compliance inclusion" where students with disabilities are physically present but lack meaningful accommodations, responsive pedagogy, and affirming relationships. The study highlights the emotional burden families experience when navigating bureaucratic barriers and social stigma, while also identifying promising practices in collaborative school cultures and peer support strategies. By situating the Zero Reject Policy within global discourses on educational equity and disability rights, this research contributes empirically grounded insights into the complex realities of translating inclusive education policy into practice, underscoring the need for sustained professional development, strengthened family-school partnerships, and systemic approaches that prioritise not only physical access but also belonging, participation, and holistic well-being for all learners.

Keywords: *Inclusive education; Zero Reject Policy; Educational equity; Disability inclusion; Malaysia*

Integrating PLC-Based Automated Beverage Dispensing Systems into Engineering Education: A Sustainable and Hygienic Approach to Service Optimization

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Abstract

This paper presents the design and implementation of a PLC-based automated beverage dispensing system featuring a conveyor mechanism and dual proximity sensors to optimize service efficiency, dispensing accuracy, and hygiene management. The conveyor transports cups through the dispensing station, while the proximity sensors detect cup position and presence, enabling precise timing control for beverage filling. The PLC coordinates sensor inputs and actuator outputs to automate the process, ensuring consistent portion sizes and minimizing spillage or waste. Importantly, the system incorporates cleanliness objectives by minimizing direct human contact with beverages and cups, reducing contamination risks and maintaining sanitary conditions throughout operation. This integration of automation and hygiene control enhances operational flow, reliability and repeatability, making it ideal for high-volume beverage service in events and commercial settings. The modular design supports customization and scalability, contributing to improved user experience, operational efficiency, and food safety compliance.

Keywords: PLC-based automated beverage dispensing

Teaching and Delivery Methods in Computer Science Higher Education (2020–2025): A Systematic Review

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Abstract

This article presents a systematic review of teaching and delivery methods in university-level computer science education in recent years. Following the PRISMA methodology, 113 articles were initially identified for abstract screening; irrelevant studies were excluded, and full-text reviews were conducted on the remaining articles. Studies not aligned with the scope of this review were further eliminated. By synthesizing evidence from 11 core studies, the review identifies a significant transition from traditional lectures toward interactive, student-centered approaches such as blended learning, project-based learning (PjBL), and flipped classrooms. The findings indicate that these methods effectively enhance student engagement, academic performance, and the development of transferable soft skills, although significant gaps remain regarding standardized assessment and instructor support. This review contributes by providing a consolidated understanding of current methods and offering directions for future research, ultimately supporting the advancement of computer science education.

Keywords : *Blended and Project-Based Learning; Behavior-Driven Development; Computer Science higher education; Teaching and Delivery Methods*

Students Awareness of the ACCA – KPT Industry Accreditation Program at Politeknik Ungku Omar

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Abstract

The Malaysian Ministry of Higher Education (MOHE) has introduced the *Program Tauliah Industri & Profesional* (KPTiP) to enhance TVET graduate employability through professional certifications. At Politeknik Ungku Omar (PUO), this initiative is realized through the ACCA-KPT Industry Accreditation Program. However, the success of such initiatives depends heavily on student awareness and their perception of the program's value. This study investigates the level of awareness, perceived benefits, and barriers regarding the KPTiP-ACCA accreditation offerings among Commerce Department students at PUO, and examines the relationship between these factors and the students' intention to enrol. Adopting a quantitative cross-sectional design, data was collected via a self-administered questionnaire from 55 Diploma in Accounting students. Descriptive analysis was performed to evaluate awareness levels, sources of information, and enrolment intentions. The findings reveal a high level of program awareness (Mean=4.45) and a strong understanding of institutional links with ACCA (Mean=4.47). Academic staff (lecturers) were identified as the primary source of information (85%). Students perceived high value in the accreditation for employability (Mean=4.55) and international recognition (Mean=4.65). However, financial constraints were identified as the primary barrier (Mean=3.35). The study concludes that while the institutional dissemination strategy is effective, uptake could be further improved by addressing financial concerns. These insights offer specific guidance for PUO administrators to refine the implementation of professional accreditation pathways.

Keywords: ACCA, Employability, KPTiP, Students Awareness, TVET

Strengthening Teaching Innovation through Digital Preparedness: Evidence from Malaysian Polytechnics and Community Colleges

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Abstract

Digital innovation has become increasingly important in higher education, particularly within Technical and Vocational Education and Training (TVET) institutions where lecturers are expected to integrate digital tools into more flexible and innovative teaching practices. However, the extent to which lecturers' digital preparedness contributes to pedagogical innovation remains insufficiently understood in the Malaysian TVET context. This study examines the role of digital preparedness in strengthening teaching innovation among lecturers in Malaysian polytechnics and community colleges. A quantitative cross-sectional survey was conducted involving 200 lecturers selected through purposive sampling, and the data were analysed using descriptive statistics, Pearson correlation, and simple linear regression with IBM SPSS Version 26. The findings show that lecturers demonstrate a moderate-to-high level of digital preparedness ($M = 3.65$, $SD = 0.50$), while pedagogical innovation remains at a moderate level ($M = 3.45$, $SD = 0.52$). The results further indicate a significant positive relationship between digital preparedness and pedagogical innovation ($r = 0.377$, $p < 0.01$), with digital preparedness explaining 14.2% of the variance in innovative teaching practices ($R^2 = 0.142$). These findings suggest that digital preparedness is an important enabler of teaching innovation, but sustained pedagogical change also requires institutional support, continuous professional development, and structured capacity-building initiatives in Malaysian TVET institutions.

Keywords: *Digital preparedness; Innovative teaching practices; Pedagogical innovation; TVET institutions; Polytechnic and community colleges*

Physicochemical Properties and Sensory Evaluation of Mayonnaise Using Soursop Vinegar

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Abstract

The quality and acceptability of mayonnaise are greatly influenced by the type of acidifying agent used in its formulation. The use of natural fruit vinegar in mayonnaise has recently gained attention due to its functional properties and consumer preference for natural ingredients. Therefore, this study aimed to evaluate the feasibility of using soursop vinegar (*Annona muricata*) as a natural alternative to synthetic vinegar in mayonnaise production by assessing its physicochemical properties and sensory acceptance. Three mayonnaise formulations were prepared using different types and concentrations of vinegar, namely synthetic vinegar, soursop vinegar, and soursop vinegar with added soursop essence. Physicochemical analyses included pH and viscosity measurements, while sensory evaluation was conducted through hedonic and scoring tests involving 30 semi-trained panellists from the Department of Food Technology, Politeknik Sultan Haji Ahmad Shah, Pahang. Data were analysed using one-way ANOVA to determine significant differences among formulations. The results indicated that all mayonnaise samples exhibited a safe acidic pH range between 3.6 and 3.8, comparable to commercial mayonnaise products. Viscosity analysis showed acceptable textural characteristics, particularly for formulations containing soursop vinegar. Sensory evaluation demonstrated that the formulation incorporating soursop vinegar with soursop essence achieved the highest overall acceptability, with significantly higher scores for aroma, taste, and texture ($p < 0.05$). In conclusion, soursop vinegar can be successfully utilised as a natural acidifying agent in mayonnaise formulation, maintaining desirable physicochemical qualities while enhancing sensory appeal. This study highlights the potential of soursop vinegar as a functional and healthier alternative to synthetic vinegar in mayonnaise production

Keywords : *mayonnaise, soursop vinegar, natural alternative*

Teacher Readiness and Challenges in Implementing Early Career Transition Programmes for Primary School Students with Special Educational Needs

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Abstract

The Career Transition Program (CTP) for Students with Special Educational Needs at the primary school level is a crucial step in developing self-awareness, social skills, and foundational career skills from the early stages of education. However, the implementation of CTP in primary schools remains limited, relying on teacher initiative and inconsistent systemic support. This study examines teacher readiness and the challenges in implementing the Early Career Transition Program (CTP) for primary school students with Special Educational Needs (SEN), an area that remains underexplored despite its importance in fostering early career awareness and life skills, with a focus on teachers' level of readiness, identifying implementation challenges, and exploring the roles of parental support and industry collaboration. A qualitative case study approach was employed, involving five special education teachers selected through purposive sampling. Data were collected through semi-structured interviews and analysed using thematic analysis. The findings reveal that while teachers demonstrate positive attitudes towards CTP, their knowledge and practical skills are moderate, particularly due to limited training and a lack of structured guidelines. Key challenges include time constraints, heavy workload, and insufficient teaching modules, while parental involvement and industry collaboration remain minimal, resulting in activities that are predominantly simulation-based. The study highlights that effective early CTP implementation requires integrated support from teachers, schools, parents, and policymakers. It concludes by recommending targeted teacher training, the development of appropriate CTP modules, and the gradual integration of career transition elements into the curriculum and Individual Education Plans (IEPs) to enhance early career development among SEN students.

Keywords: *Career Transition Program; Primary Education; Special Educational Needs; Teacher Readiness; Implementation Challenges*

Teacher Participation in Decision-Making and Its Influence on Professional Learning Communities in Malaysian Schools

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Abstract

Professional Learning Communities (PLCs) are recognized as structured collaborative groups that enable teachers to enhance their competencies through continuous and systematic learning activities and contribute to school improvement. However, the effective implementation of PLCs in Malaysian schools remains challenging due to issues such as heavy teacher workload, limited institutional support, and lack of shared understanding. These challenges highlight the need for stronger organizational mechanisms, particularly teacher participation in decision-making. Therefore, this study investigates the influence of teacher participation in decision-making on PLCs. A quantitative cross-sectional survey design was employed, involving 284 secondary school teachers in Penang selected through simple random sampling. Data were analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings reveal that teacher participation in decision-making has a significant positive influence on PLCs. This study provides empirical evidence that inclusive decision-making practices strengthen collaborative professional cultures and enhance the sustainability of PLCs implementation in Malaysian schools.

Keywords: *Partial least squares structural equation modelling (PLS-SEM); Professional learning communities; Teacher participation in decision-making*

Tahap Pengetahuan Pelajar Jabatan Perdagangan Politeknik Kuching Sarawak Terhadap Penggunaan Kecerdasan Buatan (*Artificial Intelligence*) Dalam Membantu Proses Pembelajaran

Nur Azreen binti Zaidel¹, Siti Adawiyah binti Abdullah², Nurfaizlyn binti Dolhan³

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² Politeknik Kuala Terengganu
E-mail: wada_wiya@pkt.edu.my

Abstrak

Kajian ini bertujuan mengenal pasti tahap pengetahuan pelajar Jabatan Perdagangan Politeknik Kuching Sarawak terhadap penggunaan kecerdasan buatan (AI) dalam pembelajaran, selaras dengan perkembangan teknologi yang semakin pesat dan berperanan meningkatkan kecekapan serta memperkaya pengalaman pendidikan yang lebih adaptif dan berpersonal. Walaupun AI tidak dapat menggantikan peranan guru, teknologi ini berpotensi menyokong pendidik dalam menyediakan bahan pengajaran yang lebih efisien serta membantu pelajar mengoptimumkan pembelajaran mengikut gaya dan tahap kefahaman masing-masing. Kajian ini menggunakan pendekatan kuantitatif melalui instrumen soal selidik yang diedarkan secara talian kepada sampel pelajar diploma Jabatan Perdagangan menggunakan teknik pensampelan rawak. Data yang diperoleh dianalisis secara deskriptif bagi menilai tahap pengetahuan pelajar terhadap penggunaan AI. Dapatan kajian menunjukkan bahawa tahap pengetahuan pelajar berada pada tahap sederhana, menandakan mereka mempunyai pemahaman yang agak baik serta sikap yang positif terhadap teknologi ini, namun masih terdapat ruang untuk penambahbaikan. Kesimpulannya, kajian ini memberi implikasi penting dalam merangka kurikulum yang lebih komprehensif serta membantu pembuat dasar pendidikan dalam merancang inisiatif yang lebih efektif bagi mengintegrasikan AI dalam pengajaran dan pembelajaran.

Kata kunci: AI; kecerdasan buatan; pembelajaran; tahap pengetahuan

Abstract

This study aims to identify the level of knowledge among students of the Commerce Department at Politeknik Kuching Sarawak regarding the use of artificial intelligence (AI) in learning, in line with the rapid development of technology that enhances efficiency and enriches more adaptive and personalized educational experiences. Although AI cannot replace the role of teachers, it has the potential to support educators in delivering more efficient teaching materials and assist students in optimizing their learning according to their individual learning styles and levels of understanding. This study adopts a quantitative approach using a questionnaire instrument distributed online to a sample of diploma students from the Commerce Department through random sampling techniques. The data obtained were analysed descriptively to assess the students' level of knowledge regarding the use of AI. The findings indicate that the students' level of knowledge is at a moderate level, suggesting that they possess a good understanding and a positive attitude towards this technology, although there is still room for improvement. In conclusion, this study provides important implications for designing a more comprehensive curriculum and assists policymakers in planning more effective initiatives to integrate AI into teaching and learning.

Keywords: AI; artificial intelligence; learning; level of knowledge

Keberkesanan Laman Sesawang *MyHydrology* dalam Pengajaran dan Pembelajaran Kursus DCC50212 *Hydrology*

Nor Afzan binti Ariffin¹

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Abstract

This study evaluates the effectiveness of the MyHydrology website as a digital learning platform for the DCC50212 Hydrology course. MyHydrology was developed as a one-stop center providing comprehensive sets of practice questions with answers, aiming to support Teaching and Learning (T&L) in an interactive and flexible manner across the five main topics of the course. A descriptive quantitative approach was employed, involving 56 fifth-semester students selected based on the Krejcie and Morgan table. Data were collected through a four-point Likert scale questionnaire and the achievement of Course Learning Outcome (CLO) 1. The findings indicate that the website design was very well received by students, with mean scores ranging from 3.93 to 4.00, while the usability aspect recorded an average score of 3.98, reflecting high levels of accessibility, usability, and content effectiveness. Analysis of CLO 1 achievement showed a significant improvement after using MyHydrology, with Group Attainment (%) data recorded at 69.8% in Session 1: 2024/2025 and declining to 63.7% in Session 2: 2024/2025 before the implementation of this innovation. After its use in Session 1: 2025/2026, achievement increased to 73.7%, indicating a positive impact on students' understanding and performance. In conclusion, MyHydrology has proven to be an effective, interactive, and innovative digital learning platform that enhances motivation, comprehension, and academic achievement, with potential for broader application in other technical courses to support more effective and modern T&L.

Keywords: *MyHydrology, Hydrology, Teaching and Learning, Digital Learning, Course Learning Outcome*

Abstrak

Kajian ini menilai keberkesanan laman sesawang MyHydrology sebagai platform pembelajaran digital bagi kursus DCC50212 Hydrology. MyHydrology dibangunkan sebagai pusat sehenti yang menyediakan set soalan latihan lengkap berserta jawapan, bertujuan menyokong Pengajaran dan Pembelajaran (PdP) secara interaktif dan fleksibel bagi lima topik utama kursus ini. Pendekatan kuantitatif deskriptif digunakan, melibatkan 56 pelajar Semester 5 yang dipilih berdasarkan jadual Krejcie dan Morgan. Data dikumpul melalui soal selidik skala Likert empat mata serta pencapaian Course Learning Outcome (CLO) 1. Hasil kajian menunjukkan reka bentuk laman sesawang diterima dengan sangat baik oleh pelajar, dengan skor min 3.93 hingga 4.00, manakala aspek penggunaan mencatat purata skor 3.98, menunjukkan tahap kebolegunaan, aksesibiliti, dan keberkesanan kandungan yang tinggi. Analisis pencapaian CLO 1 memperlihatkan peningkatan ketara selepas penggunaan MyHydrology, dengan data Group Attainment (%) merekodkan 69.8% pada Sesi 1: 2024/2025 dan menurun kepada 63.7% pada Sesi 2: 2024/2025 sebelum inovasi ini diperkenalkan. Selepas penggunaan pada Sesi 1: 2025/2026, pencapaian meningkat kepada 73.7%, menandakan impak positif terhadap kefahaman dan prestasi pelajar. Kesimpulannya, MyHydrology terbukti sebagai platform pembelajaran digital yang efektif, interaktif, dan inovatif, meningkatkan motivasi, kefahaman, serta pencapaian akademik, dengan potensi diperluaskan kepada kursus teknikal lain untuk menyokong PdP yang lebih berkesan dan moden.

Kata Kunci: MyHydrology, Hidrologi, Pengajaran dan Pembelajaran (PdP), Pembelajaran Digital, Course Learning Outcome

Efikasi Kendiri Guru Sebagai Peramal Kepuasan Kerja di Sekolah Rendah Luar Bandar: Keningau, Sabah

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Abstrak

Kepuasan kerja guru merupakan elemen kritikal dalam menentukan keberkesanan pengajaran dan kelestarian profesion perguruan, khususnya di sekolah rendah luar bandar yang berhadapan dengan kekangan sumber dan sokongan profesional. Berasaskan Teori Kognitif Sosial Bandura, kajian ini bertujuan meneliti efikasi sendiri guru sebagai peramal kepada kepuasan kerja dalam konteks sekolah rendah luar bandar di daerah Keningau, Sabah. Kajian ini menggunakan pendekatan kuantitatif dengan reka bentuk tinjauan melibatkan sampel guru sekolah rendah luar bandar, di mana data dianalisis menggunakan analisis deskriptif dan inferensi seperti korelasi dan regresi bagi menentukan hubungan dan sumbangan efikasi sendiri terhadap kepuasan kerja. Efikasi sendiri guru diukur melalui tiga dimensi utama iaitu efikasi pengajaran, pengurusan bilik darjah dan penglibatan murid. Dapatan kajian menunjukkan bahawa efikasi sendiri guru mempunyai hubungan yang signifikan dan berperanan sebagai peramal utama kepada kepuasan kerja guru. Kesimpulannya, efikasi sendiri merupakan mekanisme psikologi penting yang dapat meningkatkan kesejahteraan dan kepuasan kerja guru, justeru implikasi kajian menekankan kepentingan sokongan kepimpinan sekolah dan pembangunan profesional berterusan dalam memperkukuh efikasi sendiri guru di sekolah luar bandar.

Abstract

Teacher job satisfaction is a critical element in determining the effectiveness of teaching and the sustainability of the teaching profession, especially in rural primary schools that face resource constraints and professional support. Based on Bandura's Social Cognitive Theory, this study aims to examine teacher self-efficacy as a predictor of job satisfaction in the context of rural primary schools in the Keningau district, Sabah. This study uses a quantitative approach with a survey design involving a sample of rural primary school teachers, where the data is analyzed using descriptive and inferential analysis such as correlation and regression to determine the relationship and contribution of self-efficacy to job satisfaction. Teacher self-efficacy is measured through three main dimensions, namely teaching efficacy, classroom management and student engagement. The study findings show that teacher self-efficacy has a significant relationship and serves as a main predictor of teacher job satisfaction. In conclusion, self-efficacy is an important psychological mechanism that can improve teachers' well-being and job satisfaction, thus the implications of the study emphasize the importance of school leadership support and continuous professional development in strengthening teacher self-efficacy in rural schools.

Kata kunci: efikasi sendiri guru, kepuasan kerja, sekolah rendah luar bandar, Keningau, Sabah

Penggunaan *Still Air Box* Melalui *PlantClone Edu Kit* dalam Pelaksanaan Amali Pensterilan Kultur Tisu Tumbuhan

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Abstrak

Pelaksanaan amali kultur tisru tumbuhan di institusi Pendidikan dan Latihan Teknikal dan Vokasional (TVET) sering terbatas disebabkan kos peralatan yang tinggi serta keperluan fasiliti makmal yang sofistikated. Kajian ini bertujuan menilai keberkesanan penggunaan *Still Air Box* (SAB) melalui *PlantClone Edu Kit* sebagai alternatif ruang kerja aseptik kos rendah bagi proses pensterilan eksplan. Kajian ini menggunakan reka bentuk eksperimental berskala kecil yang melibatkan pelajar Kolej Komuniti Rembau, di mana aktiviti pensterilan dan inokulasi dilaksanakan berdasarkan Prosedur Operasi Standard (SOP) yang ditetapkan. Keberkesanan SAB dianalisis menggunakan analisis statistik deskriptif melalui pemerhatian kadar kontaminasi kultur pada hari ke-3, ke-5 dan ke-7 selepas inokulasi. Dapatan menunjukkan min kadar kontaminasi berjaya dikawal di bawah 20%, sekali gus membuktikan bahawa SAB mampu menyokong pelaksanaan proses pensterilan secara terkawal walaupun dalam persekitaran makmal yang terhad. Selain itu, maklum balas pelajar melalui analisis tematik menunjukkan bahawa SOP yang dibangunkan adalah mudah difahami, membantu meningkatkan kefahaman terhadap proses pensterilan serta meningkatkan keyakinan dalam mengendalikan eksplan secara sendiri. Secara keseluruhannya, kajian ini menunjukkan bahawa penggunaan SAB melalui *PlantClone Edu Kit* berpotensi sebagai pendekatan praktikal dan kos rendah dalam menyokong pelaksanaan latihan amali pensterilan kultur tisru tumbuhan di institusi TVET yang berhadapan dengan kekangan fasiliti makmal.

Kata kunci: Amali kultur tisru tumbuhan; Institusi TVET; Kekangan makmal; Pensterilan eksplan; Still air box; Teknik aseptik

Abstract

The implementation of plant tissue culture practical sessions in Technical and Vocational Education and Training (TVET) institutions is often limited by high equipment costs and the requirement for sophisticated laboratory facilities. This study aims to evaluate the effectiveness of the Still Air Box (SAB) through the PlantClone Edu Kit as a low-cost alternative aseptic workspace for the explant sterilization process. Utilizing a small-scale experimental design involving students from Kolej Komuniti Rembau, sterilization and inoculation activities were conducted based on established Standard Operating Procedures (SOP). The effectiveness of the SAB was analyzed using descriptive statistical analysis through observations of culture contamination rates on days 3, 5, and 7 post-inoculations. Findings indicated that the mean contamination rate was successfully controlled below 20%, proving that the SAB is capable of supporting controlled sterilization processes even within limited laboratory environments. Furthermore, student feedback via thematic analysis showed that the developed SOP was easy to understand, improved their comprehension of the sterilization process, and increased their confidence in handling explants independently. Overall, this study demonstrates that the use of the SAB through the PlantClone Edu Kit has potential as a practical and low-cost approach to support plant tissue culture sterilization training in TVET institutions facing laboratory facility constraints.

Keywords: *Explant sterilization; Plant tissue culture; Still air box; Technical and vocational education and training (TVET); Aseptic technique; Laboratory constraints*

Kajian Ciri Apron Bagi Kanak-Kanak Tabika Perpaduan Di Daerah Rembau: Elemen Reka Bentuk, Bahan Sesuai dan Fungsi Nilai Tambah Dalam Aktiviti Seni

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Abstrak

Kajian ini dijalankan bagi menganalisis ciri-ciri apron yang sesuai digunakan oleh kanak-kanak Tabika Perpaduan di sekitar daerah Rembau semasa menjalankan aktiviti seni seperti mewarna dan melukis. Objektif utama kajian adalah untuk mengenal pasti elemen reka bentuk, bahan yang sesuai, serta fungsi tambahan yang boleh dijadikan nilai tambah pada apron untuk meningkatkan keberkesanan penggunaannya. Pendekatan kuantitatif telah digunakan dalam kajian ini, di mana soal selidik berasaskan Google Form telah diedarkan kepada guru-guru Tabika serta ibu bapa yang terlibat secara langsung dalam pemantauan aktiviti anak-anak. Dapatan kajian menunjukkan bahawa apron yang diperbuat daripada bahan fabrik kalis air, mudah dicuci, tali pengikat mudah laras dan mempunyai poket tambahan sangat digemari oleh responden. Selain itu, fungsi tambahan sepertimudah disimpan apabila tidak digunakan dan boleh dijadikan beg untuk menyimpan alat lukisan dilihat sebagai nilai tambah yang praktikal. Kajian ini diharapkan dapat menjadi asas kepada pembangunan reka bentuk apron inovatif yang bukan sahaja berfungsi sebagai pelindung pakaian, malah menyokong keperluan aktiviti seni kanak-kanak secara menyeluruh.

Kata kunci: *Apron, Tabika Perpaduan, reka bentuk, aktiviti seni*

Abstract

This study was conducted to analyze the characteristics of aprons suitable for use by children in Tabika Perpaduan (Unity Kindergarten) around the Rembau district during art activities such as coloring and drawing. The main objective of the study was to identify design elements, appropriate materials, and additional functions that could add value to the apron in order to enhance its effectiveness. A quantitative approach was employed in this study, where a questionnaire based on Google Forms was distributed to Tabika teachers and parents who are directly involved in monitoring the children's activities. The findings of the study revealed that aprons made from waterproof fabric, easy to clean, with adjustable straps and additional pockets, were highly favored by the respondents. In addition, extra features such as being easy to store when not in use and being convertible into a bag for storing art tools were seen as practical value-added elements. This study is expected to serve as a foundation for the development of an innovative apron design that not only functions as clothing protection but also supports the overall needs of children's art activities.

Keywords: *Apron, Tabika Perpaduan, design, art activities*

Eco-GC-Bin: A Community-Based Composting Solution for Food Waste Management in Merlimau Permai

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Abstract

Food waste is an increasingly serious environmental issue in Malaysia, contributing approximately 30–35% of municipal solid waste disposed of in landfills. Anaerobic decomposition of food waste produces methane, a greenhouse gas that exacerbates global warming and climate change. Although 3R (Reduce, Reuse, Recycle) campaigns have been implemented, their effectiveness remains limited due to infrastructure constraints, unsuitable equipment, and low practicality at the household level. Composting is therefore considered a more effective alternative, as it can be carried out at household and community levels using simple, low-cost methods. This study aimed to design and develop the Eco GC Bin, a community-based food waste composting bin, and assess residents' awareness and acceptance of food waste management in Merlimau Permai. A quantitative research approach was employed using a structured questionnaire based on a five-point Likert scale, involving 97 respondents selected using the Krejcie and Morgan sampling method. The data were analysed using descriptive statistics particularly mean score analysis to determine awareness and acceptance levels. The data were analysed using SPSS version 26. Results showed low initial awareness (mean scores 1.06–2.53) but very high acceptance of the Eco GC Bin (overall mean = 4.39), including effectiveness (4.40), fertilizer production (4.48) design suitability (4.38) and product has potential to market with mean value very high (4.48). The Eco GC Bin demonstrates potential to reduce greenhouse gas emissions, enhance community awareness, and provide added value through compost production, aligning with SDGs 1,3 and 11.

Keyword : *Food waste management, community composting, compost bin*

Pengaruh Xenoglossofobia Terhadap Keberkesanan Pembelajaran Bahasa Inggeris dalam Kalangan Pelajar Politeknik Sultan Idris Shah

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Abstract

This study aims to investigate the influence of xenoglossophobia the anxiety associated with foreign language use on the effectiveness of English language learning among polytechnic students. The primary objectives include measuring the levels of xenoglossophobia and evaluating its impact on students' motivation and academic performance. Utilizing a descriptive quantitative research design through a cross-sectional survey, a sample of 224 diploma students (Semester 1 to Semester 3) was selected from a population of 426 based on the Krejcie and Morgan table. The research instrument consisted of a five-point Likert scale questionnaire covering xenoglossophobia, motivation and performance constructs, demonstrating high reliability with Cronbach's Alpha values ranging (α from 0.907 to 0.929). Data were analyzed descriptively and inferentially using SPSS version 26.0 via Spearman correlation analysis. The findings indicate that xenoglossophobia is at a moderate level (mean = 3.12, SD = 0.95). Correlation analysis revealed a significant negative relationship between xenoglossophobia and motivation ($r = -0.264, p < 0.01$), as well as between xenoglossophobia and learning performance ($r = -0.390, p < 0.01$). Conversely, motivation showed a strong positive correlation with performance ($r = 0.621, p < 0.01$). In conclusion, higher levels of xenoglossophobia tend to decrease student motivation and academic achievement, suggesting that emotional and psychological aspects must be integrated into pedagogical planning to create a more conducive and supportive second language learning environment.

Keywords : *Xenoglossophobia; Language Anxiety; Learning Motivation; Academic Performance; English Language Learning.*

Abstrak

Kajian ini dijalankan untuk mengkaji pengaruh xenoglossofobia, iaitu kebimbangan terhadap penggunaan bahasa asing, terhadap keberkesanan pembelajaran Bahasa Inggeris dalam kalangan pelajar politeknik. Fokus utama kajian merangkumi pengukuran tahap xenoglossofobia serta penilaian impaknya terhadap motivasi dan prestasi pembelajaran pelajar. Dengan menggunakan reka bentuk kuantitatif deskriptif menerusi tinjauan merentas, seramai 224 pelajar diploma (Semester 1 hingga Semester 3) telah dipilih sebagai sampel daripada populasi 426 orang berdasarkan jadual Krejcie dan Morgan. Instrumen kajian melibatkan soal selidik skala Likert lima mata yang merangkumi konstruk xenoglossofobia, motivasi dan prestasi dengan nilai kebolehpercayaan Cronbach's Alpha yang tinggi (α antara 0.907 hingga 0.929). Data dianalisis secara deskriptif dan inferensi menggunakan perisian SPSS versi 26.0 melalui ujian korelasi Spearman. Dapatan kajian menunjukkan xenoglossofobia berada pada tahap sederhana (min = 3.12, SP = 0.95). Analisis korelasi mendedahkan wujudnya hubungan negatif yang signifikan antara xenoglossofobia dengan motivasi ($r = -0.264, p < 0.01$) serta prestasi pembelajaran ($r = -0.390, p < 0.01$). Sebaliknya, motivasi menunjukkan hubungan positif yang kuat dengan prestasi ($r = 0.621, p < 0.01$). Secara keseluruhannya, peningkatan xenoglossofobia terbukti menurunkan motivasi dan prestasi akademik pelajar, sekali gus memberi implikasi bahawa aspek emosi dan psikologi perlu diintegrasikan dalam perancangan pedagogi bagi mewujudkan persekitaran pembelajaran bahasa kedua yang lebih kondusif dan menyokong.

Kata kunci : *xenoglossofobia; kebimbangan Bahasa; motivasi pembelajaran; prestasi akademik; pembelajaran bahasa inggeris.*

Zero-Waste Transformation: Functional Herbal Tea from Dragon Fruit Peel

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Abstract

Food waste, such as fruit peels, is often discarded despite its nutritional potential. The study contributes to reducing food waste and aligns with the Sustainable Development Goals, particularly Zero Hunger and Good Health and Well-being. While tea is known for its health benefits, excessive consumption of traditional tea, which contains caffeine and additives, may cause side effects such as iron deficiency and insomnia. The objectives for this study are to develop a unique tea formulation using dragon fruit peel, evaluate its nutritional composition, and assess its acceptance among the Merlimau, Melaka community. The methodology involves cleaning, drying, grinding and blending dragon fruit peel with cinnamon. An organoleptic evaluation was conducted with 30 respondents, who rated taste, smell, texture, and colour using a 5-point Hedonic scale. Results showed an overall acceptance mean score of 3.93, with mean scores of 4.20 for texture, 3.27 for smell, 4.60 for colour, and 3.43 for taste. The nutritional analysis indicated that the dry tea blend contains, per 100 g, 0.7 g of crude protein, 80.5 g of carbohydrates, 0.4 g of fat, and 328 kcal of energy. However, the actual caloric intake from the brewed beverage is significantly lower. This study demonstrates a practical method for upcycling food waste into plant-based products with strong nutritional and commercial potential. In conclusion, the study supports sustainable practices and shows a high potential for commercialization of beverages as a nutritious, locally produced, and eco-friendly beverage.

Keywords: *dragon fruit peel, food waste, tea, organoleptic*

Analisis Kefahaman dan Penerimaan Pelajar Semester Satu Politeknik Kota Kinabalu terhadap Penggunaan AI dalam Kejuruteraan Mekanikal

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Abstrak

Kajian ini dijalankan untuk menganalisis tahap kefahaman dan penerimaan pelajar semester satu Jabatan Kejuruteraan Mekanikal, Politeknik Kota Kinabalu terhadap penggunaan teknologi Kecerdasan Buatan (Artificial Intelligence, AI) dalam pengajaran dan pembelajaran. Dengan perkembangan pesat AI dalam era Revolusi Industri 4.0, pelajar kejuruteraan perlu bersedia menghadapi cabaran teknologi semasa dan masa depan. Kajian ini menggunakan pendekatan kuantitatif melalui soal selidik yang melibatkan seramai 235 pelajar semester satu yang dipilih secara rawak, dan data dianalisis menggunakan statistik deskriptif serta inferens melalui SPSS versi 26. Hasil kajian menunjukkan bahawa tahap kefahaman pelajar terhadap AI adalah sederhana tinggi (min = 3.72), manakala tahap penerimaan terhadap penggunaannya dalam pembelajaran adalah tinggi (min = 4.18). Analisis korelasi mendapati terdapat hubungan positif yang signifikan antara kefahaman dan penerimaan pelajar terhadap AI ($r = 0.46$, $p < 0.01$). Secara keseluruhannya, peningkatan kefahaman pelajar berpotensi meningkatkan penerimaan mereka terhadap penggunaan AI dalam pembelajaran kejuruteraan mekanikal, dan dapatan ini diharapkan dapat membantu institusi merancang pendekatan pengajaran yang lebih sistematik melalui integrasi teknologi AI, khususnya bagi pelajar politeknik di peringkat awal.

Kata Kunci: Kecerdasan Buatan (AI), kefahaman pelajar, penerimaan teknologi, kejuruteraan mekanikal, politeknik.

Keberkesanan Pelaksanaan Peningkatan Kualiti Berterusan Terhadap Pencapaian Hasil Pembelajaran Bagi DUF10212 Bahasa Arab 1

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Abstract

This study was conducted to evaluate the effectiveness of Continuous Quality Improvement (CQI) initiatives on the attainment of Course Learning Outcomes (CLO) for the DUF10212 Arabic Language 1 course. Under the Outcome-Based Education (OBE) framework, this course places critical emphasis on the affective domains (A2 and A3), which involve students' ability to respond and interact actively. However, previous CLO attainment was identified as inconsistent, primarily due to "affective barriers" such as a lack of self-confidence and issues regarding student compliance with assessment rubrics. The primary objectives of this study are to analyze the attainment trends of CLO1, CLO2, and CLO3 across four academic sessions (Session II 2023/2024 to Session I 2025/2026) and to identify the impact of the implemented CQI interventions. This study employs a descriptive quantitative design through secondary data analysis of official CLO attainment reports and departmental CQI documents. The population data involves all students enrolled in the course during the study period. Findings indicate a positive and stable attainment trend, with all CLOs consistently remaining above the 85% threshold. Peak attainment was recorded in Session II 2024/2025, with scores exceeding 97% for CLO2, resulting from initiatives such as phased reinforcement exercises and academic mentoring programs. Despite a slight decline in the final session, overall performance is still categorized as highly satisfactory. In conclusion, the integration of systematic CQI interventions, such as rubric standardization and structured academic support, has proven effective in enhancing the quality of student learning. Future research is recommended to explore the use of digital technology and Artificial Intelligence (AI) to sustainably maintain student motivation within the affective domain.

Keywords: Continuous Quality Improvement (CQI); Course Learning Outcomes (CLO); Arabic Language; Affective Domain; Outcome-Based Education (OBE)

Abstrak

Kajian ini dijalankan untuk menilai keberkesanan inisiatif Peningkatan Kualiti Berterusan (CQI) terhadap pencapaian Hasil Pembelajaran Kursus (CLO) bagi kursus DUF10212 Bahasa Arab 1. Di bawah kerangka Pendidikan Berasaskan Hasil (OBE), kursus ini memberikan penekanan kritikal terhadap domain afektif (A2 dan A3) yang melibatkan keupayaan pelajar untuk memberi respon dan berinteraksi secara aktif. Walau bagaimanapun, prestasi pencapaian CLO pada sesi-sesi terdahulu dikenal pasti tidak konsisten, terutamanya disebabkan oleh faktor "halangan afektif" seperti kurang keyakinan diri serta isu ketidakpatuhan pelajar terhadap rubrik penilaian. Objektif utama kajian adalah untuk menganalisis trend pencapaian CLO1, CLO2 dan CLO3 merentasi empat sesi pengajian (Sesi II 2023/2024 hingga Sesi I 2025/2026) serta mengenal pasti impak intervensi CQI yang telah dilaksanakan. Kajian ini menggunakan reka bentuk kuantitatif deskriptif melalui analisis data sekunder ke atas laporan rasmi pencapaian CLO dan dokumen CQI jabatan. Data populasi melibatkan keseluruhan pelajar yang mendaftar kursus tersebut dalam tempoh kajian. Dapatan kajian menunjukkan trend pencapaian yang positif dan stabil, di mana kesemua CLO kekal berada di atas paras 85%. Pencapaian kemuncak direkodkan pada Sesi II 2024/2025 dengan skor melebihi 97% bagi kategori CLO2, hasil daripada inisiatif penambahan latihan pengukuhan berperingkat dan program bimbingan akademik (*mentoring*). Walaupun terdapat sedikit penurunan pada sesi terakhir, prestasi keseluruhan masih dikategorikan sebagai sangat memuaskan. Kesimpulannya, integrasi intervensi CQI yang sistematik seperti penyeragaman rubrik dan sokongan akademik yang tersusun terbukti berkesan dalam meningkatkan kualiti pembelajaran pelajar. Kajian masa depan dicadangkan untuk menerokai penggunaan teknologi digital dan kecerdasan buatan (AI) bagi mengekalkan motivasi pelajar dalam domain afektif secara lebih mampan.

Kata kunci : Peningkatan Kualiti Berterusan (CQI); Hasil Pembelajaran Kursus (CLO); Bahasa Arab; Domain Afektif; Pendidikan Berasaskan Hasil (OBE)

KAJIAN AWAL KEFAHAMAN PELAJAR UPNM MENGENAI ISU PERCERAIAN DAN SOLUSI BERDASARKAN PERSPEKTIF ISLAM

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Abstrak

Kajian ini bertujuan meneliti kefahaman awal pelajar Universiti Pertahanan Nasional Malaysia (UPNM) terhadap isu perceraian dalam kalangan pasangan Muslim di Malaysia. Kajian ini mengenal pasti faktor konflik rumah tangga serta implikasi perceraian terhadap kesejahteraan sosial dan kestabilan institusi keluarga. Pendekatan campuran digunakan melalui analisis kandungan dan soal selidik dalam talian melibatkan 191 orang pelajar Pegawai Kadet UPNM. Data dianalisis secara deskriptif bagi mendapatkan kekerapan dan peratusan. Dapatan menunjukkan bahawa faktor utama perceraian ialah masalah kewangan, ketidakserasian, keganasan rumah tangga dan komunikasi yang lemah. Perceraian juga memberi kesan terhadap emosi, hubungan sosial dan kestabilan keluarga. Kajian ini menegaskan kepentingan pendedahan awal kepada golongan muda berkaitan pengurusan konflik rumah tangga menurut perspektif Islam bagi membentuk masyarakat yang lebih sejahtera.

Abstract

This study examines the preliminary understanding of Universiti Pertahanan Nasional Malaysia (UPNM) students regarding divorce issues among Muslim couples in Malaysia. The study identifies contributing factors to marital conflict and examines the implications of divorce on social well-being and family stability. A mixed-method approach was employed using content analysis and an online survey involving 191 Officer Cadet students. The data were analysed descriptively to obtain frequencies and percentages. The findings indicate that financial problems, incompatibility, domestic violence, and weak communication are the main contributing factors. Divorce also affects emotional well-being, social relationships, and family stability. The study highlights the importance of early exposure among youth to conflict management from an Islamic perspective.

Keywords : Perceraian; konflik rumah tangga; pelajar UPNM; perspektif Islam; komunikasi; keluarga

HAK-HAK WANITA DALAM PERKAHWINAN: KAJIAN AWAL KEFAHAMAN DALAM KALANGAN PELAJAR UPNM

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Abstrak

Hak wanita dalam perkahwinan Islam merupakan aspek penting dalam memastikan keadilan, kesejahteraan dan keharmonian institusi kekeluargaan. Islam melalui al-Quran, hadis dan perundangan syariah telah memperuntukkan pelbagai hak kepada wanita sebelum, semasa dan selepas perkahwinan. Kajian ini bertujuan mengenal pasti tahap kefahaman pelajar Universiti Pertahanan Nasional Malaysia (UPNM) terhadap hak-hak wanita dalam perkahwinan menurut perspektif syariah. Kajian ini menggunakan pendekatan kuantitatif berbentuk kajian penerokaan melalui pengedaran soal selidik kepada 287 orang pelajar tahun tiga UPNM yang dipilih menggunakan kaedah persampelan rawak mudah. Data dianalisis secara deskriptif bagi mendapatkan kekerapan dan peratusan. Dapatan menunjukkan bahawa tahap kefahaman pelajar berada pada tahap yang baik, namun pelaksanaan hak wanita masih memerlukan penambahbaikan dari segi pendidikan, kesedaran masyarakat dan sokongan institusi.

Abstract

Women's rights in Islamic marriage constitute an essential aspect in ensuring justice, well-being, and harmony within the family institution. Islam, through the Qur'an, hadith, and Shariah law, has established various rights for women before, during, and after marriage. This study aims to identify the level of understanding among Universiti Pertahanan Nasional Malaysia (UPNM) students regarding women's rights in marriage from the Shariah perspective. A quantitative exploratory approach was employed through the distribution of questionnaires to 287 third-year UPNM students selected using simple random sampling. The data were analysed using descriptive analysis to obtain frequencies and percentages. The findings indicate that although students demonstrate a good level of understanding, the implementation of women's rights still requires improvement in terms of education, public awareness, and institutional support

Keywords : *Hak wanita, perkahwinan Islam, syariah, nafkah, mahar, fasakh, Maqasid al-Syariah*

Determinants of Marketing Skill Competency Among SPM Leavers

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Abstract

This paper examines how some of these factors influence marketing skill competency among Malaysian SPM leavers based on the Theory of Planned behaviour (TPB) as the paradigm. The new job market requires a learner the skills of adapting to the digital and competitive economy practiced in Malaysia and as such marketing education should equip students with such skills. Nonetheless, there is very few facts regarding the level of readiness and the levels of skills of SPM leavers prior to commencement of programs in marketing diploma programs. In this work, exposure to marketing knowledge and interest in marketing are considered components of the attitude with the help of TPB, career guidance and social support are the subjective norms, and the digital media experience and self-efficacy. All these play a role in determining the perception of students towards their competency in marketing skills. The type of designed survey was a quantitative one where 319 SPM leavers were considered to complete a structured online survey questionnaire with a five-point Likert scale. Analysis of the data was done through descriptive statistics where frequencies and proportion, average score analysis was done in Microsoft Excel and IBM SPSS. The results indicate that there is a very high awareness regarding marketing as a potential course of study at 98.7%. General levels of exposure, interest, social support, digital media experience, and self-efficacy were also high (M = 3.84, 3.76, 3.72, 3.73 and 3.79 respectively). The perceived marketing skill competency in general was considerable as well (M = 3.72); the basic marketing concepts knowledge (M = 3.65) and the ability to develop simple marketing content (M = 3.63) were moderate. Such findings suggest that although the students have positive attitudes and confidence, they require further training in the foundational skills. The research also provides the local support of the evidence on the program outreach, curriculum, and the design of learning based on the skills of the marketing education.

Keywords : Career Guidance Support; Digital Media Usage; Exposure to Marketing; Interest in Marketing; Self-Efficacy; Skill Competency in Marketing; Theory of Planned Behaviour (TPB)

Perceived Curriculum Market Alignment and Its Impact on Enrolment Intentions: a Case Study of Diploma in Marketing at Kolej Professional MARA Seri Iskandar

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Abstract

Malaysia's higher education landscape is drastically shifting as more SPM graduates choose for immediate employment over traditional academic pathways. Consequently, fewer students are enrolling in Kolej Professional MARA (KPM) Seri Iskandar's Traditional Diploma in Marketing, which raises concerns about the program's perceived attractiveness. Based on the Theory of Planned Behaviour (TPB), this study investigates the perceptual, social, and motivational factors influencing enrolment intentions. A quantitative cross-sectional survey was administered to 339 SPM graduates in the Perak region, and frequency and descriptive statistics were used to analyze the results. The findings point to an important "Awareness-Enrolment Paradox": enrolment does not always follow from prior knowledge of the marketing industry, even though 98% of respondents had such knowledge. Empirical results show that while Enrolment Intentions (IV1) is the strongest asset with a mean score of 4.03 and a frequency of 142.2, Alternative Course Choices and Social Influence (IV3) closely challenge it with a high conviction-level frequency of 129.0 despite a lower mean. The discovery of a 13.2-point "strategic margin" between the program's strongest academic strength and its most formidable social rival is one of the study's main conclusions. These findings imply that targeted digital interventions that address social influence and economic opportunity costs should replace general awareness campaigns in institutional strategy. This study offers policymakers and institutional leaders a quantifiable standard for reviving marketing education at the diploma level in Malaysia.

Keywords: *Enrolment Intention; Intrinsic Motivation and Interest; Perceived Career Sustainability; Perceived Curriculum-Market Alignment; Social Influence of the Gig Economy; Theory of Planned Behaviour*

Behavioral Patterns of SPM Graduates in Choosing a Marketing Diploma: A Comprehensive Analysis of Kolej Profesional MARA Seri Iskandar

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Abstract

The Malaysian marketing and business sectors are currently undergoing a rapid transformation from digital branding and entrepreneurship, which has created a high demand for skilled young professionals. Despite this industry growth, Kolej Profesional MARA Seri Iskandar (KPMSI) faces a persistent challenge where Sijil Pelajaran Malaysia (SPM) graduates are increasingly discarding specialized marketing diplomas in favor of alternative academic paths or direct entry into the labor market. This study aims to investigate the underlying factors contributing to this low enrollment and evaluate how students perceive the program's value. Specifically, the research objectives include examining the influence of career expectations, industry awareness, and personal interests on the decision-making patterns of school leavers. Through an adopted descriptive research design, data was collected through an online survey with 310 respondents from SPM graduates. The results revealed that Family Influence (Mean = 3.77) was the only factor reaching a high level of agreement while other variables remained moderate. This indicated that family validation is the primary driver of student choice. The study concluded that KPMSI must recalibrate its marketing to target the family unit, specifically highlighting the professional security and prestige associated with the CPM (Asia) designation to build parental trust.

Keywords: Behavior of SPM Graduates; Business sector; Diploma in Marketing; Marketing; SPM Graduates

Bridging Digital Inequality: Enhancing Education and Skills to Support SME Growth in the Digital Era

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Abstract

Persistent digital inequities continue to constrain inclusive economic development within Malaysia, with pronounced effects upon small and medium enterprises operating in the food and beverage sector under MARA auspices. In spite of the introduction of several national programs to speed up digital transformation, there exist significant obstacles to full uptake of digital technology by these businesses. These constraints are based on the insufficiency of digital literacy, the lack of technical skills, and the inconsistency of the implementation of digital business practice factors that together weaken organisational ability to develop robust digital customer relationships and provide engaging experiential results in an increasingly competitive marketplace. This study focuses on functionality interoperation of four individual digital capability dimensions namely; personalisation of services, customer feedback, interface and user experience design, and the development of digital marketing strategies. The study concern will be based on their respective efforts towards improving customer interaction modalities and improving the quality of aggregates customer experience. The research also challenges customer interaction as a mediating factor that adds value to the relationship channels between these online projects and experience results. The methodological approach used was quantitative and primary data was gathered on 340 customers of food and beverage SMEs registered by MARA spread everywhere across Malaysia. Data collection was done by means of structured questionnaires. The further analytical procedures were applied using SPSS version 29 including correlation analysis, and multiple regression. The empirical data suggest that the most substantively significant predictors of improved customer interaction and high customer experience are digital marketing policies and UI/UX design. On the other hand, service personalisation and customer feedback integration are still relatively underutilized in the investigated population of SMEs. The results of the analysis also prove that the customer engagement has a statistically significant mediational role in reinforcing digital customer relationships and increasing the quality of customer experience. These empirical results stress the paramount role of further development of educational and skills development programs, with specific focus on digital marketing skills, adoption of electronic commerce and customer engagement strategy planning. These programmatic investments are some of the necessary requirements of alleviating digital inequality, enhancing the competitive positioning of SMEs and the quality of customer experience in the increasingly digitalized economy of Malaysia.

Keywords:

Digital Inequality; Education and Skills Development; Customer Engagement; SME Growth; Digital Transformation

Factors Shaping Students' Interest in Diploma in Marketing Programmes: A Behavioural Perspective

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Abstract

In today's competitive and digital-driven era, marketing education serves a important role in preparing students with skills in social media, analytics, branding, and consumer behaviour. However, the demand for enrolment in the Diploma in Marketing at Kolej Profesional MARA Seri Iskandar has declined for marketing professionals. Guided by the Theory of Planned Behaviour (TPB), this study titled Factors Shaping Students' Interest in Diploma in Marketing Programmes: A Behavioural Perspective aims to examine the factors influencing students' programme interest intention. Specifically, it studies the impact of perceived career opportunities, programme reputation or institutional image, personal interest in marketing subjects, and social elements on enrolment intention. A descriptive quantitative research design was used using a structured 5-point Likert scale questionnaire distributed to 302 respondents through convenience sampling, mainly consisting of SPM leavers and pre-university students. Data were analysed using descriptive statistics, particularly mean scores and frequency analysis, with the assistance of Excel/SPSS. The findings show that perceived career opportunities, programme reputation, and social influence recorded the highest mean score (3.92), while community factors displayed the highest frequency (38.40%), showing their strong influence on students' intention to enroll. The study delivers useful insights for improving recruitment plans and strengthening the durability and competitiveness of the programme.

Keywords:

Diploma in Marketing; Perceived Career Opportunities; Programme Interest Intention; Programme Reputation, Social Influence; Theory of Planned Behaviour (TPB)

Factors of Perception Influencing Low Student Enrollment in The Diploma in Marketing at Kolej Profesional MARA Seri Iskandar (KPMSI)

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Abstract

Declining enrolment in business-related diploma programmes, particularly in marketing, has emerged as a critical concern despite the increasing demand for marketing and digital competencies in today's labour market. This issue is notably evident at Kolej Profesional MARA Seri Iskandar (KPMSI), where the Diploma in Marketing programme continues to experience low student intake among SPM school leavers. This mismatch between industry demand and student enrolment raises important questions about how prospective students perceive marketing education and its value. Therefore, this study aims to examine the influence of students' perceptions on their intention to enrol in the Diploma in Marketing, guided by the Theory of Planned Behaviour. Specifically, the study investigates four key perceptual factors: perceived job market alignment, perceived skill relevance, perceived credential value, and perceived fairness of assessment. These factors are hypothesised to play a significant role in shaping students' attitudes and behavioural intentions towards selecting the programme. A quantitative research design was employed, using a structured survey distributed to 300 SPM school leavers to ensure data reliability and generalisability. Responses were measured using a five-point Likert scale to capture the degree of agreement on each construct. By providing empirical evidence on how these perceptions influence decision-making, this study offers meaningful insights into the underlying reasons behind low enrolment in marketing programmes. The findings are expected to support education providers in developing more targeted and student-centred strategies, including improving curriculum relevance, enhancing assessment transparency, and strengthening programme positioning in alignment with industry needs. Ultimately, this study contributes to bridging the gap between educational offerings and labour market expectations, while also providing practical implications for increasing student enrolment in the Diploma in Marketing programme and strengthening the future pipeline of marketing professionals.

Keywords : *Diploma in Marketing; Job market alignment; Skill relevance; SPM school leavers; Theory of Planned Behaviour*

Outdated Curricula or Outdated Perceptions? Unpacking SPM Leavers’ Views on Marketing Diploma Relevance in Malaysia’s Digital Era

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Abstract

The rise in the digital economy and the subsequent demand in niche positions like TikTok Specialists and Shopee marketers have increased exponentially, however, formal marketing diploma enrollment has experienced an estimated 25-35% drop. This paper explores the behavioural theory of SPM graduates in obtaining a marketing diploma by directly looking at the perception of the curriculum as being outdated or simply that an enrollment is being discouraged by subjective factors. The study is based on the Theory of Planned Behaviour and considers the respondent data of 343 participants. The descriptive statistics indicate high scores on perceived relevance of contemporary skills, including preparation in E-commerce positions (M=4.13) and practical advertising in Tik Tok (M=4.11).

There are, however, critical blockades when it comes to time and economical survival. Results show that students appreciate the content but strongly believe that taking two years courses is a time wastage compared to fast and easy online courses (M=3.88). In addition, the paper also determines that economic stress due to family income of less than RM5,000 (M=4.15) is the main reason pushing students out of long-term education and straight into the immediate income of the gig-economy. These findings are important in making it clear that the enrollment crisis is not a curriculum content problem, but a program length and financial urgency disjunction of the Gen Z. The research highlights the role of implementing micro-credentials and industrial relations in terms of assuring the digitization of the Malaysian economy through the RM15 billion to be could be sustained by HR workforce that is trained and well-equipped.

Keywords : *Digital marketing, Enrollment decline, Curriculum reform, Enrollment intention, Perceived curriculum advance.*

The Push and Pull of Diploma in Marketing: Determinants of Gen Z's Enrollment Decisions in Marketing Programs

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Abstract

The declining interest among Malaysian SPM leavers in pursuing a Diploma in Marketing has raised serious concerns regarding enrollment sustainability. This study examines the core determinants of Generation Z's enrollment decisions by integrating the Theory of Planned Behaviour with the push-pull framework. A quantitative research design was strictly employed, successfully gathering primary data from exactly 300 respondents via an online structured survey questionnaire. While the methodology uses convenience sampling rather than random sampling for operational simplicity, it effectively captured student perspectives. Data analysis was conducted to generate clear descriptive results, specifically focusing on frequency distributions and means score analysis using SPSS. Our findings reveal that Social Media Influence is the most dominant pull factor driving the final enrollment decision, achieving a high means score of 4.36. In terms of frequency, a striking 86.38% of respondents strongly acknowledged its direct impact on their educational choices. Furthermore, Perceived Career Value, Peer and Family Recommendations, and Institutional Digital Marketing all heavily shape this dependent variable. Ultimately, these results underscore the critical necessity for higher education institutions to shift toward peer-led, authentic digital recruitment strategies today.

Keywords : *Enrollment Decision; Theory of Planned Behaviour; Generation Z; Quantitative research; Means score; Random sampling; Descriptive results; Frequency.*

Innovation Trends Among Students Based on Final Year Project Competition Winners: A Case Study of Politeknik Kuching Sarawak

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Abstract

Final Year Project (FYP) competitions serve as a vital platform for students to demonstrate innovation, technical proficiency, and problem-solving capabilities, yet long-term trends in these achievements are often underutilized for academic planning. This study analyzes the trends among overall winners at Politeknik Kuching Sarawak (PKS) over six semesters to identify departmental contributions and innovation trajectories using a quantitative descriptive approach where frequency counts and trend visualizations were applied to institutional records. The results reveal a significant dominance by the Information and Communication Technology (ICT) department, which secured four (4) overall wins (66.7%), followed by Electrical and Mechanical Engineering with one (1) win each (16.7%), while notably, the Internet of Things (IoT) emerged as the most frequent winning category representing 50.0% of total wins. Conversely, a persistent innovation gap was identified in the Civil Engineering, Petrochemical, and Commerce departments, suggesting that while technical software-based innovations are thriving, there is a critical need for more inclusive evaluation criteria. Ultimately, this research provides actionable institutional intelligence to inform curriculum enhancement and strategic resource allocation, fostering a more balanced innovation ecosystem within polytechnic education.

Keywords : *Final Year Project; Innovation Trends, Institutional Intelligence; IoT; Polytechnic Education; Student Innovation*

Psychological Capital and Career Advancement of Hospitality and Tourism Industry in Sabah

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Abstract

Psychological capital is a constructive psychological state characterized by four synergistic resources: hope, involving goal-oriented determination; efficacy, reflecting confidence in task mastery; resilience, the capacity to recover from setbacks; and optimism, maintaining a positive outlook for future success. Within the hospitality and tourism industry in Sabah a vital pillar of the regional economy these internal resources are increasingly recognized as essential drivers for professional sustainability in a rapidly evolving business landscape. However, despite the industry's economic importance, there remains a significant gap in empirical evidence exploring how these psychological dimensions specifically influence the career advancement of local employees. This study adopted a quantitative approach, utilizing proportionate stratified random sampling to gather data from 287 employees across five key divisions in Sabah. Data analysis performed via SmartPLS 4.0 using Partial Least Squares-Structural Equation Modeling (PLS-SEM) revealed that hope, efficacy, resilience, and optimism all maintain a significant positive relationship with career advancement, with optimism emerging as the most influential predictor. These findings underscore the critical need to integrate psychological resource development into human capital strategies to reshape the global knowledge economy and ensure the long-term competitiveness of Sabah's hospitality and tourism workforce.

Keywords: Psychological capital; Career advancement; Hospitality and tourism industry

Bridging Digital Inequality: Enhancing Education and Skills to Support SME Growth in the Digital Era

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Abstract

Persistent digital inequities continue to constrain inclusive economic development within Malaysia, with pronounced effects upon small and medium enterprises operating in the food and beverage sector under MARA auspices. In spite of the introduction of several national programs to speed up digital transformation, there exist significant obstacles to full uptake of digital technology by these businesses. These constraints are based on the insufficiency of digital literacy, the lack of technical skills, and the inconsistency of the implementation of digital business practice factors that together weaken organisational ability to develop robust digital customer relationships and provide engaging experiential results in an increasingly competitive marketplace. This study focuses on functionality interoperation of four individual digital capability dimensions namely; personalisation of services, customer feedback, interface and user experience design, and the development of digital marketing strategies. The study concern will be based on their respective efforts towards improving customer interaction modalities and improving the quality of aggregates customer experience. The research also challenges customer interaction as a mediating factor that adds value to the relationship channels between these online projects and experience results. The methodological approach used was quantitative and primary data was gathered on 340 customers of food and beverage SMEs registered by MARA spread everywhere across Malaysia. Data collection was done by means of structured questionnaires. The further analytical procedures were applied using SPSS version 29 including correlation analysis, and multiple regression. The empirical data suggest that the most substantively significant predictors of improved customer interaction and high customer experience are digital marketing policies and UI/UX design. On the other hand, service personalisation and customer feedback integration are still relatively underutilized in the investigated population of SMEs. The results of the analysis also prove that the customer engagement has a statistically significant mediational role in reinforcing digital customer relationships and increasing the quality of customer experience. These empirical results stress the paramount role of further development of educational and skills development programs, with specific focus on digital marketing skills, adoption of electronic commerce and customer engagement strategy planning. These programmatic investments are some of the necessary requirements of alleviating digital inequality, enhancing the competitive positioning of SMEs and the quality of customer experience in the increasingly digitalized economy of Malaysia.

Keywords:

Digital Inequality; Education and Skills Development; Customer Engagement; SME Growth; Digital Transformation

Rethinking Marketing Education for Gen Z: New Learning Approaches to Developing Future Digital Marketers

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Abstract

The rapid growth of the digital economy has significantly transformed the marketing profession, creating increasing demand for graduates with digital marketing competencies. However, interest among Generation Z students in pursuing marketing-related programs has not always kept pace with these industry developments. This divide brings up the following critical questions regarding the way marketing education might be more aligned to the learning styles, career expectations and motivations of the current student generation. Thus, this paper will investigate the effects of new methods of learning and career-related perceptions of Gen Z students on their interest in studying marketing in the digital marketing era. The study will be guided by the Self-Determination Theory to investigate the importance of career perception, program awareness and exposure, parental influence, and the perception of the job market on the intention of students to enroll in Diploma in Marketing programs. A structured questionnaire was used to distribute in random 301 SPM leavers to a structured questionnaire and this was the quantitative research design used. Data gathered was analyzed in SPSS, descriptive statistics, correlation analysis, and multiple regression analysis were done to determine the relationships and predictive power of the variables selected. The results suggest that the students tend to show positive attitudes towards marketing professions and industrial employment. The mean score using descriptive analysis indicates that career perception had the highest score of (3.98), then job market perception (3.92), career information and exposure (3.87) and parental influence (3.54) respectively. The results of regression also indicate that job market perception ($\beta = 0.421$, $p < 0.001$) then job market perception (3.92), career information and exposure (3.87) and parental influence (3.54) respectively. The results of regression also indicate that job market perception ($\beta = 0.298$, $p < 0.001$) and program awareness and exposure ($\beta = 0.214$, $p = 0.002$), are the next most significant and positively related. Conversely, parental influence ($\beta = 0.087$, $p = 0.091$) does not have a noteworthy impact on the enrolment intentions of students. These results indicate that Gen Z students will be more inclined to think about marketing education when they have a proper vision of relevance of marketing careers in the current transforming digital economy and when they have access to pertinent career information. The paper emphasizes the need to embrace new methods of learning that will merge real life marketing experiences, exposure to digital industry and demarcation of the programs positioning to improve the interaction of the students. The findings of this study can provide useful recommendations to higher education institutions that need to restructure marketing education to prepare the generation of digital marketer in the future.

Keywords : *Marketing Education; Gen Z; Career Perception; Programme Awareness; Labour Market Perception; Self-Determination Theory.*

A STUDY OF CUSTOMER SATISFACTION TOWARD HOMESTAY SERVICE QUALITY AT MERLIMAU, MELAKA

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Abstract

In recent years, the rapid evolution of rural homestays has become a cornerstone of rural revitalization policies. However, the global pandemic that emerged in early 2020 presented formidable challenges to the industry, exposing the vulnerability of self-employed operators to operational failures and economic risks. Recognizing that the tourism sector is Malaysia's second-largest economic contributor, the government has strategically promoted the homestay program as an engine for socio-economic development in rural areas. Central to this development is service quality, a critical determinant that fosters customer satisfaction and long-term brand loyalty. This case study aims to evaluate customer satisfaction toward homestays in Merlimau, Melaka, focusing on three primary dimensions: room cleanliness, facility provision, and interior spaciousness. The research methodology employed a quantitative approach, utilizing online questionnaires distributed to 30 respondents, including members of the Merlimau community and students from Politeknik Merlimau. Data analysis conducted via SPSS revealed an overall mean score of 2.69, indicating that customers are only moderately satisfied with the current service quality. Specifically, facilities recorded a mean of 2.76, cleanliness 2.68, and interior spaciousness 2.66. Significant dissatisfaction was identified regarding aesthetic room themes (mean 2.30) and fundamental upkeep, such as floor cleanliness and the condition of bed linens (mean 2.50). To address these gaps, the study proposes strategic solutions, including investing in high-quality sanitation products, modernizing technology such as Wi-Fi and Smart TVs, and optimizing furniture layouts to enhance the perception of space. In conclusion, the findings suggest that homestay operators in Merlimau have yet to meet optimal guest expectations. Continuous service transformation is essential to bridge the satisfaction gap and enhance the competitiveness of rural tourism in the region.

Keywords : Customer Satisfaction, Service Quality, Rural Tourism, Mean Score Analysis, Community-Based Tourism

LAST MILE DELIVERY QUALITY AND EXPERIENCE: KEY DETERMINANTS OF E-COMMERCE CUSTOMER LOYALTY OF GEN Z

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Abstract

With the e-commerce revolution reforming the retailing business environment of Malaysia, customer loyalty is the endgame of the businesses that intend to remain competitive. The paper explores the role of the last stage of the process last-mile delivery (LMD) in fact determining the loyalty of Generation Z consumers. Our structured survey and quantitative analysis of the results of the application of the SERVQUAL model to measure speed, reliability, communication, and professionalism made us understand what, in fact, determines repeat purchases among this young target audience. The results proved to be instructive: whereas the research model explained almost half of the variation in customer loyalty, only the delivery speed and rider professionalism proved to be significant. Interestingly, the statistical weight of reliability and communication was not of a comparable level, which indicates that in the case of Gen Z, the need to receive instant gratification and a respectful human contact usually prevails over technical accuracy. As it is evident in the preference to the TikTok platform and Shopee and a preferred courier in J&T, the study shows that e-commerce requires more than mere logistics to flourish. Instead, they will have to adopt a customer experience that is more customer-centric by focusing on shorter delivery times and enhanced rider training to establish a seamless, reliable experience.

Keywords : *Last Mile Delivery, Customer Loyalty, Gen Z, e-commerce, servqual, speed, professionalism*

Project-Based Learning through the Documentation of Measured Drawings of Heritage Buildings in TVET Education: An Implementation Study of Selected Terengganu Heritage Houses

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Abstract

Technical drawing is one of the fundamental skills that students need to master in Technical and Vocational Education and Training (TVET), particularly in the construction field. However, some students still face difficulties in interpreting technical drawings meaningfully when learning relies heavily on classroom-based explanation, studio exercises, and examples that are not closely connected to real site conditions. In response to this issue, this study examines the implementation of Project-Based Learning (PBL) through heritage building documentation and measured drawing as a more contextual learning approach in TVET education. The study focuses on two selected Terengganu heritage houses, namely Rumah Limas Belanda and Rumah Bujang Berserambi Berselasar. A qualitative approach was employed through observation of project implementation, analysis of students' work, and supporting project documents. The findings show that students' direct involvement in fieldwork helped them develop a clearer understanding of structural systems, spatial organisation, and the relationship between technical drawings and actual building conditions. The project also improved their ability to produce more systematic technical documentation and exposed them to the educational value of local built heritage. Overall, the study suggests that heritage building documentation and measured drawing have strong potential to serve as a practical and meaningful learning model in TVET education.

Keywords: *Heritage buildings; measured drawing; Project-Based Learning; technical drawing; TVET education*

Inclusive Board Game Design Using Universal Design for Learning to Support Diverse Deaf and Hearing Students

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Abstract

Universal Design for Learning (UDL) offers a framework to make educational activities accessible to all learners, including deaf/hard-of-hearing (DHH) students. This research explores adapting an educational board game (originally for teaching art elements) using UDL principles. We survey recent literature on UDL and DHH education, conduct participatory co-design workshops with deaf students and instructors, and prototype multiple game variants that employ UDL strategies (e.g. visual symbols, sign-language support, multi-sensory cues). Usability testing and expert accessibility reviews evaluate each variant. Finally, we compare learning outcomes (knowledge gains and engagement) across adapted and original versions. This UDL-driven approach aims to ensure that deaf learners of varied language and sensory profiles can fully access and benefit from the game.

Keywords : *Inclusive Design; Universal Design for Learning; Deaf Education; Board Games; Accessibility*

Inclusive Board Game Design Using Universal Design for Learning to Support Diverse Deaf and Hearing Students

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Abstract

Universal Design for Learning (UDL) offers a framework to make educational activities accessible to all learners, including deaf/hard-of-hearing (DHH) students. This research explores adapting an educational board game (originally for teaching art elements) using UDL principles. We survey recent literature on UDL and DHH education, conduct participatory co-design workshops with deaf students and instructors, and prototype multiple game variants that employ UDL strategies (e.g. visual symbols, sign-language support, multi-sensory cues). Usability testing and expert accessibility reviews evaluate each variant. Finally, we compare learning outcomes (knowledge gains and engagement) across adapted and original versions. This UDL-driven approach aims to ensure that deaf learners of varied language and sensory profiles can fully access and benefit from the game.

Keywords : *Inclusive Design; Universal Design for Learning; Deaf Education; Board Games; Accessibility*

Faktor Pemilihan Program Pelancongan Dalam Kalangan Pelajar Semester Satu di Kolej Komuniti Malaysia

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Abstrak

Industri pelancongan dikenal pasti sebagai salah satu pemacu utama ekonomi negara, di samping menawarkan pelbagai prospek kerjaya kepada graduan. Perkembangan ini menuntut institusi Pendidikan dan Latihan Teknikal dan Vokasional (TVET), khususnya Kolej Komuniti, untuk melahirkan tenaga kerja berkemahiran dalam bidang pelancongan. Namun begitu, kajian yang memfokuskan kepada faktor pemilihan bidang pelancongan dalam kalangan pelajar Kolej Komuniti masih terhad. Sehubungan itu, kertas konsep ini mencadangkan satu kajian tinjauan kuantitatif berbentuk deskriptif bagi mengenal pasti faktor-faktor yang mempengaruhi pemilihan program pelancongan dalam kalangan pelajar Semester Satu di 13 Kolej Komuniti seluruh Malaysia bagi Sesi I:2026/2027. Data dicadangkan untuk dikumpul melalui soal selidik berstruktur secara dalam talian dan dianalisis menggunakan perisian SPSS bagi memperoleh skor min, sisihan piawai, kekerapan dan peratusan. Dapatan kajian ini dijangka memberi implikasi kepada pihak pengurusan kolej dalam merangka strategi promosi dan pengambilan pelajar yang lebih berfokus, di samping menyumbang kepada pemantapan program pelancongan dalam konteks TVET, khususnya Kolej Komuniti di Malaysia.

Kata kunci: *Pemilihan program pelancongan; Kolej Komuniti; Pendidikan pelancongan; Pelancongan; TVET*

Abstract

The tourism industry is recognised as one of the key drivers of the national economy, while also offering diverse career prospects for graduates. This development requires Technical and Vocational Education and Training (TVET) institutions, particularly Community Colleges, to produce skilled manpower in the tourism field. However, studies focusing on the factors influencing the selection of tourism programs among Community College students remain limited. Accordingly, this conceptual paper proposes a descriptive quantitative survey to identify the factors influencing the selection of tourism programs among first-semester students from 13 Community Colleges across Malaysia for Session I:2026/2027. Data are proposed to be collected through a structured online questionnaire and analyzed using SPSS software to obtain mean scores, standard deviations, frequencies, and percentages. The findings of this study are expected to have implications for college management in formulating more focused student recruitment and promotional strategies, while also contributing to the strengthening of tourism programs within the TVET context, particularly Community Colleges in Malaysia.

Keywords : *Tourism program selection; Community college; Tourism education; Tourism; TVET*

PRODUCING AN ORGANIC ANTI-FOGGING BAR FOR CLEANING GOGGLE SURFACE

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Abstract

Water recreation such as scuba diving is very popular with tourists and locals. Diving activities that use goggles and gas tanks to see coral and marine life. However, fogging goggles can cause accidents in the water. Because of that, the researcher decided to make an anti-fogging bar works to remove the vapour produced on the surface of the goggles when entering the water. Therefore, this innovation is to produce an anti-fogging bar using organic ingredients, to determine vitamin A content in the anti-fogging bar and to determine the level of acceptance of the anti-fogging bar. The anti-fogging bars were sent to biotech to determine vitamin A content. The result found that this anti-fogging bar contains vitamin A which is retinal at a dose of 15.3 mg/100 g. Vitamin A supports the skin's immune system, speeds up healing, prevents breakouts and encourages natural moisturizing, which means it effectively hydrates the skin. The result of the questionnaire found that all respondents agreed that the anti-fogging bar can remove fog on the goggle surface, the overall mean score is 4.15 which is at a high level. The quantitative method was used, where Google form questionnaires were distributed to 30 respondents from students Diploma in Tourism Management from semester 2 until semester 5. From the questionnaires, the researcher used Statistical Packages for Social Science (SPSS) version 25 to analyse the data to obtain the percentage value and also the mean score. In conclusion, this innovative product which is an anti-fogging bar was well received by users in terms of smell, texture and packaging. This anti-fogging bar also helps divers from having a foggy mask and blocking their vision while diving

Keywords: *Anti-Fogging, Goggle, Recreational, Vitamin A,*

Digital Workforce Readiness in Supply Chain Management Determinants: Evidence of a Malaysian TVET Institution.

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Abstract

Industry 4.0 is causing a significant change in the global supply chain sector, creating an urgent need for a workforce that is both technologically competent and dynamic enough to meet the demands of the upcoming digital transformation. This study examines whether the Malaysian Technical and Vocational Education and Training (TVET) students are ready to support the digital transformation of the logistics and supply chain sector. Specifically, it evaluates the student's digital literacy level, investigates the relationship between digital literacy, training development and curriculum alignment with workforce readiness, and compares readiness across students' cohorts. Using a purposive sampling approach, data were collected using a structured questionnaire administered to 169 students enrolled in the Diploma in Logistics and Supply Chain Management at Polytechnic Seberang Perai. Descriptive results revealed that the respondents demonstrate a high level of digital competency. Pearson correlation analysis indicated a strong positive correlation between all independent variables and workforce readiness, with curriculum alignment emerging as the most significant predictor ($r = .755$, $p < .001$). A one-way ANOVA also showed no statistically significant differences in preparedness across semesters ($p = .162$) suggesting consistent competency levels among the student groups. These findings highlight the need for TVET institutions to implement real-time simulations of the supply chain into learning and evaluation. Comprehensively, this study provides empirical evidence to support the development of a resilient, technology-oriented supply chain workforce in alignment with the National TVET Policy 2030.

***Keywords:* Curriculum Alignment; Digital Literacy Skills; Future Workforce Readiness; SCM;**

The Effectiveness of Using BMCExpert on Computational Thinking among Students of the DFT30033 Cyberpreneurship Course

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Abstract

This study investigates the effectiveness of integrating computational thinking specifically decomposition, through BMCExpert in enhancing student performance in the DFT30033 Cyberpreneurship course. A quasi-experimental design was employed involving 40 Semester 3 students divided into a control group (n = 20) receiving conventional instruction and a treatment group (n = 20) exposed to BMCExpert embedded with computational thinking elements. Student performance was measured using pre- and post-tests, and the data were analyzed using paired-sample and independent-sample t-tests. The findings indicate statistically significant improvements in both groups; however, the treatment group exhibited a substantially greater mean gain (21.85) compared to the control group (11.15). Moreover, the independent t-test revealed a significant difference in post-test scores between groups ($t = -5.506$, $p < .05$), demonstrating the superior effectiveness of the intervention. These results underscore the pedagogical value of integrating computational thinking with digital tools such as BMCExpert in fostering higher-order analytical skills and enhancing students' capability to systematically develop business models. The study contributes to emerging evidence supporting technology-enhanced learning approaches in cyberpreneurship education.

Keywords : *Computational Thinking; Decomposition; ; Business Model Canvas; Digital Learning Tools*

A Conceptual Review: Transformation of English Language Teaching with AI Chatbots

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Abstract

Technological developments have opened a path to innovation and integration of various pedagogical tools within the ELT field. Among these emerging tools that are beginning to take a strong hold in ELT domain is Artificial Intelligent (AI) chatbots. The aim of this conceptual paper is to examine pedagogical implications of AI chatbots in English Language Teaching (ELT) context. The discussion is grounded in frameworks including Constructivist theory, Self-determination theory (SDT), Interaction hypothesis, and Communicative language teaching (CLT) that serve as theoretical support for implementing AI chatbots in ELT settings. As per the findings, use of AI chatbots in ELT can improve learners' core language abilities, particularly speaking and writing. There are limited empirical data to support benefit of AI chatbot implementation on other language skills such as reading, listening, and vocabulary development. In addition, learners' engagement level and motivation toward language learning increased while language anxiety reduces when English language teachers integrate AI chatbots in their classroom. Other than that, the ease of AI chatbots accessibility promotes learner autonomy through self-paced and independent practice sessions. Despite the benefits AI chatbots have on English language learning, the findings emphasise the need for careful pedagogical integration to prevent overreliance on the support provided by AI chatbots and at the same time preserve critical thinking. Overall, this study systematically positions AI chatbots as an important pedagogical tool in ELT context that could transform ELT practices when implemented within structured and theory-driven instructional designs.

Keywords: Artificial Intelligent (AI); chatbots; English; English Language Teaching (ELT)

Assessing Users' Satisfaction in Using NDCLearnHub for the Network and Data Communication Course at Politeknik Balik Pulau

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Abstract

The integration of digital technologies in higher education has transformed teaching and learning by enabling flexible, interactive and student-centered learning environments. In response to this development, NDCLearnHub was developed as an online learning platform to support students in understanding the Network and Data Communication course at Politeknik Balik Pulau. This study aims to assess students' satisfaction with the use of NDCLearnHub in terms of usefulness, ease of use, ease of learning and overall satisfaction. A quantitative research approach was employed using a questionnaire distributed to Diploma in Information Technology students enrolled in the DFC20293 Network and Data Communication course for Session II: 2025/2026. A total of 191 students participated in the study. The instrument utilized a five-point Likert scale and was validated through a pilot study involving 30 students, achieving Cronbach's Alpha values ranging from 0.835 to 0.887, indicating good reliability. The analysis revealed high mean scores for usefulness (4.1110), ease of use (4.1034), ease of learning (4.2644), and overall satisfaction (4.2072). These findings indicate that NDCLearnHub is an effective digital learning tool that enhances students' learning experience and supports the implementation of technology-driven education.

Keywords : *Digital learning; NDCLearnHub; Online learning platform; Students' satisfaction*

The Implementation of Brain Breaks in ESL Classrooms: A Study among Diploma Students at Politeknik Ungku Omar

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Abstract

Maintaining students' attention during prolonged classroom sessions remains a challenge in higher education, particularly in English as a Second Language (ESL) contexts where learners engage in multiple cognitive tasks simultaneously. This study investigates the implementation of brain breaks in Technical English classrooms among diploma students at Politeknik Ungku Omar (PUO), Malaysia, and examines their effects on students' focus, engagement, and overall classroom experience. A quantitative research design was employed, involving 60 diploma students who completed a Likert-scale questionnaire at the end of the semester. The data were analysed using descriptive statistics, including mean, variance, and standard deviation, alongside reliability testing using Cronbach's Alpha. The findings reveal that students generally perceive brain breaks as beneficial, with high mean scores indicating improved concentration, reduced cognitive fatigue, and enhanced engagement during lessons. The study concludes that structured brain break activities serve as an effective pedagogical strategy for sustaining attention and promoting active learning in extended ESL classroom sessions.

Keywords: *brain breaks; ESL classroom; student engagement, attention; Technical English*

Tahap Pengetahuan Konsep dan Peranan Keusahawanan Sosial serta Hubungannya dengan Minat Penglibatan Pelajar Kolej Komuniti Sandakan

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Abstract

Social entrepreneurship is increasingly being recognised as an innovative approach to addressing social issues through sustainable business-based solutions, but the level of student knowledge in this field has not been extensively studied, particularly in community colleges. Therefore, this study aims to assess students' knowledge regarding the concept and role of social entrepreneurship and analyse its relationship with students' interest in participation. This study employs a quantitative approach through a survey design involving 87 students from Sandakan Community College, using a five-point Likert scale questionnaire instrument. The data were analysed using descriptive statistics and Cronbach's alpha reliability test, as well as inferential analysis, namely Pearson correlation and multiple regression. The results of the study show that the level of students' knowledge of the concept (mean = 3.87) and the role of social entrepreneurship (mean = 3.92) is high, while the interest in involvement is at a moderately high level (mean = 3.75). Correlation analysis found a significant positive relationship between conceptual knowledge ($r = 0.56$, $p < 0.01$) and role knowledge ($r = 0.61$, $p < 0.01$) with student interest. Furthermore, regression analysis shows that both dimensions of knowledge significantly contribute to students' interest, with role knowledge being the more dominant predictor. In conclusion, the study findings demonstrate that knowledge of social entrepreneurship plays an important role in increasing students' interest in engaging in socially impactful activities, thereby supporting sustainable community development efforts in line with the global agenda.

Keywords: social entrepreneurship; higher education; student knowledge; interest; community development

Abstrak

Keusahawanan sosial semakin mendapat pengiktirafan sebagai pendekatan inovatif dalam menangani isu sosial melalui penyelesaian berasaskan perniagaan yang mampan, namun tahap pengetahuan pelajar dalam bidang ini masih kurang dikaji khususnya di kolej komuniti. Oleh itu, kajian ini bertujuan menilai tahap pengetahuan pelajar terhadap konsep dan peranan keusahawanan sosial serta menganalisis hubungannya dengan minat penglibatan pelajar. Kajian ini menggunakan pendekatan kuantitatif melalui reka bentuk tinjauan yang melibatkan 87 orang pelajar Kolej Komuniti Sandakan, dengan instrumen soal selidik berskala Likert lima mata. Data dianalisis menggunakan statistik deskriptif, ujian kebolehpercayaan Cronbach's Alpha, serta analisis inferensi iaitu korelasi Pearson dan regresi berganda. Hasil kajian menunjukkan bahawa tahap pengetahuan pelajar terhadap konsep (min = 3.87) dan peranan keusahawanan sosial (min = 3.92) adalah tinggi, manakala minat penglibatan berada pada tahap sederhana tinggi (min = 3.75). Analisis korelasi mendapati terdapat hubungan positif yang signifikan antara pengetahuan konsep ($r = 0.56$, $p < 0.01$) dan pengetahuan peranan ($r = 0.61$, $p < 0.01$) dengan minat pelajar. Selain itu, analisis regresi menunjukkan bahawa kedua-dua dimensi pengetahuan memberi sumbangan signifikan terhadap minat pelajar, dengan pengetahuan peranan sebagai peramal yang lebih dominan. Kesimpulannya, dapatan kajian membuktikan bahawa pengetahuan keusahawanan sosial memainkan peranan penting dalam meningkatkan minat pelajar untuk terlibat dalam aktiviti berimpak sosial, sekaligus menyokong usaha pembangunan masyarakat mampan selaras dengan agenda global.

Kata kunci : keusahawanan sosial; pendidikan tinggi; pengetahuan pelajar; minat; pembangunan komuniti

Pendekatan Gamifikasi Melalui Inovasi Antara Dua Marhalah bagi Kursus Pendidikan Islam: Satu Kajian Tinjauan di Kolej Komuniti Sandakan

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Abstract

The topic of Jamak and Qasar prayers often poses a challenge for students because it involves understanding the laws, conditions, and application in travel situations. This study introduces the innovation "Antara Dua Marhalah" as a gamification approach in teaching and learning (T&L) to enhance the understanding of Islamic Education students, particularly regarding Jamak and Qasar prayers. This quantitative study involved 73 students from Sandakan Community College through a five-point Likert scale questionnaire. Data were analysed using descriptive analysis, an independent t-test, Pearson correlation, and linear regression with SPSS. The findings indicate that the levels of gamification usage, motivation, engagement, understanding, and learning effectiveness are at a high level (mean > 4.60). The independent t-test, on the other hand, showed no significant difference in the level of understanding between students of the Tourism Adventure Certificate Program and the Electrical Technology Certificate Program ($t = -0.360, p > 0.05$), proving the effectiveness of this approach across fields of study. Correlation analysis shows a significant positive relationship between gamification and learning effectiveness ($r = 0.69, p < 0.05$), while regression analysis indicates that gamification contributes 48% to learning effectiveness. In conclusion, gamification is an effective approach in enhancing the quality of Islamic education teaching and learning and should be expanded in the field of TVET.

Keywords: *Gamification of Teaching and Learning, Jamak and Qasar prayers, Innovation in Islamic Education.*

Abstrak

Topik Solat Jamak dan Qasar sering menjadi cabaran kepada pelajar kerana melibatkan kefahaman hukum, syarat dan aplikasi dalam situasi musafir. Kajian ini memperkenalkan inovasi "Antara Dua Marhalah" sebagai pendekatan gamifikasi dalam pengajaran dan pembelajaran (PdP) bagi meningkatkan kefahaman pelajar Pendidikan Islam khususnya topik solat jamak dan qasar. Kajian berbentuk kuantitatif ini melibatkan 73 orang pelajar Kolej Komuniti Sandakan melalui soal selidik skala Likert lima mata. Data dianalisis menggunakan analisis deskriptif, ujian-t tidak bersandar, korelasi Pearson dan regresi linear menggunakan SPSS. Dapatan menunjukkan tahap penggunaan gamifikasi, motivasi, penglibatan, kefahaman dan keberkesanan pembelajaran berada pada tahap tinggi (min > 4.60). Ujian-t tidak bersandar pula menunjukkan tiada perbezaan signifikan dalam tahap kefahaman antara pelajar program Sijil Pengembaraan Pelancongan dan Sijil Teknologi Elektrik ($t = -0.360, p > 0.05$), ini membuktikan keberkesanan pendekatan ini merentas bidang pengajian. Analisis korelasi menunjukkan hubungan positif yang signifikan antara gamifikasi dan keberkesanan pembelajaran ($r = 0.69, p < 0.05$), manakala analisis regresi menunjukkan gamifikasi menyumbang sebanyak 48% terhadap keberkesanan pembelajaran. Kesimpulannya, gamifikasi merupakan pendekatan berkesan dalam meningkatkan kualiti PdP Pendidikan Islam dan wajar diperluaskan dalam bidang TVET.

Kata kunci : *Gamifikasi PdP, Solat Jamak dan Qasar, Inovasi Pendidikan Islam*

Post-Covid-19 Tourism Recovery and Hotel Industry Performance in Melaka: Demand Drivers, Operational Challenges and Future Outlook

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Abstract

The COVID-19 pandemic severely disrupted the global tourism and hospitality sector, causing significant declines in travel demand, hotel occupancy and tourism revenue. Melaka, a UNESCO World Heritage site and one of Malaysia's major tourism hubs, experienced significant contractions in hotel activity during the pandemic. However, the reopening of borders and the recovery of domestic travel contributed to a rebound in the tourism economy. This study examines tourism demand recovery and hotel industry performance in Melaka after the COVID-19 pandemic and identifies key operational challenges affecting the sector. The analysis is based on secondary data from tourism statistics, industry reports, academic literature and media sources covering the period from 2023 to 2025. Findings indicate a strong domestic-driven tourism recovery, supported by heritage attractions, weekend leisure travel, and government initiatives such as Visit Melaka Year 2024. The state recorded more than 15 million visitors and generated RM12.68 billion in tourism revenue in 2024. Despite improving tourism demand, recovery remains uneven across hotel categories, and the industry continues to face challenges, including labour shortages, rising operating costs, and reliance on online travel agencies. The study highlights the need for strategic adaptation to sustain competitiveness in Melaka's hotel industry.

Keywords: *COVID-19 recovery; Hotel performance; Melaka tourism; Operational challenges; Tourism demand*

Camera to Classroom: Transforming STEM Learning through Digital Storytelling

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Abstract

This study explores educators' perceptions of digital storytelling as a pedagogical innovation for transforming Science, Technology, Engineering and Mathematics (STEM) learning following their participation in the Digital Storytelling Contest (DISCONT) 2025. As digital technologies reform educational practices, educators require professional learning opportunities that support meaningful pedagogical integration beyond technical exposure. Using an exploratory qualitative research design, data were collected from 19 educators through an open-ended online survey and analysed using thematic analysis. The findings revealed five key themes: pedagogical innovation, enhanced student engagement, professional skill development, implementation challenges and future classroom integration. Educators reported a shift from traditional content delivery to more innovative, student-centred STEM teaching approaches, describing the experience as transformative. Overall, the study highlights digital storytelling as a powerful strategy for bridging technology integration with effective STEM pedagogy and supporting teacher professional development.

Keywords: digital storytelling, pedagogical innovation, STEM education, student engagement, teacher professional development

Penggunaan ChatGPT Dan Hubungannya Dengan Pembelajaran Kendiri Serta Integriti Akademik Dalam Kalangan Pelajar Kolej Komuniti Arau

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Abstrak

Kajian ini dijalankan bagi meneroka hubungan antara penggunaan ChatGPT dalam kalangan pelajar Kolej Komuniti Arau dengan tahap pembelajaran kendiri serta persepsi terhadap integriti akademik dalam konteks penggunaan teknologi kecerdasan buatan generatif dalam pendidikan tinggi. Perkembangan teknologi kecerdasan buatan generatif pada masa kini telah mempengaruhi cara pelajar memperoleh maklumat dan menyelesaikan tugas akademik melalui bantuan digital yang lebih interaktif. Walau bagaimanapun, penggunaan teknologi ini turut menimbulkan kebimbangan berkaitan aspek etika akademik sekiranya ia digunakan tanpa panduan yang jelas. Kajian ini menggunakan pendekatan kuantitatif melalui reka bentuk tinjauan dengan pengumpulan data menggunakan soal selidik berstruktur yang melibatkan 150 orang pelajar daripada lima program pengajian di Kolej Komuniti Arau. Data kajian menilai tiga (3) konstruk utama iaitu tahap penggunaan ChatGPT, pembelajaran kendiri dan integriti akademik. Data yang diperoleh dianalisis menggunakan statistik deskriptif, ujian-t sampel bebas serta analisis korelasi Pearson bagi mengenal pasti hubungan antara pemboleh ubah yang dikaji. Hasil kajian menunjukkan bahawa tahap penggunaan ChatGPT berada pada tahap sederhana tinggi dengan nilai min 3.62, manakala persepsi terhadap integriti akademik juga berada pada tahap sederhana dengan nilai min 3.21. Analisis ujian-t menunjukkan terdapat perbezaan yang signifikan dalam persepsi integriti akademik antara pelajar yang menggunakan ChatGPT pada tahap tinggi dan rendah. Selain itu, pelajar dengan tahap penggunaan ChatGPT yang lebih tinggi turut menunjukkan tahap pembelajaran kendiri yang lebih baik. Analisis korelasi Pearson turut menunjukkan wujud hubungan positif yang signifikan antara penggunaan ChatGPT dan pembelajaran kendiri ($r = 0.415$), serta hubungan negatif yang signifikan antara penggunaan ChatGPT dan integriti akademik ($r = -0.298$). Dapatan ini menunjukkan bahawa penggunaan teknologi AI generatif dalam pendidikan perlu diimbangi dengan pendekatan pedagogi dan garis panduan etika akademik yang jelas. Secara keseluruhannya, dapatan kajian mencadangkan bahawa penggunaan ChatGPT berpotensi menyokong pembelajaran kendiri pelajar, namun penggunaannya perlu disertai dengan garis panduan etika akademik yang jelas bagi memastikan integriti akademik dapat dipelihara.

Kata kunci - ChatGPT, Integriti akademik, Kecerdasan buatan generatif, Kolej Komuniti, Pembelajaran kendiri

Abstract

This study was conducted to explore the relationship between the use of ChatGPT among students at Kolej Komuniti Arau and their level of self-directed learning as well as their perception of academic integrity within the context of generative artificial intelligence technology in higher education. The rapid development of generative artificial intelligence has influenced the way students obtain information and complete academic tasks through more interactive digital assistance. However, the use of this technology also raises concerns regarding academic ethics if it is applied without clear guidelines. This study adopted a quantitative approach using a survey research design, with data collected through a structured questionnaire involving 150 students from five academic programmes at Kolej Komuniti Arau. The study examined three main constructs, namely the level of ChatGPT usage, self-directed learning, and academic integrity. The collected data were analysed using descriptive statistics, an independent samples t-test, and Pearson correlation analysis to determine the relationships among the variables studied. The findings indicate that the level of ChatGPT usage among students is moderately high, with a mean value of 3.62, while the perception of academic integrity is at a moderate level with a mean value of 3.21. The results of the t-test analysis show a significant difference in academic integrity perception between

students with high and low levels of ChatGPT usage. In addition, students who reported higher levels of ChatGPT usage also demonstrated a higher level of self-directed learning. Pearson correlation analysis further reveals a significant positive relationship between ChatGPT usage and self-directed learning ($r = 0.415$), as well as a significant negative relationship between ChatGPT usage and academic integrity ($r = -0.298$). These findings indicate that the use of generative artificial intelligence in education needs to be balanced with appropriate pedagogical approaches and clear academic ethical guidelines. Overall, the results suggest that the use of ChatGPT has the potential to support students' self-directed learning; however, its use should be accompanied by clear academic ethical guidelines to ensure that academic integrity is maintained.

Keywords - *Academic integrity, ChatGPT, Community College, Generative artificial intelligence, Self-directed learning*

Identifying Students' Learning Styles Using Interpretive Structural Modeling and MICMAC Analysis

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Abstract

Understanding students' learning styles is crucial for designing personalized learning experiences that enhance educational outcomes. However, identifying and analyzing the complex relationships between factors that influence students' learning preferences remains a challenge. This study applies Interpretive Structural Modeling (ISM) and Cross-Impact Matrix Multiplication Applied to Classification (MICMAC) analysis to identify and evaluate the key factors that shape students' learning styles. There are five factors identified which are cognitive abilities, motivation, learning environments, teaching methods, and personal interests. Using ISM, a structural model is developed to represent the interrelationships between different factors, while MICMAC analysis categorizes these factors based on their driving and dependence power. The findings show the final model of learning styles obtained from the ISM process. As a result of the MICMAC analysis, the cognitive abilities factor is classified in the independence variable. Meanwhile, the teaching method factor is classified as a dependent variable. Next, the factors of motivation and learning environments are classified in the linkage variable. Finally, the personal interest factor is classified as an autonomous variable. In conclusion, the results provide a detailed framework for understanding the dynamics of students' learning styles and offer practical insights for educators to tailor their teaching strategies.

Keywords : *Learning Styles; Teaching Strategies; Interpretive Structural Modeling; Cross-Impact Matrix Multiplication Applied to Classification; Decision Making*

REKABENTUK DAN PEMBANGUNAN MESIN MINI PENCELUR DAN PENCABUT BULU PUYUH UNTUK APLIKASI LATIHAN TVET

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Abstrak

Penternakan puyuh merupakan subsektor ternakan unggas yang semakin berkembang di Malaysia, namun aktiviti pemprosesan seperti penceluran dan pencabutan bulu masih banyak dilakukan secara manual yang menjejaskan kecekapan operasi. Kajian ini bertujuan mereka bentuk dan membangunkan mesin mini pencelur dan pencabut bulu puyuh untuk aplikasi penternakan skala kecil dan latihan TVET. Kajian menggunakan pendekatan *Design and Development Research* (DDR) yang melibatkan fasa analisis keperluan, reka bentuk, pembangunan prototaip dan ujian operasi. Mesin yang dibangunkan menggunakan konsep drum statik dengan tapak berputar serta dilengkapi dengan sistem penceluran yang mempunyai kawalan suhu menggunakan penderia dalam julat 55°C hingga 65°C. Hasil pemerhatian menunjukkan peningkatan kecekapan pemprosesan, pengurangan masa pencabutan bulu serta peningkatan konsistensi hasil berbanding kaedah manual. Secara keseluruhannya, mesin ini berpotensi meningkatkan produktiviti penternak kecil serta menyokong pembelajaran berasaskan amali dalam bidang TVET.

Kata kunci: mesin pencabut bulu; puyuh; penceluran unggas; inovasi pertanian; TVET

Abstract

Quail farming is an emerging poultry sector in Malaysia. However, processing activities such as scalding and defeathering are still largely performed manually, resulting in low efficiency. This study aims to design and develop a mini quail scalding and plucker for small-scale farming and TVET training applications. The study adopts a Design and Development Research (DDR) approach involving needs analysis, design, prototype development, and operational testing. The developed machine utilizes a static drum with a rotating base equipped with rubber plucker fingers and an integrated scalding system with temperature control maintained between 55°C and 65°C using a temperature sensor. Preliminary observations indicate improved processing efficiency, reduced defeathering time, and more consistent results compared to manual methods. Overall, the developed machine demonstrates potential to enhance small-scale quail processing productivity and support hands-on learning in TVET education.

Keywords: *defeathering machine, quail, poultry scalding, agriculture innovation, TVET*

PEMBANGUNAN PERANGKAP SERANGGA *GLOW-IN-THE-DARK* BERSEPADU DENGAN PEMBELAJARAN MESIN BAGI PENGESANAN DAN PENGIRAAN SERANGGA

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Abstrak

Serangga perosak merupakan ancaman utama terhadap produktiviti tanaman dan pemantauan secara manual sering memerlukan masa serta tenaga kerja yang tinggi. Kajian ini membangunkan perangkap serangga jenis *glow-in-the-dark* (GITD) yang diintegrasikan dengan pembelajaran mesin bagi tujuan pengesanan dan pengiraan serangga secara automatik. Dua prototaip telah dibangunkan, iaitu prototaip pertama menggunakan pita *glow-in-the-dark*, manakala prototaip kedua menggunakan serbuk strontium aluminate yang dicampurkan dengan gam pelekat serangga. Campuran sebanyak 20g serbuk strontium aluminate dengan 100ml gam pelekat disapu pada permukaan perangkap dan diuji menggunakan beberapa variasi warna. Keputusan menunjukkan rawatan kuning-hijau merekodkan tangkapan tertinggi iaitu purata 31 ekor serangga, berbanding 6 ekor bagi kawalan. Prototaip kedua turut meningkatkan tempoh nyalaan daripada 2–3 jam kepada 4–12 jam. Model pembelajaran mesin yang dibangunkan menggunakan *Google Teachable Machine* menunjukkan ketepatan purata 87.5% dalam pengelasan serangga. Dapatan kajian membuktikan bahawa integrasi bahan fotoluminesen dan pembelajaran mesin berpotensi meningkatkan kecekapan pemantauan serangga dalam sistem pertanian pintar dan menyokong SDG 2, SDG 12 dan SDG 13.

Kata kunci: *glow-in-the-dark*, perangkap serangga, pembelajaran mesin, pemantauan serangga, pertanian pintar

Abstract

Insect pests are a major threat to crop productivity, while manual monitoring requires considerable time and labour. This study developed a glow-in-the-dark (GITD) insect trap integrated with machine learning for automatic insect detection and counting. Two prototypes were developed, where the first prototype used glow-in-the-dark tape and the second prototype used strontium aluminate powder mixed with insect adhesive glue. A mixture of 20 g strontium aluminate and 100 ml adhesive glue was applied to the trap surface and tested with several colour variations. The results showed that the yellow-green treatment recorded the highest insect capture, with an average of 31 insects compared to only 6 insects for the control treatment. The second prototype also improved glow duration from 2–3 hours to 4–12 hours. The machine learning model developed using Google Teachable Machine achieved an average classification accuracy of 87.5%. The findings indicate that the integration of photoluminescent materials and machine learning has strong potential to improve insect monitoring efficiency in smart agriculture while supporting SDG 2, SDG 12 and SDG 13.

Keywords: *glow-in-the-dark, insect trap, machine learning, insect monitoring, smart farming*

Problem-Based Learning in Mathematics Education: A Bibliometric Analysis on Research Trends, Contributions, and Thematic Analysis from the Dimensions AI Database

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Abstract

Problem-based learning (PBL) has emerged as a prominent student-centred approach that fosters active learning, problem-solving, and higher-order thinking skills (HOTS) in mathematics education. This study aims to examine the trends of PBL research in mathematics education, its scholarly contributions, and its thematic developments within the last decade, 2016-2025. A total of 274 articles related to the research domain were obtained from the Dimensions AI Database using “problem-based learning” and “mathematics education” as the search keywords. The PRISMA Framework was employed to ensure transparency and the completeness of the selection process when reporting the bibliometric review. VOSviewer was used to analyse the publication trends, author contribution, co-occurrence of keywords, as well as thematic clustering. The findings indicate that the PBL research tends to increase steadily, which indicates an increasing of scholarly interest in PBL in mathematics education, especially starting from 2023. Indonesia was the leading contributor in both publication and citation impact in the field of PBL research. However, the findings indicate low global collaboration intensity comparatively, as reflected by limited total link strength. Thematic mapping identifies three interrelated clusters, including (i) the development of critical thinking and problem-solving skills, (ii) mathematical literacy, reasoning, and conceptual competence, and (iii) technological integration and innovative instructions. The study concluded that this research field is consistently increasing. However, it remains structurally fragmented, which requires stronger global collaboration, deeper theoretical integration, and greater emphasis on technology-enhanced pedagogical practices. As a contribution, this study provides a comprehensive overview of the intellectual framework and future directions of PBL research in mathematics education.

Keywords: *bibliometric analysis; mathematics education; problem-based learning; research trends; scholarly contribution, thematic analysis*

Kajian Faktor Yang Mempengaruhi Pemilihan TVET Sebagai Laluan Kerjaya Dalam Kalangan Pelajar Kolej Komuniti Pasir Gudang

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Abstrak

Pendidikan dan Latihan Teknikal dan Vokasional (TVET) merupakan satu laluan pendidikan yang menekankan kemahiran praktikal dan berperanan penting dalam memenuhi keperluan tenaga kerja industri di Malaysia. Kajian ini bertujuan untuk mengenal pasti faktor-faktor yang mempengaruhi pemilihan TVET sebagai laluan kerjaya dalam kalangan pelajar Kolej Komuniti Pasir Gudang iaitu dengan memberi tumpuan kepada aspek minat pelajar, persepsi terhadap kebolehpasaran graduan, serta sokongan keluarga dan rakan sebaya. Kajian ini menggunakan reka bentuk kuantitatif berbentuk tinjauan deskriptif dengan penglibatan seramai 145 orang pelajar sebagai responden di mana data dikumpul melalui soal selidik berstruktur skala Likert dan dianalisis menggunakan perisian SPSS bagi mendapatkan nilai min dan peratusan. Dapatan kajian menunjukkan bahawa ketiga-tiga faktor yang dikaji berada pada tahap tinggi, iaitu minat pelajar (skor min = 3.68), persepsi terhadap kebolehpasaran graduan (skor min = 3.69) dan sokongan keluarga serta rakan sebaya (skor min = 3.67). Hasil analisis ini menunjukkan bahawa pelajar mempunyai kecenderungan positif terhadap TVET sebagai laluan pendidikan dan kerjaya. Secara keseluruhannya, kajian ini menunjukkan bahawa minat pelajar, persepsi terhadap kebolehpasaran graduan TVET, serta sokongan sosial mempengaruhi pemilihan TVET sebagai laluan kerjaya, di samping membuktikan bahawa TVET relevan dengan keperluan industri.

Kata kunci: TVET, pemilihan kerjaya, minat pelajar, kebolehpasaran graduan, sokongan sosial.

Abstract

Technical and Vocational Education and Training (TVET) is an educational pathway that emphasizes practical skills and plays an important role in meeting the needs of the industry workforce in Malaysia. This study aims to identify factors that influence the selection of TVET as a career path among students of Pasir Gudang Community College, namely by focusing on aspects of student interest, perceptions of graduate marketability, and family and peer support. This study uses a quantitative design in the form of a descriptive survey with the involvement of 145 students as respondents where data was collected through a structured Likert scale questionnaire and analyzed using SPSS software to obtain mean values and percentages. The findings of the study showed that all three factors studied were at a high level, namely student interest (mean score = 3.68), perception of graduate marketability (mean score = 3.69) and family and peer support (mean score = 3.67). The results of this analysis showed that students had a positive tendency towards TVET as an educational and career path. Overall, this study showed that student interest, perception of TVET graduate marketability, and social support influenced the selection of TVET as a career path, in addition to proving that TVET is relevant to industry needs.

Keywords: TVET, career choice, student interest, graduate employability, social support.

Students' Perceptions of the Effectiveness of CIDOS as a Learning Platform in Technical English classroom

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Abstract

This action research investigates students' perceptions of the effectiveness of CIDOS as a learning platform in the Technical English classroom at Politeknik Tuanku Sultanah Bahiyah Kulim Kedah. With the increasing integration of digital technologies in education, Learning Management Systems such as CIDOS are essential in supporting flexible and accessible learning environments. A quantitative research design was employed, involving 51 diploma students with prior experience using CIDOS. Data were gathered through structured questionnaires and analyzed using descriptive statistics. The results show that majority of students perceive CIDOS as an effective platform for accessing learning materials, supporting lesson revision, enhancing engagement and improving academic performance as reflected in consistently high mean scores. Nonetheless, several difficulties were identified, including technical issues, internet connectivity problems and limitations in certain interactive features. Despite these challenges, the study concludes that CIDOS is a valuable tool for facilitating teaching and learning in the Technical English classroom. It is recommended that improvements be made in technical infrastructure, user training and the development of more interactive features to further enhance the effectiveness of CIDOS in e-learning practices.

Keywords : CIDOS; e-Learning; Effectiveness; Online learning; Students' perception

Green Digital Marketing and Sustainable Consumer Behavior in ASEAN Economies: The Mediating Role of Consumer Trust and The Moderating Effect of Eco-Label Counterfeiting

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Abstract

Within the digital economy, green marketing has increasingly shifted beyond symbolic environmental messaging toward a more data-driven and transparency-based approach capable of influencing sustainable consumer behaviour. This conceptual paper explores how green digital marketing shapes sustainable consumption behaviour in ASEAN economies, emphasizing the mediating role of consumer trust and the moderating influence of eco-label counterfeiting in digitally diverse markets. As consumers increasingly depend on social media platforms, mobile applications, and algorithm-driven recommendations when making purchasing decisions, scepticism toward environmental claims has also intensified. This concern is particularly evident in emerging Southeast Asian markets where regulatory enforcement varies and digital literacy levels differ across populations. Drawing upon the Theory of Planned Behaviour together with trust-based consumer behaviour perspectives, this study proposes an integrative conceptual framework that conceptualizes green digital marketing as an interactive ecosystem that combines persuasive communication with digital transparency tools. These tools include QR-code traceability, blockchain-enabled product authentication, and real-time supply chain information disclosure. The framework illustrates how such transparency mechanisms may mitigate the negative consequences of eco-label counterfeiting, improve consumers perceived behavioural control, strengthen trust toward environmental claims, and ultimately encourage sustainable purchasing intentions. By integrating insights from digital marketing, sustainability governance, and behavioural science, this paper contributes to the advancement of green marketing theory by reframing digital marketing not merely as a promotional channel but as a mechanism for building trust and enhancing transparency. The proposed framework also offers strategic implications for businesses, digital platforms, and policymakers seeking to foster responsible consumption and production (SDG 12) and advance sustainable development within ASEAN economies.

Keywords: *Green Digital Marketing, Sustainable Consumer Behaviour, Consumer Trust, Eco-Label Counterfeiting, Sustainable Development Goal 12*

Determinants of Accounting Students' Career Paths: Evidence from Politeknik Muadzam Shah

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Abstract

This research explores the factors affecting the career path intentions of accounting students in the Malaysian polytechnic setting, particularly at Politeknik Muadzam Shah, based on the Social Cognitive Career Theory (SCCT) framework. The research assesses how intrinsic motivation, extrinsic motivation, third-party influence, and career exposure impact students' career choices. A quantitative research approach was utilized, using a structured survey shared through Google Forms. Data were gathered through a non-probability convenience sampling method that relied on the accessibility and availability of participants within the targeted student group, yielding 363 valid responses. The data were examined with the Statistical Package for the Social Sciences (SPSS), utilizing descriptive statistics, Pearson correlation analysis, and multiple regression methods. The results show that intrinsic motivation, extrinsic motivation, and external influence significantly enhance students' intentions to follow accounting careers, while career exposure displays a positive yet statistically insignificant relationship. Significantly, intrinsic motivation stands out as the key factor, highlighting the significance of students' internal interest in the accounting domain. In summary, the findings indicate that motivational and social elements have a greater impact than career exposure on how students choose their career paths. This research adds to the accounting education literature by examining the somewhat overlooked polytechnic environment in Malaysia and provides actionable insights for educators and policymakers to boost student motivation and improve career development efforts.

Keywords : *Accounting career path, Intrinsic Motivation, Extrinsic Motivation, Third Parties Influence, Career Exposure, Social Cognitive Career Theory*

Keberkesanan Pengurusan Aset Dalam Kalangan Warga Kolej Komuniti Pasir Gudang

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Abstrak

Pengurusan aset alih kerajaan merupakan aspek penting dalam memastikan tadbir urus organisasi dilaksanakan secara cekap dan berkesan. Kolej Komuniti Pasir Gudang (KKPG) melaksanakan pengurusan aset selaras dengan pekeliling yang ditetapkan, namun masih berdepan isu kekangan sumber manusia khususnya ketiadaan juruteknik serta pelupusan aset yang tertangguh apabila aset usang disimpan melebihi tempoh sewajarnya akibat kelewatan penyelenggaraan dan penilaian. Sehubungan itu, kajian ini dijalankan bagi menilai tahap keberkesanan pengurusan aset dalam kalangan warga KKPG berdasarkan lima faktor utama iaitu pengetahuan dan kepatuhan staf, keberkesanan sistem dan maklumat aset, pelaksanaan pengurusan dan pemantauan aset, sokongan pengurusan serta kepuasan staf. Kajian ini melibatkan 41 orang responden yang dipilih secara rawak mudah, dengan data dikumpulkan melalui soal selidik Skala Likert lima mata dan dianalisis menggunakan SPSS versi 26.0 secara deskriptif. Dapatan kajian menunjukkan bahawa pengurusan aset di KKPG berada pada tahap memuaskan dan dilaksanakan secara sistematik, dengan pengetahuan dan kepatuhan staf serta sokongan pengurusan dikenal pasti sebagai faktor utama yang menyumbang kepada keberkesanan tersebut walaupun berhadapan dengan isu-isu yang lain. Secara keseluruhannya, pengurusan aset di KKPG berada pada tahap baik dan berpotensi untuk terus diperkukuhkan melalui penambahbaikan berterusan, khususnya dalam aspek sumber manusia dan kecekapan pelupusan aset.

Kata Kunci : *Pengurusan Aset, Keberkesanan Pengurusan Aset, Kolej Komuniti*

Abstract

The management of government movable assets is a crucial component in ensuring that organizational governance is implemented efficiently and effectively. Kolej Komuniti Pasir Gudang manages its assets in accordance with the prescribed government circulars; however, several challenges remain, particularly in terms of human resource constraints, such as the absence of technical personnel, as well as delays in asset disposal where obsolete assets are retained beyond the appropriate period due to delayed maintenance and evaluation processes. Therefore, this study was conducted to assess the effectiveness of asset management among the staff of Kolej Komuniti Pasir Gudang based on five key factors, namely staff knowledge and compliance, the effectiveness of asset systems and information, the implementation of asset management and monitoring, management support, and staff satisfaction. This study involved 41 respondents selected through simple random sampling. Data were collected using a five-point Likert scale questionnaire and analyzed descriptively using SPSS version 26.0. The findings reveal that asset management practices at Kolej Komuniti Pasir Gudang are at a satisfactory level and are implemented systematically. Staff knowledge and compliance, together with management support, were identified as the primary factors contributing to the effectiveness of asset management despite the existence of several related challenges. In conclusion, asset management at Kolej Komuniti Pasir Gudang is at a good level and demonstrates strong potential for further enhancement through continuous improvement efforts, particularly in the areas of human resource capacity and the efficiency of asset disposal processes.

Keywords : *Asset Management, Effectiveness of Asset Management, Community College*

Persepsi Pelajar Terhadap Pembelajaran Teknologi Percetakan Digital bagi Program Diploma Teknologi Media Cetak di Politeknik Muadzam Shah, Pahang.

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Abstrak

Perkembangan teknologi percetakan daripada percetakan konvensional kepada percetakan digital telah membawa perubahan ketara dalam bidang dunia percetakan yang telah mempengaruhi kaedah pengajaran dan pembelajaran teknologi percetakan. Percetakan digital atau lebih dikenali sebagai *Digital Printing* merupakan kaedah percetakan yang mencetak terus daripada imej berasaskan digital kepada pelbagai jenis media atau bahan cetakan. Ia merupakan satu teknologi moden yang telah merevolusikan industri percetakan tradisional iaitu *offset printing* kepada *digital printing*. Percetakan digital merupakan salah satu kursus yang terdapat dalam Program Diploma Teknologi Media Cetak di Jabatan Rekabentuk & Komunikasi Visual, Politeknik Muadzam Shah, Pahang yang merupakan satu-satunya politeknik di Malaysia yang mempunyai kursus ini. Oleh hal yang demikian, kajian ini dijalankan bagi mengenal pasti persepsi pelajar terhadap pembelajaran percetakan digital dalam kalangan pelajar bagi Program Diploma Teknologi Media Cetak. Kajian ini melibatkan 90 responden yang terdiri daripada pelajar semester 2 hingga 6 Program Diploma Teknologi Media Cetak di Politeknik Muadzam Shah. Kaedah pengumpulan data dikumpul dengan menggunakan kaedah kuantitatif iaitu melalui pengedaran borang soal selidik kepada semua responden. Instrumen kajian menggunakan skala Likert lima mata bagi mengukur tahap persepsi pelajar terhadap pembelajaran teknologi percetakan digital, kefahaman pelajar terhadap pembelajaran teknologi percetakan digital, kemahiran dan penguasaan pelajar terhadap pembelajaran teknologi percetakan digital, kaedah pengajaran pensyarah di dalam kelas dan cabaran yang dihadapi oleh pelajar dalam proses pembelajaran teknologi percetakan digital. Dapatan kajian menunjukkan bahawa majoriti pelajar Program Diploma Teknologi Media Cetak mempunyai persepsi yang positif terhadap pembelajaran percetakan digital walaupun terdapat beberapa cabaran dan kekangan dalam menguasai perisian teknologi digital seperti cabaran dalam menggunakan perisian percetakan digital, masalah teknikal dan kesukaran mengendalikan mesin digital kerana ketiadaan mesin di jabatan dan masa amali yang terhad. Oleh hal yang demikian diharapkan kajian ini dapat membantu pensyarah dan politeknik dalam menambah baik strategi PdP serta kemudahan peralatan agar memenuhi keperluan kursus semasa.

Kata kunci : *persepsi, pembelajaran, percetakan digital, Teknologi Media Cetak*

Abstract

The development of printing technology from conventional printing to digital printing has brought significant changes to the printing industry, influencing teaching and learning methods in printing technology. Digital printing is a modern printing method that prints from digital images directly onto various media or materials. Modern technology has revolutionized the traditional printing industry. Digital printing is one of the courses available in the Diploma Print Media Technology Program at the Department of Design & Visual Communication, Polytechnic Muadzam Shah, Pahang, which is the only polytechnic in Malaysia to offer this course. This study was conducted to identify students' perceptions of learning in digital printing within the Diploma Print Media Technology Program. This study involved 90 respondents, comprising students in semesters 2 to 6 of the Diploma Print Media Technology Program at Polytechnic Muadzam Shah. The data collection method used was quantitative, with questionnaires distributed to all respondents. The study instrument used a Likert scale to measure students' perceptions, understanding, and skills learning digital printing technology, lecturers' teaching methods in the classroom, and the challenges students faced in the process of learning digital printing technology.

The findings of the study show that the majority of students in the Diploma Print Media Technology Program have a positive perception of learning digital printing despite several challenges and constraints in mastering digital technology software, such as challenges in using digital printing software, technical problems, and difficulty operating digital machines due to the absence of machines in the department and limited practical time. In conclusion, hopefully this study can assist lecturers and polytechnics in improving teaching and learning strategies and equipment facilities to meet current course requirements.

***Keywords :** perception, learning, digital printing, Print Media Technology*

Nearpod As an Innovative Teaching Aid in Basic Western Culinary Education at Politeknik Merlimau Melaka, Malaysia

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Abstract

Digital technology has increasingly become an essential component of modern educational practices. Interactive learning platforms enable educators to deliver instructional content through engaging and student-centered approaches. In vocational education, particularly in culinary programs, teaching methods traditionally focus on instructor demonstrations, lectures, and practical kitchen training. However, theoretical lessons in culinary education may sometimes struggle to maintain high levels of student engagement when conventional teaching methods are used. This study examines the potential of Nearpod as an innovative instructional tool in Basic Western Culinary Education at Politeknik Merlimau Melaka. Using a conceptual and literature-based approach, the study explores how interactive digital platforms can support student participation, motivation, and understanding of culinary concepts. Previous research suggests that Nearpod promotes interactive learning through multimedia content, real-time assessment, and collaborative classroom activities (Abdullah et al., 2022; Musa & Al-Momani, 2022). In addition, the use of interactive learning media has been associated with improved student participation and learning outcomes (Anggaretta et al., 2024). The findings indicate that integrating Nearpod.

Keywords: Nearpod, culinary education, educational technology, interactive learning, vocational education

A Study on Personality Traits and Academic Performance among Students at Politeknik Mersing Johor

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Abstract

This study examines the relationship between personality traits and academic performance among students at Politeknik Mersing Johor, recognising that personality plays a crucial role in shaping students' attitudes, behaviours, and learning approaches. Grounded in the Big Five Personality Traits Model, which consists of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. The research adopts a quantitative design using a structured questionnaire adapted from the Big Five Personality Inventory, alongside students' Grade Point Average (GPA) as a measure of academic performance. Data were collected from a sample of 119 students across various academic programmes, and analysed using descriptive statistics and mean analysis. The findings indicate that certain personality traits, particularly openness to experience, are likely to have a significant positive relationship with academic performance, while personality traits such as conscientiousness may exhibit a negative relationship due to increased stress and emotional instability. Overall, this study provides valuable insights for educators, academic advisors, and students in understanding the influence of personality on academic success and highlights the importance of developing targeted strategies to enhance learning outcomes in higher education institutions.

Keywords : *Personality Traits, Academic Performance, Big Five Personality Model, Higher Education.*

Implementation of the SAU10212 Telegram Bot in Vehicle Electrical Systems: An Evaluation of Usability, Acceptance, and Student Performance at Pasir Salak Community College

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Abstract

The integration of digital technology in higher education has facilitated more interactive and engaging pedagogical practices, consistent with the objectives of the Malaysia Higher Education Plan (RPTM) for 2026 - 2035. Traditional pedagogical approaches in technical disciplines are frequently hindered by limited access to responsive and interactive reference tools. Consequently, students struggle to visualize intricate vehicle electrical systems using static manuals, ultimately affecting their practical proficiency within continuous assessments. This study established three primary objectives: to evaluate the usability of SAU10212 Telegram Bot as a digital support platform, to identify student acceptance, and to compare overall student performance before and after the bot's implementation. Utilizing a census sampling technique, data were gathered from a total population of 54 students enrolled in the first semester of the automotive technology program across two academic sessions. To ensure a comprehensive evaluation, survey-based data were synthesized with a longitudinal analysis of student marks across two academic sessions. Descriptive statistical analysis conducted using SPSS Version 31 yielded high mean scores for interface configuration (4.34), functional evaluation (4.32), and user validation (4.36), indicating strong usability and widespread student acceptance. Furthermore, a comparative analysis of student performance across sessions revealed a positive upward trend following the bot's introduction. In summary, the SAU10212 Telegram Bot functions as a robust digital support mechanism, promoting a flexible learning environment that substantially enhances educational outcomes for vehicle electrical systems module.

Keywords: Automotive technology; digital; education; SAU10212 Telegram Bot; vehicle electrical systems

Kajian Keberkesanan Arena Usahawan JKE sebagai Medium Pembelajaran Keusahawanan Berasaskan Amali

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Abstrak

Kajian ini bertujuan menilai keberkesanan Arena Usahawan JKE sebagai medium pembelajaran keusahawanan berasaskan amali dalam kalangan pelajar. Platform ini memberi peluang kepada pelajar untuk menjalankan aktiviti perniagaan secara langsung serta mengaplikasikan pengetahuan keusahawanan yang dipelajari secara teori. Kajian ini menggunakan pendekatan kuantitatif melalui kaedah tinjauan dengan borang soal selidik sebagai instrumen kajian. Instrumen kajian merangkumi beberapa konstruk utama iaitu keberkesanan Arena Usahawan JKE sebagai medium pembelajaran, penglibatan pelajar dalam aktiviti perniagaan, pembangunan kemahiran keusahawanan, pembelajaran berasaskan amali, faktor pelaksanaan dan sokongan serta tahap kepuasan pelajar. Data dianalisis menggunakan statistik deskriptif iaitu min dan sisihan piawai. Dapatan kajian menunjukkan bahawa Arena Usahawan JKE berada pada tahap keberkesanan yang tinggi sebagai medium pembelajaran berasaskan amali. Pelajar menunjukkan penglibatan yang aktif dalam aktiviti perniagaan serta memperoleh pengalaman pembelajaran secara langsung yang membantu meningkatkan kemahiran keusahawanan seperti komunikasi, pengurusan kewangan, kreativiti dan keyakinan diri. Selain itu, tahap kepuasan pelajar terhadap pelaksanaan Arena Usahawan JKE juga didapati tinggi. Secara keseluruhannya, Arena Usahawan JKE berpotensi menjadi platform pembelajaran berasaskan pengalaman yang berkesan dalam menyokong pembangunan kompetensi keusahawanan pelajar.

Kata Kunci : *keusahawanan, pembelajaran berasaskan amali, experiential learning, penglibatan pelajar, Arena Usahawan JKE.*

This study aims to evaluate the effectiveness of the Arena Usahawan JKE as a medium of practical-based entrepreneurship learning among students. This platform provides students with the opportunity to carry out business activities directly and apply the entrepreneurial knowledge learned theoretically. This study uses a quantitative approach through a survey method with a questionnaire as the research instrument. The research instrument includes several main constructs, namely the effectiveness of the Arena Usahawan JKE as a learning medium, student involvement in business activities, entrepreneurial skill development, practical-based learning, implementation and support factors, and student satisfaction levels. The data is analyzed using descriptive statistics, namely the mean and standard deviation. The study findings show that the Arena Usahawan JKE is at a high level of effectiveness as a practical-based learning medium. Students show active involvement in business activities and gain direct learning experiences that help improve entrepreneurial skills such as communication, financial management, creativity, and self-confidence. In addition, the level of student satisfaction with the implementation of the Arena Usahawan JKE was also found to be high. Overall, the Arena Usahawan JKE has the potential to be an effective experiential learning platform in supporting the development of students' entrepreneurial competencies.

Keywords: *entrepreneurship, practice-based learning, experiential learning, student engagement, JKE Entrepreneur Arena*

Bridging The Water Literacy Gap: A Digital Approach To Promoting Sustainable Water Behaviour Among Malaysian Secondary Students

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Abstract

Water literacy is widely recognised as a multidimensional construct comprising knowledge, attitudes, and behaviour. However, behavioural change remains the most difficult dimension to develop, particularly in school-based environmental education. This study examined whether a digital learning approach could strengthen sustainable water-related behaviour among Malaysian secondary school students. A quantitative quasi-experimental design with a non-equivalent pretest-posttest control group was employed. The study involved 63 Form One students from two secondary schools in Miri, Sarawak, comprising 31 students in the digital learning group and 32 students in the conventional group. The intervention group used the interactive digital module through Minecraft Education Edition, while the control group received conventional teacher-centred instruction. Water-related behaviour was measured using a 15-item questionnaire, and the data were analysed using descriptive statistics, independent-samples t-tests, and Cohen's *d*. The findings showed no significant difference between the groups at pre-test, but the digital group achieved a significantly higher post-test mean score than the conventional group, $t(61) = 4.596, p < .001$, with a large effect size ($d = 1.158$). These findings indicate that digitally mediated, action-oriented learning can more effectively promote sustainable water-related behaviour and help bridge the behavioural gap in water literacy among Malaysian secondary school students.

Keywords: *Digital Learning; Environmental Education; Sustainable Water Behaviour; Water Literacy*

Kajian Keberkesanan Campuran Bitumen-Getah terhadap Ketahanan dan Rintangan Kegelinciran Turapan Jalan Raya

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Abstrak

Kajian ini dijalankan untuk menilai keberkesanan campuran bitumen-getah terhadap ketahanan dan rintangan kegelinciran turapan jalan raya. Objektif utama ialah menentukan kadar ketahanan turapan apabila dicampurkan dengan 3% tayar getah terpakai, serta menilai tahap rintangan kegelinciran. Sebanyak tiga sampel berbentuk silinder dihasilkan mengikut piawaian JKR/SPJ/2008-S4 dan diuji menggunakan dua kaedah makmal iaitu Ujian Marshall dan Ujian Rintangan Kegelinciran. Keputusan Ujian Marshall menunjukkan purata kestabilan 10,964 N dengan sisihan piawai 1,150 N (~10%) dan purata kekuatan 3,655 N/mm dengan sisihan piawai 87 N/mm (~2.4%). Kedua-dua nilai ini melepasi piawaian JKR (>8,000 N dan >2,000 N/mm). Sementara itu, Ujian Rintangan Kegelinciran mencatatkan purata 45 dengan sisihan piawai 3.0 (~6.6%), yang menepati kategori C dan sesuai digunakan pada semua jenis jalan. Nilai sisihan piawai yang rendah membuktikan bahawa data adalah konsisten dan boleh dipercayai. Dapatan ini menunjukkan bahawa campuran bitumen-getah bukan sahaja meningkatkan ketahanan turapan dan keselamatan jalan raya, malah berpotensi mengurangkan kos penyelenggaraan jangka panjang. Kajian ini menyokong penggunaan *Cup Lump Modified Asphalt* (CMA) sebagai alternatif turapan yang lebih tahan lama, selamat, dan mesra alam.

Keywords : *Turapan Jalan Raya, Kestabilan dan Kekutan, Rintangan Kegelinciran, Bitumen.*

Abstract

This study was conducted to evaluate the effectiveness of rubberized bitumen mixtures in improving pavement durability and skid resistance. The main objective was to determine the durability of asphalt when mixed with 3% waste tire rubber and to assess its skid resistance. Three cylindrical samples were prepared according to JKR/SPJ/2008-S4 standards and tested using two laboratory methods: the Marshall Test and the Skid Resistance Test. The Marshall Test results recorded an average stability of 10,964 N with a standard deviation of 1,150 N (~10%) and an average strength of 3,655 N/mm with a standard deviation of 87 N/mm (~2.4%). Both values exceeded JKR requirements (>8,000 N and >2,000 N/mm). Meanwhile, the Skid Resistance Test recorded an average value of 45 with a standard deviation of 3.0 (~6.6%), which meets Category C and is suitable for all road types. The relatively low standard deviation values confirm that the data are consistent and reliable. These findings demonstrate that rubberized bitumen mixtures not only enhance pavement durability and road safety but also have the potential to reduce long-term maintenance costs. This study supports the use of Cup Lump Modified Asphalt (CMA) as a more durable, safer, and environmentally sustainable alternative for road construction.

Keywords : *Road Pavement, Stability and Strength, Skid Resistance, Bitumen.*

Digital Learning Tools and Student Engagement In TVET Education: An Empirical Study at A Community College

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Abstract

Digital technologies have transformed teaching and learning practices in higher education, particularly in Technical and Vocational Education and Training (TVET), by enabling more flexible and engaging learning environments. However, the extent to which these digital learning tools enhance student engagement remains a critical question. This study aims to examine the effectiveness of digital learning tools in improving student engagement at Pasir Gudang Community College. A quantitative research approach was employed, involving 30 students from the Certificate in Information Technology programme who responded to a structured questionnaire. The study focused on three main digital tools: CIDOS Learning Management System (LMS), instructional videos, and digital eBooks. Data were analysed using descriptive statistics through mean score calculation, while reliability analysis using Cronbach's Alpha yielded a value of 0.89, indicating high internal consistency. The findings revealed a high level of student engagement, with an overall mean score of 4.37 (agree) on a five-point Likert scale. The results indicate that digital learning tools improve access to learning materials, enhance students' understanding of course content, and increase motivation to participate in learning activities. These findings highlight the importance of integrating digital learning strategies in TVET education to create more effective and engaging learning experiences.

Keywords: *Digital learning; Educational technology; Learning management system; Student engagement; TVET education*

Kajian Pembangunan Sistem Amaran Halangan Berasaskan Sensor Ultrasonik bagi menyokong Mobiliti Individu OKU Penglihatan

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Abstrak

Kajian ini bertujuan membangunkan sistem amaran halangan berasaskan sensor ultrasonik bagi meningkatkan keselamatan dan mobiliti individu kurang upaya (OKU) penglihatan yang menghadapi kesukaran mengesan halangan menggunakan tongkat konvensional yang terhad kepada sentuhan fizikal dan jarak dekat. Walaupun pelbagai sistem pengesanan halangan telah dibangunkan, kebanyakannya masih terhad dari segi kos, kebolegunaan dan keupayaan maklum balas masa nyata yang intuitif kepada pengguna. Oleh itu, sistem yang dicadangkan menggunakan mikropengawal ESP32 sebagai unit pemproses utama yang diintegrasikan dengan sensor ultrasonik untuk mengesan objek pada jarak tertentu, serta motor getaran dan buzzer sebagai mekanisme maklum balas. Metodologi kajian merangkumi reka bentuk sistem, integrasi perkakasan serta pembangunan perisian menggunakan Arduino IDE. Pengujian sistem dijalankan bagi menilai keupayaan pengesanan halangan serta keberkesanan maklum balas berdasarkan variasi jarak objek. Hasil kajian menunjukkan bahawa sistem mampu mengesan halangan secara masa nyata dan memberikan maklum balas yang berbeza mengikut tahap kedekatan objek. Secara keseluruhannya, sistem ini menyumbang kepada pembangunan peranti bantuan kos rendah yang praktikal dan mesra pengguna.

Kata Kunci: Sensor Ultrasonik; Sistem Amaran Halangan; OKU Penglihatan; Mikropengawal ESP32; Maklum Balas Masa Nyata; Peranti Bantuan Mobiliti.

Abstract

This study aims to develop an ultrasonic sensor-based obstacle warning system to enhance the safety and mobility of visually impaired individuals, who often face difficulties in detecting obstacles using conventional canes. The proposed system utilizes an ESP32 microcontroller integrated with an ultrasonic sensor, vibration motor, and buzzer to provide real-time feedback. The methodology includes system design, hardware integration, and software development using Arduino IDE, followed by system testing to evaluate detection performance and feedback effectiveness. The results indicate that the system is capable of detecting obstacles and providing differentiated feedback based on distance. This study contributes to the development of a low-cost, practical, and user-friendly assistive mobility device.

Keywords: *Ultrasonic Sensor; Obstacle Detection System; Visually Impaired Individuals; ESP32 Microcontroller; Real-Time Feedback; Assistive Mobility Device.*

Deep Learning-Based Structural Monitoring of Oil Palm Inflorescences for Early-Stage Pollination Assessment Using UAV Imagery

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Abstrak

Kajian ini dijalankan untuk suatu sistem pemantauan awal pendebungaan kelapa sawit berasaskan dron tanpa pemandu (UAV) dan deep learning bagi memantau keseimbangan bunga jantan dan bunga betina dalam kawasan mikro-plot terkawal berkeluasan 10×10 pokok. Sistem yang dicadangkan diintegrasikan dengan pengesanan imej bunga menggunakan model YOLO, pengiraan Pollination Ratio Index (PRI), dan beberapa analisis statistik bagi menilai perkembangan pendebungaan. Data dikumpulkan dari November 2025 hingga Januari 2026 dengan mengambil kira faktor altitud, halangan kanopi, dan keadaan angin. Keputusan menunjukkan bahawa variasi struktur bunga memberi kesan signifikan terhadap nilai PRI dan keseimbangan pengesanan, dengan perbezaan statistik yang signifikan diperolehi melalui analisis ANOVA ($p < 0.05$). Kajian ini membuktikan bahawa pemantauan struktur bunga menggunakan UAV berpotensi menjadi mekanisme sokongan keputusan yang lebih awal dan lebih sistematik berbanding kaedah pemerhatian manual yang konvensional.

Abstract

This study was conducted to develop an early-stage oil palm pollination monitoring system based on Unmanned Aerial Vehicle (UAV) technology and deep learning to monitor the balance between male and female flowers within a controlled 10×10 tree micro-plot area. The proposed system integrates floral image detection using a YOLO model, Pollination Ratio Index (PRI) computation, and several statistical analyses to evaluate pollination development. Data were collected from November 2025 to January 2026, taking into account altitude, canopy occlusion, and wind-condition factors. The findings indicate that variations in floral structure significantly affect PRI values and detection balance, with statistically significant differences identified through ANOVA analysis ($p < 0.05$). This study demonstrates that UAV-based floral structure monitoring has strong potential to serve as an earlier and more systematic decision-support mechanism compared to conventional manual observation methods.

Keywords : Oil palm inflorescence, Deep learning, Object detection, Pollination monitoring, Precision agriculture, *Elaeidobius kamerunicus*, UAV-based imaging

Kajian Keberkesanan *Urea Formaldehyde* dalam Meningkatkan Ketahanan Siling Kapur

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Abstrak

Kajian ini dijalankan untuk menilai keberkesanan penggunaan Urea Formaldehyde (UF) sebagai bahan tambah dalam penghasilan siling kapur kalis air. Objektif utama adalah membandingkan kandungan lembapan dan kekuatan antara siling kapur asal dengan siling kapur campuran UF, serta menentukan peratus optimum UF yang memberikan prestasi terbaik. Tiga peratus campuran UF telah diuji iaitu 10%, 30%, dan 50%. Kaedah kajian melibatkan penghasilan sampel mengikut spesifikasi JKR, diikuti ujian kandungan lembapan melalui rendaman selama 24 jam dan ujian kekuatan menggunakan mesin pemampatan hidraulik. Hasil kajian menunjukkan bahawa penambahan UF berjaya mengurangkan kadar penyerapan air daripada 37.36% kepada 21.21%, serta meningkatkan kekuatan daripada 2.88 bar kepada 3.07 bar, melepasi piawaian minimum MS EN 1296:2010. Campuran UF sebanyak 50% didapati paling optimum kerana memberikan kandungan lembapan paling rendah dan kekuatan tertinggi. Walaupun UF terbukti berkesan, isu pelepasan formaldehid perlu diberi perhatian kerana had pelepasan yang dibenarkan oleh WHO dan OSHA adalah sekitar 0.1 ppm bagi ruang dalaman. Oleh itu, kajian lanjutan wajar menilai tahap pelepasan UF serta meneroka bahan alternatif bio-berasaskan yang lebih mesra alam untuk memastikan keberkesanan dan kelestarian jangka panjang.

Keywords : *Urea Formaldehyde, Siling Kapur, Kalis Kelembapan, Kekuatan Struktur*

Abstract

This study was conducted to evaluate the effectiveness of Urea Formaldehyde (UF) as an additive in producing water-resistant gypsum ceiling boards. The main objective was to compare moisture content and strength between conventional gypsum ceilings and UF-modified samples, and to determine the optimum UF percentage for best performance. Three UF mixtures were tested: 10%, 30%, and 50%. The methodology involved sample preparation according to JKR specifications, followed by moisture absorption tests through 24-hour immersion and strength tests using a hydraulic compression machine. Results indicated that UF addition significantly reduced water absorption from 37.36% to 21.21%, while increasing strength from 2.88 bar to 3.07 bar, exceeding the minimum requirement of MS EN 1296:2010. The 50% UF mixture was found to be the most effective, providing the lowest moisture content and highest strength. Although UF proved effective, concerns regarding formaldehyde emissions must be addressed, as WHO and OSHA set the permissible indoor exposure limit at approximately 0.1 ppm. Therefore, future studies should quantify UF emissions and explore bio-based alternatives to ensure long-term effectiveness and sustainability.

Keywords : *Urea Formaldehyde, Gypsum Ceiling, Moisture Resistance, Structural Strength*

Digitalizing Institutional Quality Assurance: An Empirical Study on the Effectiveness of the Q-CORE Platform in a TVET Environment

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Abstract

Institutional quality assurance (QA) in Technical and Vocational Education and Training (TVET) often faces critical challenges related to information fragmentation and the inefficiency of decentralized documentation. This study evaluates the effectiveness of Q-CORE, a centralized digital platform designed to streamline QA documentation and enhance audit readiness at a Pasir Gudang Community College. Grounded in the Technology Acceptance Model (TAM) and Cognitive Load Theory, this research examines the impact of the platform on administrative efficiency and user experience among vocational educators. A quantitative survey was conducted involving a purposive sample of 30 academic and administrative staff, utilizing a 15-item instrument adapted from validated TAM constructs and cognitive load measures. Data were analysed using descriptive statistics to determine the mean scores for Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Cognitive Load reduction. The findings indicate an exceptionally high level of acceptance, with the platform's role as a "Single Source of Truth" (SSOT) recording the highest impact on productivity. Specifically, the integration of "single-click" navigation significantly improved information retrievability while reducing "search friction" compared to traditional, fragmented social media-based communication channels like WhatsApp. Furthermore, the results suggest that reducing extrinsic cognitive load through centralized digital gateways mitigates technostress among staff. This study contributes to the digital transformation discourse in TVET governance by providing an empirical framework for assessing specialized QA management systems, offering a scalable model for institutionalizing digital quality ecosystems in the post-pandemic administrative landscape.

Keywords : Cognitive Load; Digital Transformation Quality Assurance; Q-CORE ; Technology Acceptance Model (TAM)

Tahap Pengetahuan Pelajar Jabatan Perdagangan Politeknik Kuching Sarawak Terhadap Penggunaan Kecerdasan Buatan (*Artificial Intelligence*) Dalam Membantu Proses Pembelajaran

Nur Azreen binti Zaidel¹, Siti Adawiyah binti Abdullah², Nurfazlyn binti Dolhan³

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² Politeknik Kuala Terengganu
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Abstrak

Kajian ini bertujuan mengenal pasti tahap pengetahuan pelajar Jabatan Perdagangan Politeknik Kuching Sarawak terhadap penggunaan kecerdasan buatan (AI) dalam pembelajaran, selaras dengan perkembangan teknologi yang semakin pesat dan berperanan meningkatkan kecekapan serta memperkaya pengalaman pendidikan yang lebih adaptif dan berpersonal. Walaupun AI tidak dapat menggantikan peranan guru, teknologi ini berpotensi menyokong pendidik dalam menyediakan bahan pengajaran yang lebih efisien serta membantu pelajar mengoptimumkan pembelajaran mengikut gaya dan tahap kefahaman masing-masing. Kajian ini menggunakan pendekatan kuantitatif melalui instrumen soal selidik yang diedarkan secara dalam talian kepada sampel pelajar diploma Jabatan Perdagangan menggunakan teknik pensampelan rawak. Data yang diperoleh dianalisis secara deskriptif bagi menilai tahap pengetahuan pelajar terhadap penggunaan AI. Dapatan kajian menunjukkan bahawa tahap pengetahuan pelajar berada pada tahap sederhana, menandakan mereka mempunyai pemahaman yang agak baik serta sikap yang positif terhadap teknologi ini, namun masih terdapat ruang untuk penambahbaikan. Kesimpulannya, kajian ini memberi implikasi penting dalam merangka kurikulum yang lebih komprehensif serta membantu pembuat dasar pendidikan dalam merancang inisiatif yang lebih efektif bagi mengintegrasikan AI dalam pengajaran dan pembelajaran.

Kata kunci: AI; kecerdasan buatan; pembelajaran; tahap pengetahuan

Abstract

This study aims to identify the level of knowledge among students of the Commerce Department at Politeknik Kuching Sarawak regarding the use of artificial intelligence (AI) in learning, in line with the rapid development of technology that enhances efficiency and enriches more adaptive and personalized educational experiences. Although AI cannot replace the role of teachers, it has the potential to support educators in delivering more efficient teaching materials and assist students in optimizing their learning according to their individual learning styles and levels of understanding. This study adopts a quantitative approach using a questionnaire instrument distributed online to a sample of diploma students from the Commerce Department through random sampling techniques. The data obtained were analysed descriptively to assess the students' level of knowledge regarding the use of AI. The findings indicate that the students' level of knowledge is at a moderate level, suggesting that they possess a good understanding and a positive attitude towards this technology, although there is still room for improvement. In conclusion, this study provides important implications for designing a more comprehensive curriculum and assists policymakers in planning more effective initiatives to integrate AI into teaching and learning.

Keywords: AI; artificial intelligence; learning; level of knowledge

SOKONGAN SOSIAL SEBAGAI FAKTOR PELINDUNG KESIHATAN MENTAL PELAJAR TVET: ANALISIS TAHAP SOKONGAN DAN HUBUNGANNYA DENGAN KEMURUNGAN

Sofiah binti Bakar¹, Nur Elyani binti Mohammad², Ainun Rafieza binti Ahmad Tajuddin³

^{1, 2, 3} Unit Teknologi Maklumat, Kolej Komuniti Arau, Arau, Perlis, Malaysia

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Abstrak

Kesihatan mental pelajar institusi Pendidikan dan Latihan Teknikal dan Vokasional (TVET) semakin mendapat perhatian berikutan peningkatan tekanan akademik, latihan kemahiran dan cabaran sosioekonomi yang dihadapi oleh pelajar. Sokongan sosial dikenal pasti sebagai faktor penting yang berpotensi mempengaruhi kesejahteraan psikologi pelajar, khususnya dalam mengurangkan risiko kemurungan. Sehubungan itu, kajian ini dijalankan untuk menentukan tahap sokongan sosial dan tahap kemurungan dalam kalangan pelajar kolej komuniti, menganalisis hubungan antara sokongan sosial dan kemurungan, serta mengenal pasti perbezaan tahap kemurungan berdasarkan jantina dan pendapatan keluarga. Kajian ini menggunakan pendekatan kuantitatif berbentuk tinjauan dengan melibatkan seramai 120 orang pelajar kolej komuniti sebagai responden. Data dikumpulkan menggunakan soal selidik berstruktur berskala Likert tujuh mata dan dianalisis menggunakan statistik deskriptif serta inferensi melalui perisian Statistical Package for the Social Sciences (SPSS). Analisis korelasi Pearson menunjukkan terdapat hubungan yang signifikan dan sangat kuat antara sokongan sosial dan tahap kemurungan pelajar ($r = 0.839$, $p < 0.001$). Analisis perbezaan pula menunjukkan bahawa tiada perbezaan yang signifikan dalam tahap kemurungan berdasarkan faktor jantina dan pendapatan keluarga. Secara keseluruhannya, dapatan kajian ini membuktikan bahawa sokongan sosial memainkan peranan yang sangat signifikan sebagai faktor pelindung kesejahteraan psikologi pelajar kolej komuniti. Kajian ini memberi implikasi penting kepada pihak institusi dalam merangka strategi sokongan pelajar yang lebih holistik, berasaskan bukti empirikal dan selari dengan keperluan pendidikan TVET.

Kata kunci: sokongan sosial, kemurungan, kesejahteraan psikologi, pelajar kolej komuniti, pendidikan TVET

Abstract

The mental health of students in Technical and Vocational Education and Training (TVET) institutions has received increasing attention due to the increasing academic pressure, skills training and socioeconomic challenges faced by students. Social support has been identified as an important factor that has the potential to influence students' psychological well-being, especially in reducing the risk of depression. Accordingly, this study was conducted to determine the level of social support and depression levels among community college students, analyze the relationship between social support and depression, and identify differences in depression levels based on gender and family income. This study used a quantitative survey approach involving 120 community college students as respondents. Data were collected using a structured questionnaire with a seven-point Likert scale and analyzed using descriptive and inferential statistics using the Statistical Package for the Social Sciences (SPSS) software. Pearson correlation analysis showed that there was a significant and very strong relationship between social support and student depression levels ($r = 0.839$, $p < 0.001$). Analysis of variance showed that there was no significant difference in depression levels based on gender and family income. Overall, the findings of this study demonstrate that social support plays a very significant role as a protective factor for the psychological well-being of community college students. This study has important implications for institutions in designing more holistic student support strategies, based on empirical evidence and in line with the needs of TVET education.

Keywords : social support, depression, psychological well-being, community college students, TVET education

Language Educators' Perceptions of Online Platforms and Micro-Credentials in Language Learning Contexts

Rashidah Lip¹, Mohd Kamaruzaman Musa², Sazilah Salam³

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²*Department of Civil Engineering Technology, Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia*

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Abstract

This study explores language educators' perceptions of online language learning platforms and micro-credentials within the context of higher education. As digital learning continues to evolve, understanding educators' acceptance and perspectives is essential to ensure effective implementation of technology-enhanced language instruction. A quantitative research design was employed, involving 30 language educators from a public university in Malaysia. Data were collected using structured questionnaires and analysed using descriptive statistics, including mean scores and standard deviations. The findings indicate that educators generally have positive perceptions towards online platforms, particularly in enhancing teaching effectiveness, improving students' technological literacy, and supporting flexible learning environments. Similarly, micro-credentials are perceived as valuable tools for recognising language competencies and supporting diverse instructional strategies. However, challenges such as student engagement, increased instructional workload, and limitations in practical implementation were identified. The study concludes that while both approaches have strong potential in transforming language education, their effectiveness depends on pedagogical alignment, structured frameworks, and institutional support.

Keywords : *Online Language Learning, Micro-Credentials, Language Educators' Perception, Higher Education*

The Effect of Web Base Learning on the Level of Critical Thinking and Collaboration in Digital Circuit Courses

Farid Baskoro¹, Bambang Suprianto², I Gusti Putu Asto Buditjahjanto³, Lilik Anifah⁴,

¹ Postgraduate vocational education, Univeristas Negeri Surabaya, Surabaya, Indonesia
E-mail: faridbaskoro@unesa.ac.id

^{2,3,4} Postgraduate vocational education, Univeristas Negeri Surabaya, Surabaya, Indonesia
E-mail: bambangsuprianto@unesa.ac.id, asto@unesa.ac.id, lilikanifah@unesa.ac.id,

Abstract

This study aims to produce interactive web-based learning media for digital circuit courses. The resulting learning media must meet the feasibility and validity so that it can be said that the learning media that has been developed is feasible and valid for students to use in the learning process. The validation results through the validation sheet are then analyzed to obtain the validation results. The results of the questionnaire on 65 students consisting of class A who received treatment and class B who did not receive treatment stated that for web media display a score of 4.122 (good) was class A, while class B for media display was 3.64 (good enough). in terms of media content, class A gets a value of 4.06 (good) for class B gets a value of 3.62 (good enough) student learning outcomes from the aspect of critical thinking get an average score of 3.43 (good enough) and for collaboration gets a value of 3.45 (good enough) This shows that web-based learning media is enough to help students in the digital circuit learning process in this pandemic era.

Keywords: *learning media, web, critical thinking, collaboration*

The Effect of Instructor Professional Competence of Training Skills Simulator in Maritime Vocational Education

Nanang Joko Sulistyono¹, Bambang Suprianto², I Gusti Putu Asto Buditjahjanto³,
Supari Muslim⁴

^{1,4} Department of Technology and Vocational Education, Postgraduate State University of Surabaya, Indonesia
E-mail: nanang.20008@mhs.unesa.ac.id, supari@unesa.ac.id

^{2,3} Department of Technology and Vocational Education, Postgraduate State University of Surabaya, Indonesia
E-mail: bambangsuprianto@unesa.ac.id, ariewardhono@unesa.ac.id

Abstract

This study aims to determine the effect of the instructor's professional competence in the simulator training skills of cadets of SMK Pelayaran Tayu. One of the competencies that must be possessed by an instructor / educator is professional competence, professional competence of instructors is the ability of educators who can adapt to the development of shipping technology and be able to transfer knowledge that needs to be mastered by students by involving technology according to the demands of the world of work. This study uses a qualitative descriptive approach with the type of correlational research. The research population is the Simulator Instructor, the Head of the Simulator and the cadet of SMK Palayaran Tayu. All were taken as respondents (population research) in this study. Data collection techniques used rating scale questionnaires, semi-structured interview observations and documentation with qualitative descriptive methods. The results of the study based on the questionnaire recapitulation of the professional competence level of the instructors in the good category, the skill level of the cadet simulator training in the fairly good category. The instructor's professional competence affects the cadet simulator training skills, the better the instructor's professional competence, the higher the cadet simulator training skills.

Keywords: Instructor Professional Competence; Simulator Training Skills.

Muhammad 'aqil anuar (Presenting, annotating)

DETERMINANTS OF MARKETING SKILL COMPETENCY AMONG SPM LEAVERS

INTERNATIONAL CONFERENCE ON BUSINESS STUDIES AND EDUCATION (ICBE) 2026

Researcher & Presenter:
 Nuriza binti Ramli UTM Seri Iskandar, Malaysia
 MUHAMMAD 'AQIL BIN ANUAR (SMC26970-169)
 MUHAMMAD IRYAD BIN MOHD ZAKI (SMC2407-0224)
 MUHAMMAD 'AQIL BIN ANUAR (SMC21070-143)
 ALIF MUZAKKIR BIN MOHD FAZAL (SMC2407-0263)

Paper ID: ICBE- March26-132
 Date: 30 Mar 2026

Dr. Melor Masdoki

Muhammad 'aqil anuar

LETCUMANAN A/L SHA... +15

People

All muted Add people

Meeting host

HASHAMUDDIN BIN YA...

KANCHANA A/P KANN...

Mhdzhrul

Muhammad 'aqil anuar Meeting host

Muhammad 'aqil anuar Presentation

Muhammad Haris Milka...

NIK HASNIRA BINTI NIK ...

8:15 AM | hte-quhg-ukt

Muhammad Haris Mikael Bin Mohd Hamezan (Presenting, annotating)

PERCEIVED CURRICULUM MARKET ALIGNMENT AND ITS IMPACT ON ENROLMENT INTENTIONS

INTERNATIONAL CONFERENCE ON BUSINESS STUDIES AND EDUCATION (ICBE) 2026

a Case Study of Diploma in Marketing at Kolej Professional MARA Seri Iskandar

PAPER ID: ICBE- MARCH'26-133
 DATE: 30 MARCH 2026

PRESENTER:
 D HARIS MIKAEL BIN MOHD HAMEZAN
 Professional MARA Seri Iskandar,
 Malaysia

Dr. Melor Masdoki

HASHAMU...

18 others

Muhamma...

Muhammad Haris M...

LETCUM...

8:27 AM | hte-quhg-ukt

damia Insyrah (Presenting, annotating)

Behavioural Patterns of SPM Graduates in Choosing a Marketing Diploma
 A comprehensive analysis of Kolej Profesional MARA Seri Iskandar

Presenter: NURFIKRIYAH AUNI BINTI MOHD FAIZAL
 Paper Id: ICBE- March'26-134

8:39 AM | hte-quhg-ckt

People: All muted, Add people, NUR ZAHIRAH BINTI AH..., Rashidah, ROUNEY SALLY, RUJHANA WATI BINTI IR..., SHARMILA BT. MD ISA (...), SITI ARNI BINTI BASIR B..., Meeting host

Dr. Melor Masdoki (Presenting, annotating)

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Keynote Address
 International Conference on Business Studies & Education

QUALITY AND INNOVATION PRACTICES IN MALAYSIA'S HIGHER EDUCATION INSTITUTION

Assoc. Professor Dr. Siti Arni Basir
 Department of Sharia, Economics & Governance
 Academy of Islamic Studies
 University Malaya

30th March, 2026

9:02 AM | hte-quhg-ckt

People: 51 others, Dr. Melor Masdoki, SITI ARNI BINTI BASIR ...

Browser address bar: wafa (Presenting, annotating)

INTERNATIONAL CONFERENCE ON BUSINESS STUDIES AND EDUCATION (ICBE) 2026

Factors Shaping Students' Interest in Diploma in Marketing Programmes

IMAN NADIA BINTI MOHD MUHAYADIN
ICBE-March'26-136
30 MARCH 2026

Iman Nadia

Dr. Melor Masdoki

LETCUMANAN A/L SHA... +28

People

Mute all Add people

Search for people

IN THE MEETING

Contributors 32

- LETCUMANAN ... (You) Meeting host
- aaron Ismanto
- Aisyah Szazli
- AZREEN AHMAD TAN
- Dr Divya Rose

10:09 AM | hte-quhg-skt

Meeting controls: Mute, Video, Chat, Hand raise, etc.

Browser address bar: Vaasala K (Presenting, annotating)

NUR SHAZWANI BINTI S...

Farhana Hj Nordin

ADIRAH BINTI ISA (PTSB)

7 others

LETCUMANAN A/L SH...

PROBLEM STATEMENT

- Limited authentic language practice in classrooms
- Delayed and insufficient individualised feedback
- High language anxiety among learners
- Need for learner-centred and engaging approaches
- Lack of clear pedagogical framework for chatbot integration

DR. ANUSUYA A/P KALIA...

Vaasala K

People

Mute all Add people

- DR. ANUSUYA A/P KALIA... Meeting host
- KHAI RULFADILAH BINTI ...
- NOOR YUSLIZAWATI BL...
- NUR SHAZWANI BINTI S...
- NUR SYAZWANI BINTI M...
- SIVARANJINI SINIAH
- Vaasala K
- Vaasala K Presentation

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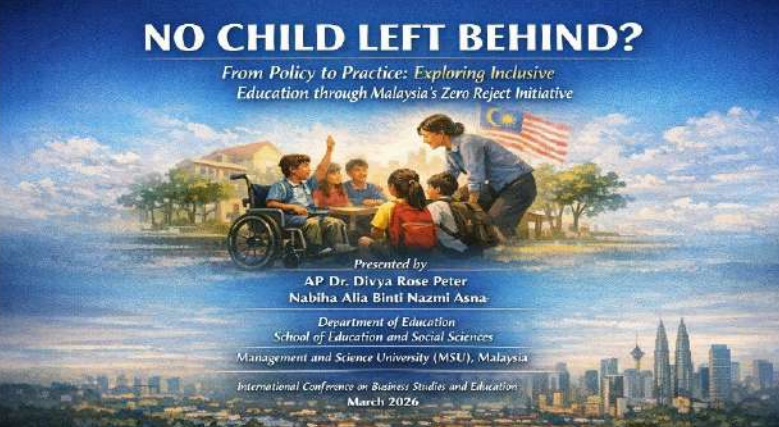
8:07 AM | tgv-iaxj-nnh

Meeting controls: Mute, Video, Chat, Hand raise, etc.

Dr Divya Rose (Presenting, annotating)

NO CHILD LEFT BEHIND?

From Policy to Practice: Exploring Inclusive Education through Malaysia's Zero Reject Initiative



Presented by
AP Dr. Divya Rose Peter
Nabiha Alia Binti Nazmi Asma

Department of Education
School of Education and Social Sciences
Management and Science University (MSU), Malaysia

International Conference on Business Studies and Education
March 2026

ABDUL AZIZ AB NASIR

Dr Divya Rose

DR GEETHA A/P NADESAC...

PUAN ROSLINDA

10 others

DR GEETHA A/P NADESAC...



08:01 | hja-ccwe-icu



International Conference on Business Studies and Education (ICBSE)

1782-9479



Dr. Melor Masdoki

Muhammad Haris Mikael Bin Moh...

Muhammad Haris Mikael Bin Moh...

K R
9 others

LETCHUMANAN A/L SHANMUGA...

People

All muted Add people

IN THE MEETING

Contributors 13

- LETCHUMANAN ... (You) Meeting host
- aaron ismanto
- Aisyah Sezail
- AZREEN AHMAD TAN
- Dr. Melor Masdoki Meeting host
- HASHAMUDDIN BIN YA...



8:10 AM | hte-quhg-skt



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PUAN ROSLINDA (Presenting, annotating)

Integrating PLC-Based Automated Beverage Dispensing Systems into Engineering Education

A Sustainable and Hygienic Approach to Service Optimization

Roslinda binti Ismail
Electrical Engineering Department

Suhairi bin Suali bin
Mechanical Engineering Department

Dr Divya Rose

PUAN ROSLINDA

DR GEETHA A/P NADESA...

ABDUL AZIZ AB NASIR

11 others

DR GEETHA A/P NADESA...

08:16 | hja-ccwe-icu

NUR SYAZWANI BINTI MELI (PBU) (Presenting, annotating)

ASSESSING USERS' SATISFACTION IN USING NDCLEARNHUB FOR THE NETWORK AND DATA COMMUNICATION COURSE AT POLITEKNIK BALIK PULAU

Paper ID: ICBE- March'26-154
Presenter: Nur Syazwani binti Meli

Vaasala K

DR. ANUSUYA A/P...

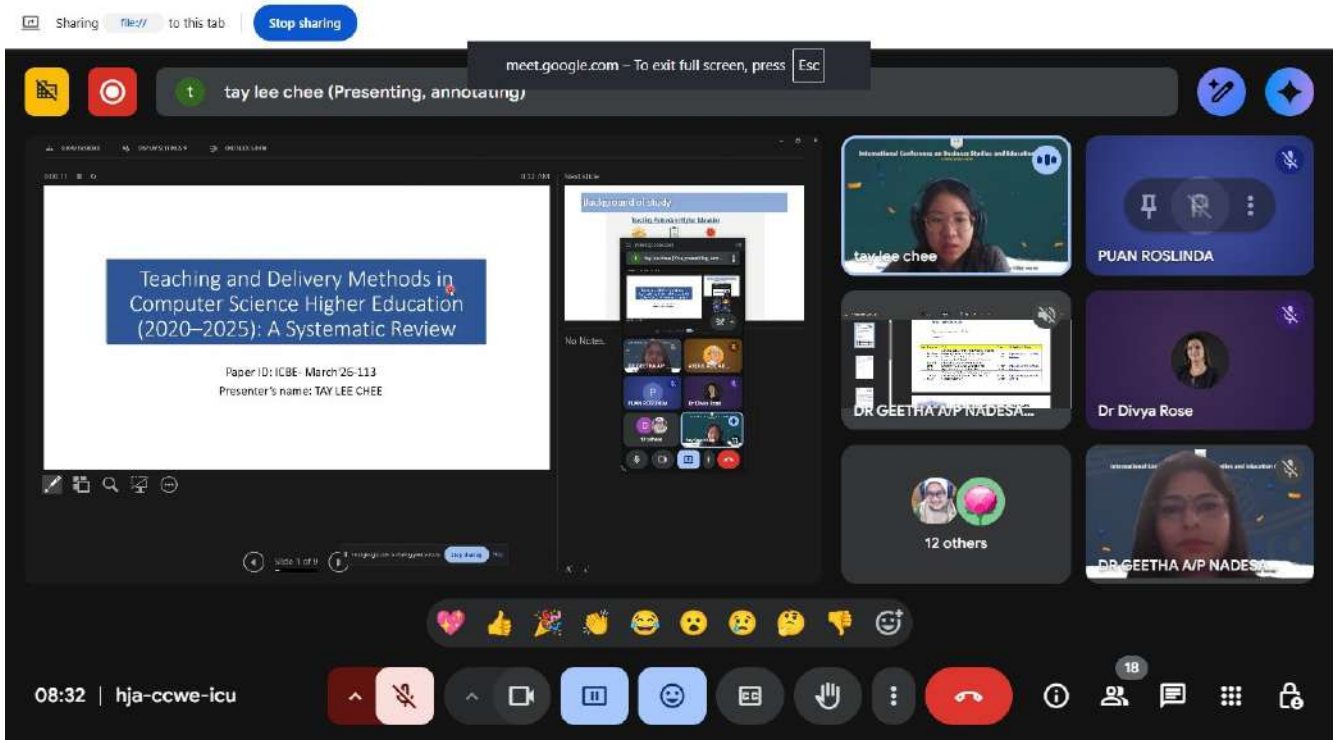
NUR SHAZ...

11 others

NUR SYAZWANI BIN...

LETCHUM...

8:19 AM | tgy-iaxj-nnh



NUR SHAZWANI BINTI SHUHAMI (PUO) (Presenting, annotating)

The Implementation of Brain Breaks in ESL Classrooms:
 A Study among Diploma Students at Politeknik Ungku Omar

Paper ID: ICBE-March'26-155
 Presenter: Nur Shazwani Shuhami
 Politeknik Ungku Omar, Malaysia

20th International Conference on Business Studies and Education (ICBE)
 30 March 2026

8:35 AM | tgv-iaxj-nnh

People

- All muted
- Add people
- norismah kamaruzaman
- NORAZIAN JAAFAR
- NUR SHAZWANI BINTI... Meeting host
- NUR SHAZWANI BINTI... Presentation
- NUR SYAZWANI BINTI M...
- NURULL ZURAIDA BINTI...
- SIVARANJINI SINIAH
- Vaasala K

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 Go to PC settings to activate Windows.

Dr. Melor Masdoki (Presenting, annotating)

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Keynote Address

International Conference on Business Studies & Education

QUALITY AND INNOVATION PRACTICES IN MALAYSIA'S HIGHER EDUCATION INSTITUTION

Assoc. Professor Dr. Siti Arni Basir
 Department of Sharia, Economics & Governance
 Academy of Islamic Studies
 University Malaya

30th March, 2026

8:55 AM | hte-quhg-skt

People

- Dr. Melor Masdoki
- 47 others
- Muhammad Har...
- LETCHUMANA...

CIK NURFATHONAH BINTI YUSOFF (KKSK) (Presenting, annotating)

9:54 AM | tgv-iaxj-nnh

TAHAP PENGETAHUAN KONSEP DAN PERANAN KEUSAHAWAN SOSIAL SERTA HUBUNGANNYA DENGAN MINAT PENGLIBATAN PELAJAR KOLEJ KOMUNITI SANDAKAN

ICBE- March'20-186

2026 20th International Conference on Business Studies and Education

30 MAC 2020 | GOOGLE MEET

NURFATHONAH BINTI YUSOFF
Penyemping

People

- Mute all
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- AMIRAH ZAWANI BINTI...
- CIK FARIZA BINTI MOHA...
- CIK NURFATHONAH BIN... Meeting host
- CIK NURFATHONAH BIN... Meeting host
- CIK NURFATHONAH BIN... Presentation
- DR. ANUSUYA A/P KALIA... Meeting host
- faizah aboo bekar
- Khairulazam Annuar

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HASHAMUDDIN BIN YA'AKOB (PUO) (Presenting, annotating)

09:56 | hja-ccwe-icu

2026 20th International Conference on Business Studies and Education

MBOT CPD Points

LIVE VIRTUAL PRESENTATION | <https://www.icbe.my>

Students Awareness of the ACCA - KPT Industry Accreditation Program at Politeknik Ungku Omar

ICBE- March'26-114

Present by: Hashamuddin Yaakob

DR GEETHA A/P N...

ABDUL AZIZ AB N...

komathi kt

NUR AZREEN BIN...

HASHAMUDDIN B...

SB Yeap

ZUR AIN BINI

SHAHIDAH ABDUL MALEK (outside MyGovUC) has joined

CIK FARIZA BINTI MOHAMAD TAJUDDIN (KKSJ) (Presenting, annotating)

10:04 AM | tgv-laxj-nnh

People

- Mute all
- Add people
- ADIRAH
- AMIRAH ZAWANI BINTI ...
- CIK FARIZA BINTI MOHA... Meeting host
- CIK FARIZA BINTI MOHA... Presentation
- CIK NURFATHONAH BIN...
- CIK NURFATHONAH BIN...
- DR. ANUSUYA A/P KALIA... Meeting host
- faizah aboo bakar

LETCHUMANAN A/L SHA... +15

wafa (Presenting, annotating)

10:09 AM | hte-quhg-skt

People

- Mute all
- Add people
- Search for people
- IN THE MEETING
- Contributors 32
- LETCHUMANAN ... (You) Meeting host
- aaron ismanto
- Aisyah Sazali
- AZREEN AHMAD TAN
- Dr Divya Rose

LETCHUMANAN A/L SHA... +28

10:18 AM | tgv-iaxj-nnh

KHAIRULFADILAH BINTI MOHD SAZALI (Presenting, annotating)

PRODUCTION OF PAPER FROM CABBAGE WASTE

Presented By: Khairulfadilah Binti Mohamad Sazali
Paper ID: ICBE-March26-158

Authors: Khairulfadilah Binti Mohamad Sazali
Sinthia Venus Anak Simon

10:18 AM DR. ANUSUYA A/P KALIA...

10:18 AM CIK FARIZA BINTI MOHA...

10:18 AM KHAIRULFADILAH BIN...

10:18 AM LETCHUMANAN A/L SHA... 14

People

Mute all Add people

- AMIRAH ZAWANI BINTI ...
- CIK FARIZA BINTI MOHA...
- CIK NURFATHONAH BIN...
- CIK NURFATHONAH BIN...
- DR. ANUSUYA A/P KALIA... Meeting host
- faizah aboo bakar
- Khairulazam Annuar
- KHAIRULFADILAH BINTI ... Meeting host

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10:18 AM | tgv-iaxj-nnh

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10:16 | hja-ccwe-icu

ABDUL AZIZ AB NASIR (Presenting, annotating)

Paper ID: ICBE- March'26-115

The International Conference on Business Studies and Education (ICBE) 2026

"Strengthening Teaching Innovation through Digital Preparedness: Evidence from Polytechnics and Community Colleges"

Team Members

- Ts. Abdul Aziz bin Ab Nasir
- Wan Ahmad Ramzi bin Wan Yusof
- Mohd Faizal bin Yohaya

Presenter

Ts. Abdul Aziz bin Ab Nasir

10:16 AM HASHAMUDDIN BIN YA' A...

10:16 AM ABDUL AZIZ AB NASIR

10:16 AM DR. GEETHA A/P NADESA...

10:16 AM NUR AZREEN BINTI ZAIDE...

10:16 AM DR. GEETHA A/P NADESA...

7 others

10:16 | hja-ccwe-icu

Fareeza Azmi (Presenting, annotating)

THE CRITICAL ROLE OF MALAYSIA'S SMEs IN THE F&B SECTOR: DRIVING ECONOMY, EMBRACING TECHNOLOGY

International Conference on Business (Icbe) and Education (ICEE) 2024

97% of all businesses in Malaysia are SMEs

ESSENTIAL CONTRIBUTORS

- Strong pillars of GDP and Employment.
- Play a *critical role* in Malaysia's economy.

The DIGITAL FRONTIER

- Increasingly competitive and customer-driven sector.
- Under significant pressure for quick digital adoption.

SME ECONOMIC IMPACT: GDP & EMPLOYMENT (Department of Statistics Malaysia (DOSM) 2023)

97% of Businesses	67% of SME GDP Contribution	67% of SME Employment
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F&B SECTOR

- Highly Competitive
- Customer-Driven
- Rapid Digital Adoption

Ukumayab et al., 2020; Khorachidan & Arboicada, 2020)

10:24 AM | hte-quhg-skt

People

All muted Add people

Search for people

IN THE MEETING

Contributors 30

- LETCUMANAN ... (You) Meeting host
- aaron Ismanto
- Aisyah Sezali
- AZREEN AHMAD TAN
- Dr Divya Rose

Dr Melor Masdoki

Fareeza Azmi

LETCUMANAN A/L SHA... +26

10:24 AM | hte-quhg-skt

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ZUR AIN BINTI MOHD NAWAWI (POLISAS) (Presenting, annotating)

PHYSICO-CHEMICAL PROPERTIES AND SENSORY EVALUATION OF MAYONNAISE USING SOURSOP VINEGAR

ICBE- MARCH'26-116

ZUR AIN BT MOHD NAWAWI

POLITEKNIK SULTAN NAJI AHMAD SHAH

ABDUL AZIZ AB NASIR

HASHAMUDDIN BIN YA...

DR GEETHA A/P NADES...

ZUR AIN BINTI MOHD N...

8 others

DR GEETHA A/P NADES...

10:29 | hja-ccwe-1cu

meet.google.com - To exit full screen, press Esc

wafa (Presenting, annotating)

CONCLUSION

<p>Students have positive perceptions of the programme:</p> <ul style="list-style-type: none"> Fairness, skill relevance, job market alignment, credential value all rated high 	<p>Despite this, enrolment intention is lower → gap between perception and action remains huge</p>
<p>Concerns affecting enrolment:</p> <ul style="list-style-type: none"> Assessment fairness Career stability Financial return 	<p>Institutions like Kolej Professional MARA Seri Iskandar can:</p> <ul style="list-style-type: none"> Improve programme design and transparency Highlight career opportunities

10:42 AM | hte-quhg-skt

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qaysirfan baharuddin (Presenting, annotating)

Theoretical Framework

Theory of Planned Behaviour (TPB): The study uses this model to explain enrolment intentions based on three elements:

<p>Attitude:</p> <p>Favorable or unfavorable assessment of the diploma.</p>	<p>Subjective Norms:</p> <p>Social pressure from parents, peers, and influencers.</p>
<p>Perceived Behavioural Control:</p> <p>Perceived ease or difficulty of enrolling, influenced by time and economic constraints.</p>	

10:47 AM | hte-quhg-skt

komathi kt (Presenting, annotating)

Teacher Readiness and Challenges in Early Career Transition Program

For Primary School Students with Special Educational Needs: A Case Study

Paper ID: ICBE- March'26-117
Presenter: Komathi d/o Elangovan

10:45 | hja-ccwe-icu

7 others

DR GEETHA A/P N...

ABDUL AZIZ AB NA...
HASHAMUDDIN BI...

ZUR AIN BINTI MO...

komathi kt

13

Khairulazam Annuar (Presenting, annotating)

Objectives

- 01 Analyse post-COVID tourism demand recovery in Melaka
- 02 Operational Challenges in the hotel industry

Vaasala K has left the meeting

10:40 AM | tgv-iaxj-nnh

15

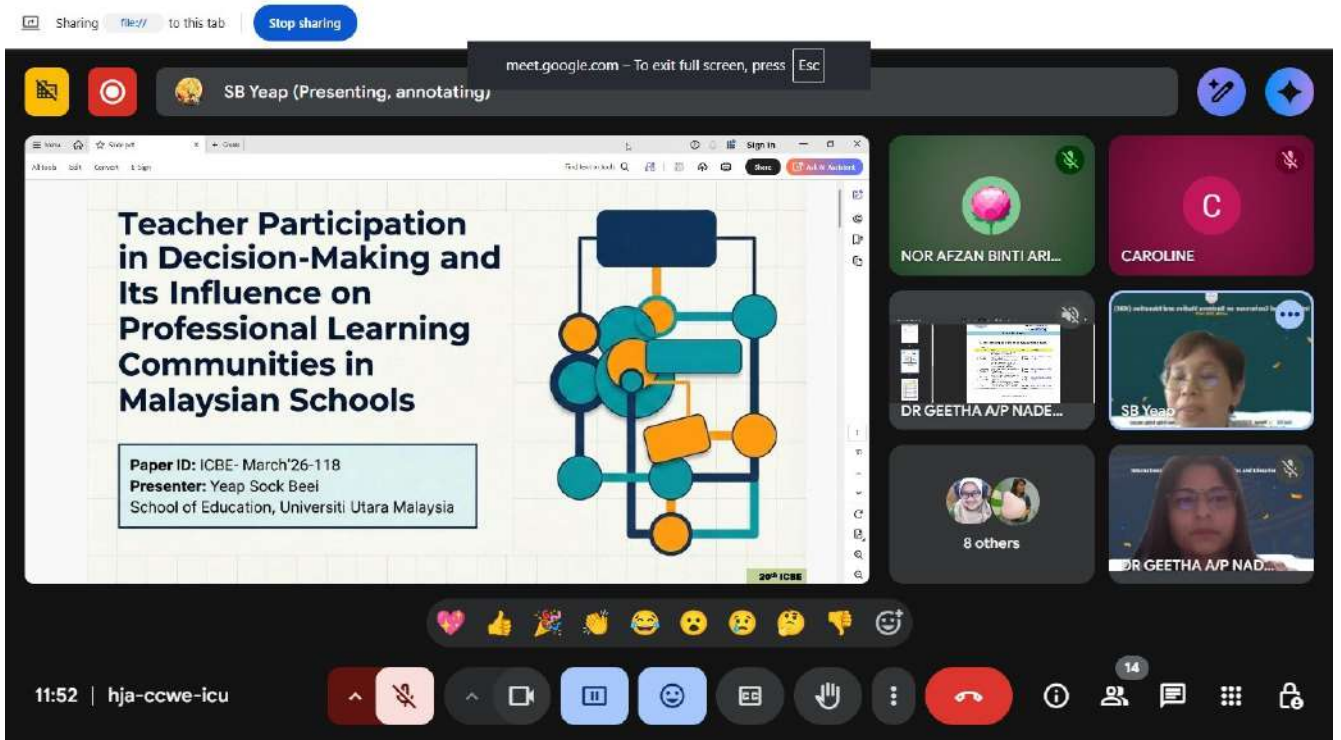
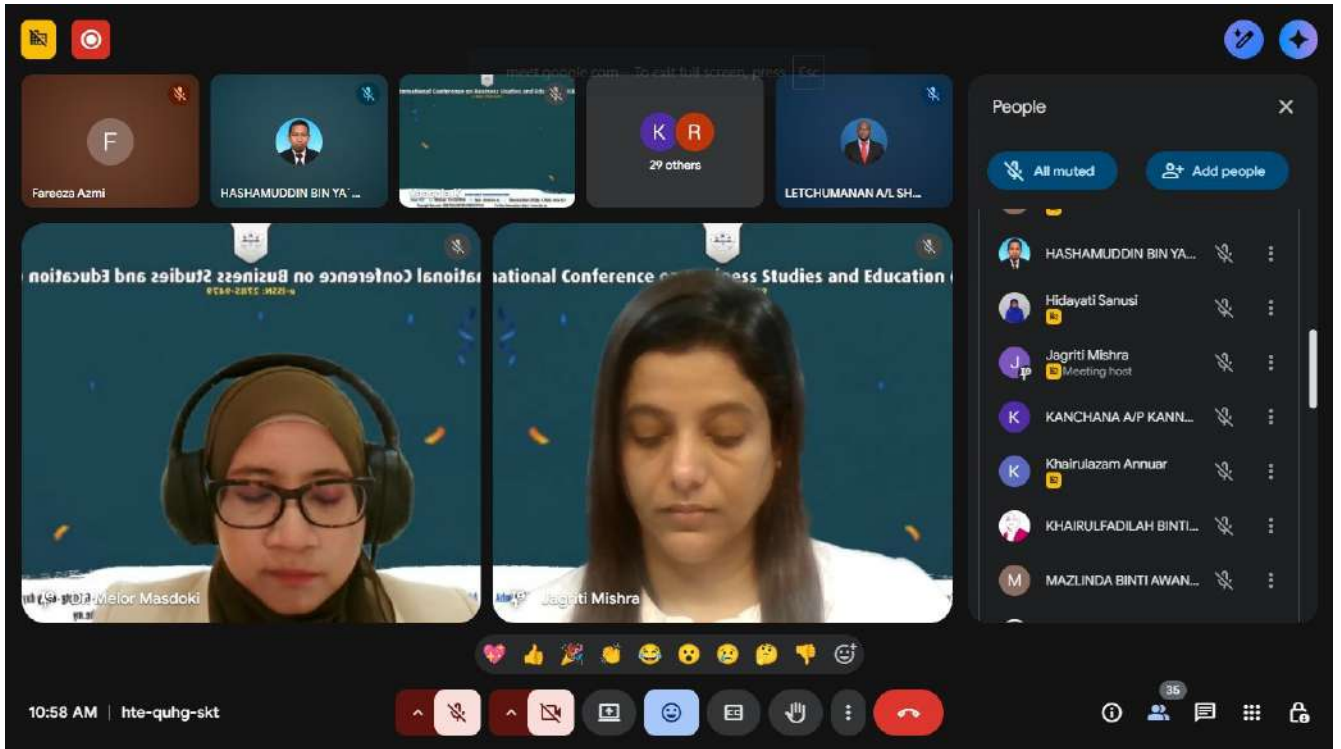
People

- All muted
- Add people
- Khairulazam Annuar (Meeting host)
- Khairulazam Annuar (Presentation)
- KHAIRULFADILAH BINTI ...
- MOHD NORULHISHAM ... (Meeting host)
- NOOR YUSLIZAWATI BL...
- norasmah kamaruzaman
- NORAZIAN JAAFAR
- NURULL ZURAIDA BINTI ...

LETCHUMANAN A/L SHA... +11

ANUSUYA A/P KA...

Khairulazam Annuar



2 Zalia Latisha (Presenting)

ICBE 2026

THE PUSH & PULL OF DIPLOMA IN MARKETING

DETERMINANTS OF GEN Z'S ENROLLMENT
DECISIONS IN MARKETING PROGRAMS

Paper ID: ICBE- March'26-159
Presenter: Sharifah Zalia Latisha Bt. Syed Ezanee Zulfakhri

People

All muted Add people

- N NORHAYATI BINTI MD S...
- N NUR YAHZELINA BT. HA...
- N NUR ZAHIRAH BINTI AH...
- R ROUNEY SALY
- R RUHANA WATI BINTI IR...
- Z Zalia Latisha (Meeting host)
- Z Zalia Latisha (Presentation)

12:01 PM | hte-quhg-skt

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NUR AZREEN BINTI ZAIDEL (POLIKU) (Presenting, annotating)

Tahap Pengetahuan Pelajar Jabatan
Perdagangan Politeknik Kuching
Sarawak Terhadap Penggunaan
Kecerdasan Buatan (*Artificial
Intelligence*) Dalam Membantu
Proses Pembelajaran

ICBE - March'26-119

Nur Azreen binti Zaidel
Politeknik Kuching Sarawak
n.azreen@poliku.edu.my

12 others

DR GEETHA A/P NADESA...

12:02 | hja-ccwe-icu

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NOR AFZAN BINTI ARIFFIN (PSMZA) (Presenting, annotating)

International Conference on Business Studies and Education (ICBE)

KAPRIS ID - ICBE MARCH 26, 2020

KEBERKESANAN LAMAN SESAWANG MYHYDROLOGY DALAM PENGAJARAN DAN PEMBELAJARAN KURSUS DCC50212 HYDROLOGY

MyHydrology

NOR AFZAN BINTI ARIFFIN

DR. GEETHA A/P NADESAN

14 others

12:12 | hja-ccwe-icu

NUR YAHZELINA BT. HANAFI (POLIKU) (Presenting)

meet.google.com - To exit full screen, press Esc

Problem Statement

Despite the focus on innovation through the Final Year Project (FYP) competition, a clear disparity in departmental performance has emerged. Certain department consistently ranks at the top, while other departments struggle to achieve similar success.

Success Drivers
What factors contribute to certain department sustained success in the FYP competition?

Innovation Direction
Identify innovation direction reflected in winning project.

Trends in innovation
analyze trends of winning project across department for consequence of 6 semester

Pattern of dominance
Pattern of department dominance in project competition

Dr. Melor Masdoki

People

- All muted
- Add people
- NIK HASNIRA BINTI NIK ...
- NORAZIAN JAAFAR
- NUR YAHZELINA BT. HA... Meeting host
- NUR ZAHIRAH BINTI AH...
- ROUNEY SALLY
- RUHANA WATI BINTI IR...
- Zaila Latisha

12:14 PM | hte-quhg-ukt

Meeting ID: NOR IZIAN IZZATY BINTI NOOR AZHAR (PMJ) (Presenting, annotating)

PAPER ID
ICBE-MARCH'26-174

A STUDY ON PERSONALITY TRAITS AND ACADEMIC PERFORMANCE AMONG STUDENTS AT POLITEKNIK MERSING JOHOR

- NOR IZIAN IZZATY BINTI NOOR AZHAR
- POLITEKNIK MERSING JOHOR
- ICBE- March'26-174

Oh zi jian

NOR IZIAN IZZATY BINTI NOOR AZHAR

LETCHUMANAN A/L SHAH... +5

People

All muted Add people

- AZREEN AHMAD TAN
- MAZLINDA BINTI AWAN...
- NOR IZIAN IZZATY BINTI... Meeting host
- NOR IZIAN IZZATY BINTI... Presentation
- NORHAYATI BINTI MD S...
- NURUL SYAHIRAH BINTI ...
- Oh zi jian Meeting host
- SHARMIL A RT MD ISA /

12:15 PM | kve-pfgx-vfa

Meeting ID: DR. MELVIN MOJIKON (POLIKK) (Presenting, annotating)

NUR YAHZELINA BT. H...

Dr. Melvin Mojdkon

DR. MELVIN MOJIKON (POLIKK)

Zalia Latisha

Fareeza Azmi

12 others

LETCHUMANAN A/L SHANMUGA...

RESEARCH BACKGROUND

- Tourism is currently the second most significant pillar Sabah's economy after the petroleum sector.
- This vital sector contributes significantly to income generation, job creation, and foreign exchange earnings for the economies.
- Sabah is actively seeking tourism as a sustainable alternate to reduce dependency on volatile oil and gas markets.
- Employee career advancement is fundamental to achieving overarching organizational goals in this sector.

People

All muted Add people

- NUR AISYA MOHD SABRI
- NUR YAHZELINA BT. HA... Meeting host
- NUR ZAHIRAH BINTI AH...
- ROUNEY SALY
- RUHANA WATI BINTI IR...
- Zalia Latisha
- رشدان حسن

12:29 PM | hte-quhg-skt

NURUL SYAHIRAH BINTI MOHD NOR (KKPSA) (Presenting, annotating)

20TH INTERNATIONAL CONFERENCE ON BUSINESS STUDIES AND EDUCATION (ICBSE)

Implementation of The SAU10212 Telegram Bot in Vehicle Electrical Systems: An Evaluation of Usability, Acceptance, & Student Performance at Pasir Salak Community College

Paper ID: ICBSE- March/26-175

Presenter:
Nurul Syahirah binti Mohd Nor
Pasir Salak Community College

Oh zi jian

LETCHUMANAN A/L SHA... +5

People

- All muted
- Add people
- AZREEN AHMAD TAN
- MAZLINDA BINTI AWAN...
- NORHAYATI BINTI MD S...
- NURUL SYAHIRAH BINTI ... Meeting host
- NURUL SYAHIRAH BINTI ... Presentation
- Oh zi jian Meeting host
- SHARMILA BT. MD ISA (...)

12:31 PM | kve-pfgx-vfa

SIVARANJINI SINNI AH (Presenting, annotating)

RESEARCH OBJECTIVES

- Perceptions of Digital Storytelling
- Professional Learning Experiences
- Implementation Challenges & Future Use

DR. ANUSUYA A/P K...

SIVARANJINI SINNI...

11:50 AM | tgv-iaxj-nnh

Sofiah Bakar (Presenting, annotating)

Penggunaan ChatGPT Dan Hubungannya Dengan Pembelajaran Kendiri Serta Integriti Akademik Dalam Kalangan Pelajar Kolej Komuniti Arau

PEMBENTANG: SOFIAH BINTI BAKAR

Nur Diyana binti Mohammad, Sofiah binti Bakar, Arun Rafaza binti Ahmad Tajuddin

KOLEJ KOMUNITI ARAU

People

- All muted
- Add people
- MOHD NORULHISHAM ... Meeting host
- NOOR YUSLIZAWATI BL...
- norasmah kamaruzaman
- NURULL ZURAIDA BINTI ...
- SIVARANJINI SINNIHAH
- Sofiah Bakar Meeting host
- Sofiah Bakar Presentation
- Vaasala K

11:57 AM | tgv-iaxj-nnh

MOHD NORULHISHAM BIN ABD RASHID (PMS) (Presenting, annotating)

The Learning Styles of Polytechnic Students Based on the VARK Model

Paper ID: ICBE- March'26-162

Presenter: Dr. Mohd Norulhisham bin Abd, Rashid

Institution: Politeknik Muadzam Shah (PMS)

People

- All muted
- Add people
- Meeting host
- faizah aboo bakar
- Khairulazam Annuar
- Khairulfadilah Binti ...
- laila
- MOHD NORULHISHAM ... Meeting host
- MOHD NORULHISHAM ... Presentation
- NOOR YUSLIZAWATI BL...
- norasmah kamaruzaman

12:12 PM | tgv-iaxj-nnh

MOHD NORULHISHAM BIN ABD RASHID (PMS) (Presenting, annotating)

Background of the Study Page 2

- 01 Definition**
Learning styles are the preferences and tendencies in how students process and engage with information.
- 02 Complexity**
Learning preferences are influenced by a variety of factors such as cognitive abilities, motivation, and environmental conditions.
- 03 Need for Holistic View**
These factors are often interdependent and must be examined as a whole to truly understand student behavior.
- 04 Evolution**
While traditional models like VARK exist, modern education requires a more nuanced approach that considers the dynamic interplay between these factors.

12:27 PM | tgv-iaxj-nnh

MOHD NORULHISHAM BIN ABD RASHID (PMS) (Presenting, annotating)

The Learning Styles of Polytechnic Students Based on the VARK Model

Paper ID: ICBE- March'26-162

Presenter: Dr. Mohd Norulhisham bin Abd,Rashid

Institution: Politeknik Muadzam Shah (PMS)

12:12 PM | tgv-iaxj-nnh

NURULL ZURAIDA BINTI SHAFIE (PMS) (Presenting, annotating)

MOHD NORULHISHAM BIN ABD RASHID (PMS) | SIVARANJINI SINNI... | Farhana Hj.Nordin | 9 others | LETCHUMANAN AJ...

Background of the Study

01 Definition
Learning styles are the preferences and tendencies in how students process and engage with information.

02 Complexity
Learning preferences are influenced by a variety of factors such as cognitive abilities, motivation, and environmental conditions.

03 Need for Holistic View
These factors are often interdependent and must be examined as a whole to truly understand student behavior.

04 Evolution
While traditional models like VARK exist, modern education requires a more nuanced approach that considers the dynamic interplay between these factors.

12:27 PM | tgv-iaxj-nnh

Fareeza Azmi (Presenting, annotating)

NUR YAZHELINA BT. H... | DR. MELVIN MOJIKON (POLIK... | NURULL ZURAIDA BINTI SHAFIE | Dr. Major Muzdoffi

The Engagement Blueprint

Redesigning Digital Marketing Education for Gen Z and the Digital Economy.

Noor Fareeza Binti Azmi
Page 0: ICEE Modul 28-142

Zafra Latisha | 13 others | LETCHUMANAN AJL SHANMUGA...

12:45 PM | hte-qugh-skt

SHARMILA BT. MD ISA (PUO) (Presenting, annotating)

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NURUL SYAHIRAH BINTI ... AZREEN AHMAD TAN NORHAYATI BINTI MD SH... 5 others LETCHUMANAN A/L SH...

People

All muted Add people

NORHAYATI BINTI MD S... NORZIEIRANI AHMAD NURUL SYAHIRAH BINTI ... Oh zj jian Meeting host SHARMILA BT. MD ISA (... Meeting host SHARMILA BT. MD ISA (... Presentation Sofiah Bakar

Kajian Keberkesanan Arena Usahawan JKE sebagai Medium Pembelajaran Berasaskan Amali

Paper ID : ICBE_MARCH26_176

Presented By SHARMILA BT MD ISA

Oh zj jian

SHARMILA BT. MD ISA

12:46 PM | kve-pfgx-vfa

norasmah kamaruzaman (Presenting, annotating)

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PEMBANGUNAN PERANGKAP... REKABENTUK DAN PE...

All tools Edit Convert E-Sign Find text or tools Share Ask AI Assistant

REKABENTUK MESIN

Konsep Operasi Mesin

CIRI-CIRI

- Drum statik
- Tapak berputar
- Rubber plucker fingers pada tapak dan dinding
- Motor elektrik
- Sistem saliran air

"Berbeza dengan mesin biasa, hanya tapak mesin berputar manakala drum kekal statik."

What did I miss?


norasmah kamaruzaman NORAZIAN JAAFAR 6 others LETCHUMANAN A/L SHANMUG...

1:53 PM | tgy-laxj-nnh

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SHAHIDAH ABDUL MALEK (Presenting, annotating)



PENGUNAAN STILL AIR BOX MELALUI PLANTCLONE EDU KIT DALAM PELAKSANAAN AMALI PENSTERILAN KULTUR TISU TUMBUHAN

SHAHIDAH BINTI ABDUL MALEK
KOLEJ KOMUNITI REMBAU,
KEMENTERIAN PENDIDIKAN TINGGI

PAPER ID: ICBE- MARCH'26-122

SHAHIDAH ABDUL MALEK
DR GEETHA A/P NADESAN
NUR AZREEN BINTI ZAIDE
SB Yeap
9 others
DR GEETHA A/P NADESAN (PTSB)
DR GEETHA A/P NADESAN

13:56 | hja-ccwe-icu

aaron ismanto (Presenting, annotating)

International Conference on Business Studies and Education (ICBE)
e-ISSN: 2785-9479

Title:
Bridging the Water Literacy Gap: A Digital Approach to Promoting Sustainable Water Behaviour among Malaysian Secondary Students

Project ID: ICBE- March'26-177
Presenter: Aaron Ismanto Anak Anggang

Oh zi jian
aaron ismanto
LETCUMANAN A/L SHA... +3

People

All muted Add people

- LETCUMANAN ... (You) Meeting host
- aaron ismanto Meeting host
- aaron ismanto Presentation
- AZREEN AHMAD TAN
- MAZLINDA BINTI AWAN...
- Oh zi jian Meeting host
- Soffiah Bakar

2:01 PM | kve-pfgx-vfa

Mithil Nabillah (Presenting)

The Industry-Education Gap

Industry Demand
Digital Marketing Demand is rapidly increasing. Skills are necessary for digital talent. Digital talent is 25-52% CAGR is expected through 2025.

Student Enrollment
Business Marketing program is stagnating or dropping.

2:03 PM | hte-quhg-skt

Participants: SURINA BT NORDIN (PMM), KANCHANA A/P KANNAN (PSP), NUR ZAHIRAH BINTI AHMAD RAZE..., LETCHUMANAN A/L SHANMUGA...

norasmah kamaruzaman (Presenting, annotating)

METODOLOGI KAJIAN

Prototaip 1
Rita glow-in-the-dark + gam
2-3 jam

Prototaip 2
Strontium aluminate + gam
4-12 jam

Penambahbaikan prototaip 2

Compuan

- 20 g strontium aluminate
- 100 ml gam palekat serangga
- Saiz perangka: 20 cm x 25 cm

Integrasi dengan pembelajaran mesin

2:07 PM | tgv-iaj-nnh

Participants: DR. ANUSUYA A/P KALLI..., NORAZIAN JAA..., NORZIEIRIANI A..., LETCHUMANA...

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HELMA BINTI MOHD ALI (KKREMBAU) (Presenting, annotating)

KAJIAN CIRI APRON BAGI KANAK-KANAK TABIKA PERPADUAN DI DAERAH REMBAU : ELEMEN REKA BENTUK, BAHAN SESUAI DAN FUNGSI NILAI TAMBAH DALAM AKTIVITI SENI

Helma binti Mohd Ali
Kolej Komuniti Rembau
ICBE-March'26-123

30 Mar 2026 Google Meet

HELMA BINTI MOHD ALI (KKREMBAU)

DR GEETHA A/P NADESA...

SHAHIDAH ABDUL MALEK

NUR AZREEN BINTI ZAIDE...

14 others

DR GEETHA A/P NADESA...

14:14 | hja-ccwe-icu

MAZLINDA BINTI AWANG (PSMZA) (Presenting, annotating)

aaron ismanto

AZREEN AHMAD TAN

Sofiah Bakar

2 others

LETCHUMANAN A/L SH...

PENYATAAN MASALAH

Turapan konvensional:

- Ketahanan rendah
- Kos penyelenggaraan tinggi
- Risiko keselamatan (pelincir & kemalangan)

Keperluan bahan alternatif yang:

- Lebih tahan lama
- Lebih selamat
- Mesra alam

Slide 9 of 12

Oh zi Jian

MAZLINDA BINTI AWA...

People

All muted Add people

- LETCHUMANAN ... (You) Meeting host
- aaron ismanto
- AZREEN AHMAD TAN
- MAZLINDA BINTI AWAN... Meeting host
- MAZLINDA BINTI AWAN... Presentation
- NORHAYATI BINTI MD S...
- NURUL DAYANA BINTI ...
- Oh zi Jian

2:17 PM | kve-pfgx-vfa

Zoom Meeting: Rouney Saly (Presenting, annotating)

Participants: norasmah kamaruzaman, NORAZIAN JAAFAR, NORZIEIRIANI AHMAD, 9 others, LETCHUMANAN A/L SH...

Presented Document: **20th International Conference on Business Studies and Education (ICBSE) 2016**
Problem-Based Learning in Mathematics Education: A Bibliometric Analysis on Research Trends, Contributions, and Thematic Analysis from the Dimensions AI Database

Name	Rouney Saly
ADDRESS	ADABUDDY PERKAMPUSAN (KAMPUS) (PJK)
Phone ID	0356-419135

2:18 PM | tgv-laxj-nnh

Zoom Meeting: SURINA BT NORDIN (PMM) (Presenting, annotating)

Participants: NURUL SYAHIRAH BINTI ..., Mithil Nabillah, KANCHANA A/P KANNA..., 4 others, LETCHUMANAN A/L SH...

Presented Document: **20th International Conference on Business Studies and Education (ICBE)**
A STUDY OF CUSTOMER SATISFACTION TOWARD HOMESTAY SERVICE QUALITY AT MERLIMAU, MELAKA (ICBE- March'26-144)

Prepared by: **Dr. Melor Masdoki**

2:21 PM | hte-quhg-skt

AZREEN AHMAD TAN (Presenting, annotating)

MAZLINDA BINTI AWAN... aaron ismanto Sofiah Bakar 3 others LETCHUMANAN A/L SH...

International Conference on Business Studies and Education (ICBE)
 KOLEJ KOMUNITI PASIR GUDANG
Digital Learning Tools and Student Engagement in TVET Education: An Empirical Study at A Community College
 Paper ID : ICBE – March26-179
 -Azreen binti Ahmad Tan -
 Kolej Komuniti Pasir Gudang

Oh z jian

AZREEN AHMAD TAN

People

All muted Add people

AZREEN AHMAD TAN Meeting host
 AZREEN AHMAD TAN Presentation
 MAZLINDA BINTI AWAN...
 NORHAYATI BINTI MD S...
 NURUL DAYANA BINTI ...
 Oh z jian Meeting host
 sherry alattas

2:31 PM | kve-pfgx-vfa

meet.google.com/hja-ccwe-icu

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Mohd Khairi Nordin @ Baharuddin (Presenting, annotating)

International Conference on Business Studies and Education
 PAPER ID: ICBE: MARCH 26-125
PENGARUH XENOGLOSSOFobia TERHADAP KEBERKESANAN PEMBELAJARAN BAHASA INGGERIS DALAM KALANGAN PELAJAR POLITEKNIK SULTAN IDRIS SHAH
 Nur Hidayati Sanusi, Mohd Khairi bin Nordin@Baharuddin, Mohamad Muda
 Pembentang:
 Mohd Khairi Bin Nordin @ Baharuddin
 Politeknik Sultan Idris Shah

HELMA BINTI MOHD ALI (...)

SHAHIDAH ABDUL MALEK

15 others

DR GEETHA A/P NADESA...

DR GEETHA A/P NADESA...

14:27 | hja-ccwe-icu

NORAZIAN JAAFAR (Presenting, annotating)

Participants: falzah aboo bakar, Rouney Saly, norasmah kamaruzaman, 9 others, LETCHUMANAN A/L SH...

People: NOOR YUSUZAWATI B..., norasmah kamaruzaman, NORAZIAN JAAFAR (Meeting host), NORAZIAN JAAFAR (Presentation), NORZIERIANI AHMAD, Rouney Saly, SIVARANJINI SINNIAH, Vasala K

2:34 PM | tgv-iaxj-nnh

KAJIAN FAKTOR YANG MEMPENGARUHI PEMILIHAN TVET SEBAGAI LALUAN KERJAYA DALAM KALANGAN PELAJAR KOLEJ KOMUNITI PASIR GUDANG

PAPER ID : ICBE_March'26_167
 NORAZIAN BINTI JAAFAR
 KOLEJ KOMUNITI PASIR GUDANG

NUR AISYA MOHD SABRI (Presenting, annotating)

Participants: Dr. Melior Masdoki, NUR AISYA MOHD SABRI, LETCHUMANAN A/L SHA... +5

People: Dr. Melior Masdoki (Meeting host), KANCHANA A/P KANN..., NIK HASNIRA BINTI NIK..., NUR AISYA MOHD SABRI (Meeting host), NUR AISYA MOHD SABRI (Presentation)

2:40 PM | hte-quhg-skt

INTERNATIONAL CONFERENCE ON BUSINESS STUDIES AND EDUCATION (ICBE)

LAST MILE DELIVERY QUALITY AND EXPERIENCE: KEY DETERMINANTS OF E-SOMMERCE CUSTOMER LOYALTY OF GEN Z

PAPER ID : ICBE - MARCH 26- 145
 NUR AISYA BINTI MOHD SABRI

WAN NOR HAFIZA BINTI WAN SULAIMAN (PMM) (Presenting, annotating)

ZERO-WASTE TRANSFORMATION: FUNCTIONAL HERBAL TEA FROM DRAGON FRUIT PEEL
(PAPER ID: ICBE-March'26-126)

20th International Conference on Business Studies and Education (ICBE) POLITEKNIK MELAKA

PRESENTER:
WAN NOR HAFIZA WAN SULAIMAN
DEPARTMENT OF TOURISM & HOSPITALITY
POLITEKNIK MELAKA MELAKA

TEAM MEMBERS:
WAN NOR HAFIZA WAN SULAIMAN
FANIS ALIA RAMLEY
SITI NORHAZAN HASSAN

Participants: WAN NOR HAFIZA BINTI..., Mohd Khairi Nordin @ Bah..., DR GEETHA A/P NADESA..., HELMA BINTI MOHD ALI (...), 16 others, DR GEETHA A/P NADESA...

14:40 | hja-ccwe-icu

ADIRAH BINTI ISA (PTSB) (Presenting, annotating)

Students' Perceptions of the Effectiveness of CIDOS as a Learning Platform in Technical English classroom

20th International Conference on Business Studies and Education (ICBE)

Presented by:
ADIRAH BINTI ISA
PAPER ID :ICBE- March'26-168

30 MARCH 2026

Participants: NORAZIAN JAAFAR, faizah aboo bakar, Rouney Saly, 10 others, LETCHUMANAN A/L SH..., DR. ANUSUYA A/P..., ADIRAH BINTI ISA (PTSB), AMIRAH ZAWANI BINTI..., DR. ANUSUYA A/P KALIA..., faizah aboo bakar, KHAIRULFADILAH BINTI..., 17 contributors

2:47 PM | tgv-iaxj-nnh

NORHAYATI BINTI MD SHARIF (POLIMAS) (Presenting, annotating)

KAJIAN PEMBANGUNAN SISTEM AMARAN HALANGAN BERASASKAN SENSOR ULTRASONIK BAGI MENYOKONG MOBILITI INDIVIDU OKU PENGLIHATAN



PEMBENTANG: **NORHAYATI BINTI MD SHARIF**
PAPER ID : ICBE -MARCH'26 -180
 POLITEKNIK SULTAN ABDUL HALIM MU ADZAM SHAH

Oh z i j i a n

NORHAYATI BINTI MD ...

LETCUMANAN A/L SHA...

People

All muted Add people

- AZREEN AHMAD TAN
- EMY ZULYANA BINTI M...
- MAZLINDA BINTI AWAN...
- NORHAYATI BINTI MD S... Meeting host
- NORHAYATI BINTI MD S... Presentation
- NURUL DAYANA BINTI ...
- Oh z i j i a n Meeting host

2:44 PM | kve-pfgx-vfa

NIK HASNIRA BINTI NIK PA (KKJEL) (Presenting, annotating)

NURUL SYAHIRAH BINTI ...


KANCHANA A/P KANNA...

NUR AISYA MOHD SABRI

3 others

LETCUMANAN A/L SH...

Project-Based Learning through the Documentation of Measured Drawings of Heritage Buildings in TVET Education: An Implementation Study of Selected Terengganu Heritage Houses



Paper ID: ICBE- March26-146

Presenter: **Ts. Nik Hasnira binti Nik Pa**
 Kolej Komuniti Selekut
 Negeri Sembilan, Malaysia

20th International Conference on Business Studies and Education (ICBE)

30th March 2026

NUR AISYA MOHD SABRI

NIK HASNIRA BINTI NI...

People

All muted Add people

- KANCHANA A/P KANNA...
- NIK HASNIRA BINTI NIK ... Meeting host
- NIK HASNIRA BINTI NIK ... Presentation
- NUR AISYA MOHD SABRI
- NUR ZAHIRAH BINTI AHL...
- NURUL SYAHIRAH BINTI ...
- RUHANA WATI BINTI IR...
- SI IRINA RT NORDIN IP

2:53 PM | hte-qung-skt

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SYAIFUL BACHTIAR BIN NEN @ SHAHINAN (PSMZA) (Presenting, annotating)

Camera → AI Processing → CUAV Flight Controller → [Drone]

People

- All muted
- Add people
- aaron Ismento
- AZREEN AHMAD TAN
- Merged audio
- MAZLINDA BINTI AW...
- SYAIFUL BACHTIAR B... Meeting host
- NORHAYATI BINTI MD S...
- NURUL DAYANA BINTI ...

Oh zi jian

SYAIFUL BACHTIAR BI...

LETCUMANAN A/L SHA...

2:57 PM | kve-pfgx-vfa

NORZIEIRIANI AHMAD (Presenting, annotating)

ADIRAH BINTI ISA (PTSB)

NORAZIAN JAAFAR

falzah a boo bakar

11 others

LETCUMANAN A/L SH...

People

- All muted
- Add people
- MUHAMMAD RASLAH A...
- NOOR YUSLIZAWATI BI...
- noraemah kamaruzaman
- NORAZIAN JAAFAR
- NORZIEIRIANI AHMAD Meeting host
- NORZIEIRIANI AHMAD Presentation
- NURULL ZURAIDA BINTI ... Meeting host
- Rouney Saly

DR. ANUSUYA A/P K...

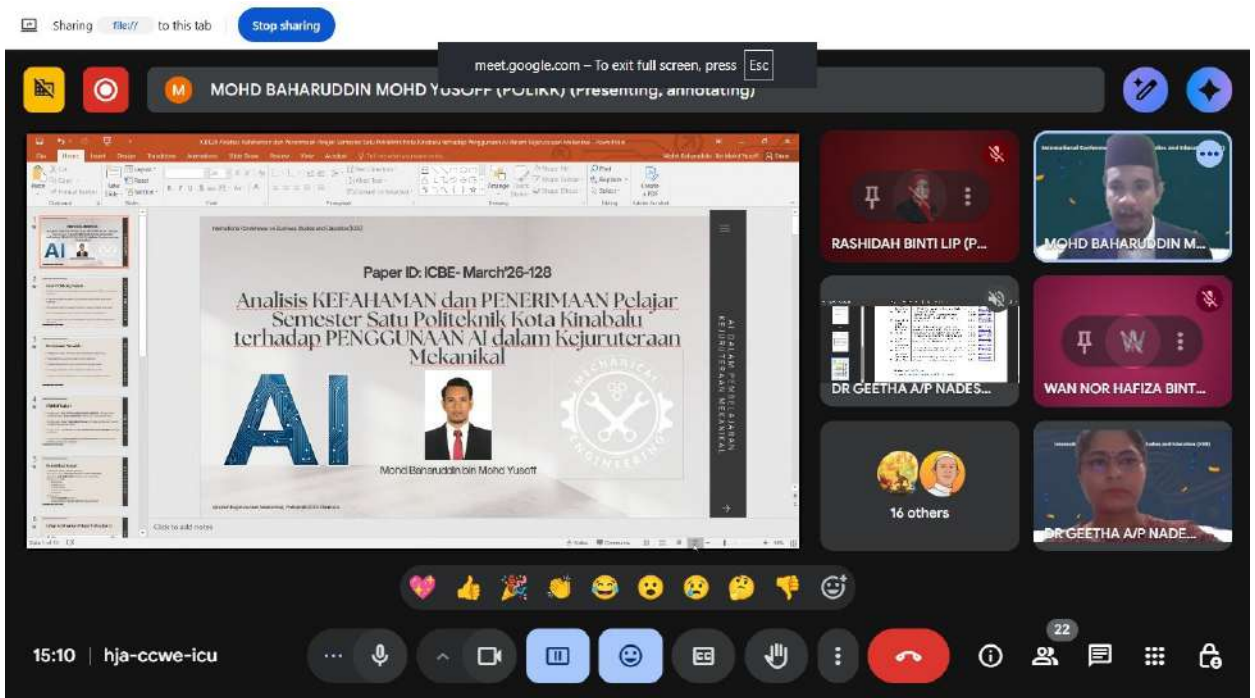
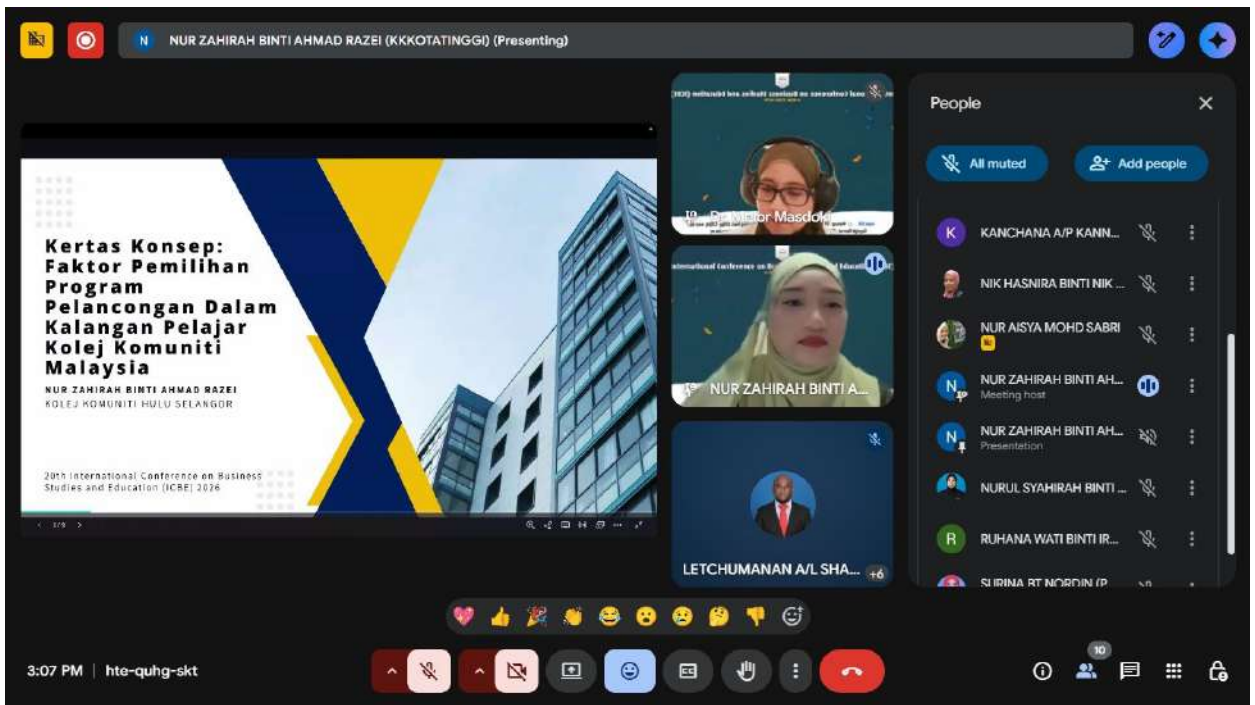
NORZIEIRIANI AHMAD

3:03 PM | tgv-laxj-nnh

Green Digital Marketing and Sustainable Consumer Behavior in ASEAN Economies: The Mediating Role of Consumer Trust and the Moderating Effect of Eco-Label Counterfeiting

Paper ID: ICBE- March'26-169

Norzieiriani Ahmad Farah Zainab



AMIRAH ZAWANI BINTI WAKHI ANUAR (PMS) (Presenting, annotating)

NORZIEIRIANI AHMAD ADIRAH BINTI ISA (PTS8) NORAZIAN JAAFAR 10 others LETCHUMANAN A/L SH...

20th International Conference on Business Studies and Education (ICBE) 2026

DETERMINANTS OF ACCOUNTING STUDENTS' CAREER PATHS: EVIDENCE FROM POLITEKNIK MUADZAM SHAH

Paper ID: ICBE-March'26-170
Presenter: Amirah Zawani binti Wakhi Anuar

AMIRAH ZAWANI BINTI...
ANUSUYA A/P KALIA...

3:15 PM | tgv-laxj-nnh

People

- LETCHUMANAN A... (You) Meeting host
- ADIRAH BINTI ISA (PTS8)
- AMIRAH ZAWANI BINTI... Meeting host
- AMIRAH ZAWANI BINTI... Presentation
- DR. ANUSUYA A/P KALIA... Meeting host
- faizah aboo bakar
- KHAIRULFADILAH BINTI ...
- MOHD NORULHISHAM ... Activate Windows
Go to PC settings to activate Windows.

MAZLINDA BINTI AWANG (PSMZA) (Presenting, annotating)

SYAIFUL BACHTIAR BIN ... NORHAYATI BINTI MD SH... AZREEN AHMAD TAN 4 others LETCHUMANAN A/L SH...

INTERNATIONAL CONFERENCE ON BUSINESS STUDIES AND EDUCATION (ICBE) 30.03.2026

TAJUK KERTAS:
KAJIAN KEBERKESANAN UREA FORMALDEHYDE (UF) DALAM MENINGKATKAN KETAHANAN SILING KAPUR

PAPER ID:
ICBE-MARCH 26-182

PEMBENTANG:
MAZLINDA BINTI AWANG

Oh zi jian

MAZLINDA BINTI AWANG

3:17 PM | kve-pfgx-vfa

People

- EMY ZULYIANA BINTI M...
- Merged audio
- MAZLINDA BINTI AW... Meeting host
- SYAIFUL BACHTIAR B... Meeting host
- MAZLINDA BINTI AWAN... Presentation
- NORHAYATI BINTI MD S...
- NURUL DAYANA BINTI ...

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RUHANA WATI BINTI IRAN (PMM) (Presenting, annotating)

INTERNATIONAL CONFERENCE ON BUSINESS STUDIES AND EDUCATION (ICBE)

Paper ID : ICBE- March'26-150

PRODUCING AN ORGANIC ANTI-FOGGING BAR FOR CLEANING GOGGLE SURFACE

Ruhana Wati binti Iran (presenter)
Surina binti Nordin
Mohamad Redzuan bin Abu Hassan
POLITEKNIK MERLIMAU MELAKA

Dr. Masdar Masrigit

RUHANA WATI BINTI IRAN

LETCUMANAN A/L SHA... +5

People

All muted Add people

- KANCHANA A/P KANN...
- NIK HASNIRA BINTI NIK ...
- NUR AISYA MOHD SABRI
- NURUL SYAHIRAH BINTI ...
- RUHANA WATI BINTI IR... Meeting host
- RUHANA WATI BINTI IR... Presentation
- SURINA BT NORDIN (P... Meeting host

3:18 PM | hte-qugh-ckt

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HELMA BINTI MOHD ALI (KKREMBAU) (Presenting, annotating)

KAJIAN CIRI APRON BAGI KANAK-KANAK TABIKA PERPADUAN DI DAERAH REMBAU : ELEMEN REKA BENTUK, BAHAN SESUAI DAN FUNGSI NILAI TAMBAH DALAM AKTIVITI SENI

Helma binti Mohd Ali
Kolej Komuniti Rembau
ICBE-March'26-123

30 Mar 2026 Google Meet

HELMA BINTI MOHD ALI

DR GEETHA A/P NADESA

SHAHIDAH ABDUL MALEK

NUR AZREEN BINTI ZAIDE...

14 others

DR GEETHA A/P NADESA

14:14 | hja-ccwe-icu

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رشدان حسن (Presenting, annotating)

International Conference on Business Studies and Education (ICBE)
 #1556 1713-1473
 ICBE- March 26-129

KEBERKESANAN PELAKSANAAN PENINGKATAN KUALITI BERTERUSAN TERHADAP PENCAPAIAN HASIL PEMBELAJARAN BAGI DUF10212 BAHASA ARAB 1

HIDAYATI BINTI SANUSI
 MOHD RUSDAN BIN HASAN

PEMBENTANG :
 MOHD RUSDAN BIN HASAN

MOHD BAHARUDDIN MO...

DR GEETHA A/P NADESA...

RASHIDAH BINTI LIP (FTSN)

16 others

DR GEETHA A/P NADESA...

15:25 | hja-ccwe-icu

faizah aboo bakar (Presenting, annotating)

Press Esc to exit full screen

NORZIEIRANI AHMAD

ADIRAH BINTI ISA (PTSB)

NORAZIAN JAAFAR

11 others

LETCHUMANAN A/L SH...

KEBERKESANAN PENGURUSAN
 ASET DALAM KALANGAN
 WARGA KOLEJ KOMUNITI PASIR
 GUDANG

Faizah binti Aboo Bakar
 ICBE- March 26-171

DR. ANUSUYA A/P KALIA...

AMIRAH ZAWANI BINTI WAKHI...

faizah aboo bakar

People

All muted Add people

- LETCHUMANAN A... (You) Meeting host
- ADIRAH BINTI ISA (PTSB)
- AMIRAH ZAWANI BINTI ...
- CIK FARIZA BINTI MOHA...
- DR. ANUSUYA A/P KALIA... Meeting host
- DR. MELVIN MOJIKON (...)
- faizah aboo bakar Meeting host
- faizah aboo bakar Presenting windows

Go to PC settings to activate Windows.

3:30 PM | tgv-laxj-nnh

KANCHANA A/P KANNAN (PSP) (Presenting, annotating)

2026
International Conference on Business Studies and Education

Digital Workforce Readiness in Supply Chain Management Determinants: Evidence of a Malaysian TVET Institution.

30th MARCH 2026

PRESENTED BY:
KANCHANA KANNAN
POLYTECHNIC SEBERANG PERAI, PULAU PINANG, MALAYSIA
PAPER ID: ICBE-MAR06-15

People

All muted Add people

Contributors

- LETCUMANAN ... (You) Meeting host
- Dr. Melor Masdoki Meeting host
- KANCHANA A/P KANN... Meeting host
- KANCHANA A/P KANN... Presentation
- NIK HASNIRA BINTI NIK ...
- NURUL SYAHIRAH BINTI ...

3:30 PM | hte-quhg-skt

EMY ZULYIANA BINTI MOHD NOR (KKPG) (Presenting, annotating)

Digitalizing Institutional Quality Assurance
An Empirical Study on the Effectiveness of the Q-CORE Platform in a TVET Environment

UNIT JAMINAN KUALITI

Unik Jaminan Kualiti

Paper ID: ICBE-MAR17-15

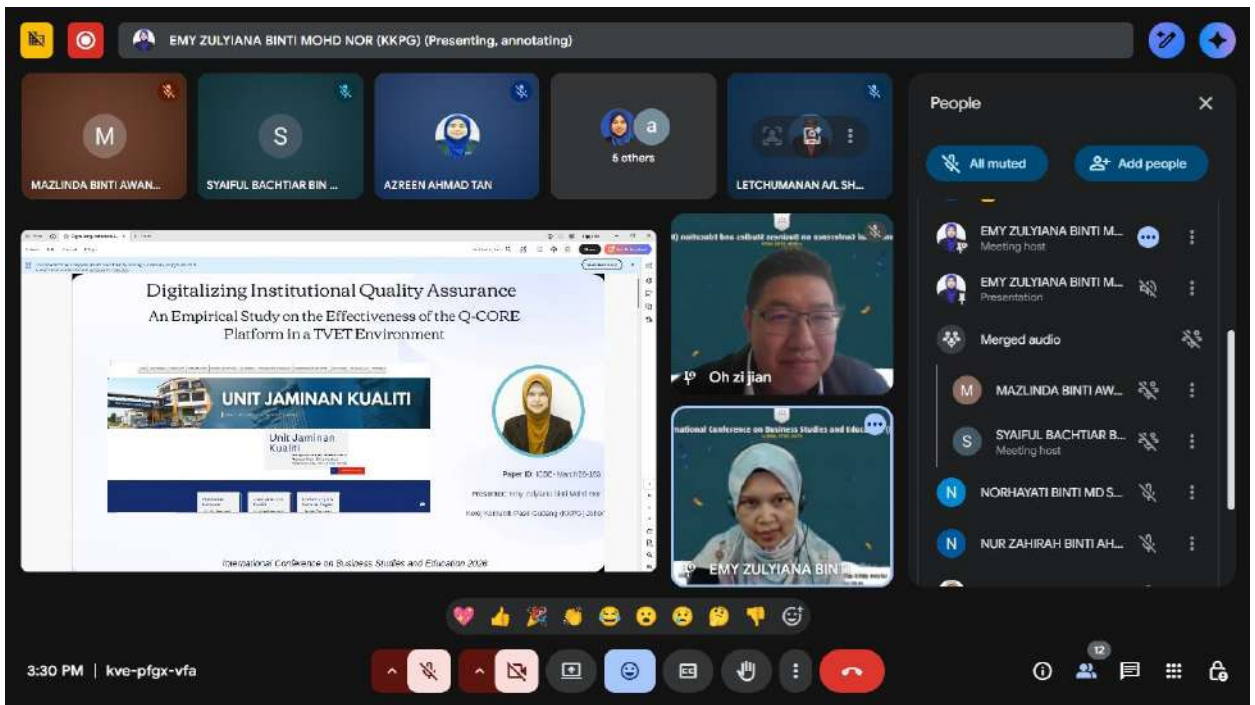
People

All muted Add people

Contributors

- EMY ZULYIANA BINTI M... Meeting host
- EMY ZULYIANA BINTI M... Presentation
- Merged audio
- MAZLINDA BINTI AW...
- SYAIFUL BACHTIAR B... Meeting host
- NORHAYATI BINTI MD S...
- NUR ZAHIRAH BINTI AHL...

3:30 PM | kve-pfgx-vfa



NOOR YUSLIZAWATI BINTI YUSOF (PMS) (Presenting, annotating)

falzah aboo bakar | AMIRAH ZAWANI BINTI... | ADIRAH BINTI ISA (PTSB) | 12 others | LETCHUMANAN A/L SH...

People

- All muted
- Add people
- MOHD NORULHISHAM ...
- MUHAMMAD RASLAH A...
- NOOR YUSLIZAWATI BI... Meeting host
- NOOR YUSLIZAWATI BI... Presentation
- norasmah kamaruzaman
- NORAZIAN JAAFAR
- NURULL ZURAIDA BINTI... Meeting host
- Rouney Saly

3:46 PM | tgv-iajx-nnh

NUR ZAHIRAH BINTI AHMAD RAZEI (KKKOTATINGGI) (Presenting)

Oh zi jian | NUR ZAHIRAH BINTI... | LETCHUMANAN A/L SHA... +8

People

- All muted
- Add people
- EMY ZULYIANA BINTI M...
- Merged audio
- MAZLINDA BINTI AW...
- SYAIFUL BACHTIAR B... Meeting host
- NORHAYATI BINTI MD S...
- NUR ZAHIRAH BINTI AHL... Meeting host
- NUR ZAHIRAH BINTI AHL... Presentation

3:49 PM | kve-pfgx-vfa

MUHAMMAD RASLAH AAIMAN BIN MOHAMAD (PMM) (Presenting, annotating)

2026 20th International Conference on Business Studies and Education

Nearpod As an Innovative Teaching Aid in Basic Western Culinary Education at Politeknik Merlimau Melaka, Malaysia

PAPER ID: ICBE- March'26-173

MUHAMMAD RASLAH AAIMAN BIN MOHAMAD

DR. MURZITA AIDY KALIAPPAN

MUHAMMAD RASLAH AAIMAN BIN MOHAMAD

LETCUMANAN A/L SHA... +15

People

All muted Add people

- KHAIRULFADILAH BINTI...
- MOHD NORULHISHAM ...
- MUHAMMAD RASLAH A... Meeting host
- MUHAMMAD RASLAH A... Presentation
- NOOR YUSLIZAWATI BI...
- norasmah kamaruzaman
- NORAZIAN JAAFAR
- NURULL ZURAIDA BINTI... Meeting host

4:01 PM | tgv-iaxj-nnh

Sofiah Bakar (Presenting, annotating)

SOKONGAN SOSIAL SEBAGAI FAKTOR PELINDUNG KESIHATAN MENTAL PELAJAR TVET: ANALISIS TAHAP SOKONGAN DAN HUBUNGANNYA DENGAN KEMURUNGAN

PEMBENTANG: SOFIAH BINTI BAKAR

PAPER ID: ICBE- March'26-185

Oh zi jian

Sofiah Bakar

LETCUMANAN A/L SHA... +8

People

All muted Add people

- SYAIFUL BACHTIAR B... Meeting host
- NORHAYATI BINTI MD S...
- NUR ZAHIRAH BINTI AHL...
- NURUL DAYANA BINTI ...
- Oh zi jian Meeting host
- Sofiah Bakar Meeting host
- Sofiah Bakar Presentation

4:03 PM | kve-pfgx-vfa

Sharing file:// to this tab Stop sharing

Aisyah Sazali (Presenting, annotating)

ICBE-MARCH'26-131
Presentation 2026

HAK-HAK WANITA DALAM PERKAHWINAN: KAJIAN KEFAHAMAN AWAL PELAJAR UPN

TERIMA KASIH

NUR AISYAH ATIFAH BINTI AHMAD SAZALI
ICBE-March'26-131

16:03 | hja-ccwe-icu

NURUL DAYANA BINTI MOHD DAZID (PBU) (Presenting, annotating)

Presented by NURUL DAYANA

The Effectiveness of Using BMCExpert on Computational Thinking among Students of the DFT30033 Cyberpreneurship Course

Presenter: Nurul Dayana Binti Mohd Dazid
Paper ID: ICBE-March'26-152

Conference on Business Studies and Edu...

NURUL DAYANA BINTI ...

9 others

LETCUMANAN A/L SHANMUG...

People

- All muted
- Add people
- SYAIFUL BACHTIAR B... Meeting host
- NORHAYATI BINTI MD S...
- NUR ZAHIRAH BINTI AHL...
- NURUL DAYANA BINTI ... Meeting host
- NURUL DAYANA BINTI ... Presentation
- Oh zi jian Meeting host
- Sofiah Bakar

4:15 PM | kve-pfgx-vfa

DR GEETHA A/P NADESAN (PTSB) (You, presenting, annotating) Stop presenting

The screenshot shows a Zoom meeting interface. At the top, the name 'DR GEETHA A/P NADESAN (PTSB) (You, presenting, annotating)' is displayed next to a 'Stop presenting' button. The main content is a presentation slide from a PDF viewer. The slide title is 'International Conference on Business Studies and Education (ICBE)' with the subtitle 'EFIKASI KENDIRI GURU SEBAGAI PERAMAL KEPUASAN KERJA DI SEKOLAH RENDAH LUAR ANDAR KENINGAU SABAH' and 'PAPER ID: ICBE - MARCH '2026'. The presenter is listed as 'PEMBENTANG CAROLINE P. EDDY DR ROSY TALIN UMS SABAH'. The slide footer includes contact information for ICBE: 'WhatsApp: 08-2820949', 'Email: icbe@ums.edu.my', and 'Website: https://www.ums.edu.my'. A grid of participants is visible on the right, including 'DR GEETHA A/P NADESAN', 'NOR AFZAN BINTI ARIFFIN (...)', and '13 others'. At the bottom, there is a toolbar with various icons for chat, mute, video, and other meeting controls. The time '12:38' and the ID 'hja-ccwe-icu' are shown in the bottom left corner.

International Conference on Business Studies and Education (ICBE)
 EFISIENSI KENDIRI GURU SEBAGAI PERAMAL KEPUASAN KERJA
 DI SEKOLAH RENDAH LUAR ANDAR KENINGAU SABAH
 PAPER ID: ICBE - MARCH '2026

PEMBENTANG
 CAROLINE P. EDDY
 DR ROSY TALIN
 UMS SABAH

WhatsApp: 08-2820949 | Email: icbe@ums.edu.my | Website: https://www.ums.edu.my
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DR GEETHA A/P NADESAN (...)
 NOR AFZAN BINTI ARIFFIN (...)
 13 others

12:38 | hja-ccwe-icu

meet.google.com - To exit full screen, press Esc

The screenshot shows a Google Meet grid view with 19 participants. The top bar displays 'meet.google.com - To exit full screen, press Esc'. The grid contains 19 video thumbnails of participants, including 'Aisyah Sazali', 'Mhdzhrul', 'NOR AFZAN BINTI...', 'MOHD BAHARUD...', 'RASHIDAH BINTI...', 'IWAN NOR HARTZ...', 'Mohd Khairi Nord...', 'HELMA BINTI MO...', 'SHAHIDAH ABDU...', 'SB Yaso', 'ZUR AIN BINTI M...', 'ABDUL AZIZ AB N...', 'Hidayati Sanusi', 'NUR AZREEN BINTI ZAIDEL (...)', 'HASHAMUDDIN BIN YA'AK', 'CAROLINE P. EDDY KPM - G...', 'komathi kt', and 'DR. GEETHA A/P NADESAN'. A toolbar at the bottom includes icons for chat, mute, video, and other meeting functions. The time '16:20' and the ID 'hja-ccwe-icu' are shown in the bottom left corner.

meet.google.com - To exit full screen, press Esc

Aisyah Sazali
 Mhdzhrul
 NOR AFZAN BINTI...
 MOHD BAHARUD...
 RASHIDAH BINTI...
 IWAN NOR HARTZ...
 Mohd Khairi Nord...
 HELMA BINTI MO...
 SHAHIDAH ABDU...
 SB Yaso
 ZUR AIN BINTI M...
 ABDUL AZIZ AB N...
 Hidayati Sanusi
 NUR AZREEN BINTI ZAIDEL (...)
 HASHAMUDDIN BIN YA'AK
 CAROLINE P. EDDY KPM - G...
 komathi kt
 DR. GEETHA A/P NADESAN

16:20 | hja-ccwe-icu

meet.google.com - To exit full screen, press Esc

RASHIDAH BINTI LIP (PTSN) (Presenting)

Paper ID: ICBE-March'26-186

Language Educators' Perceptions of Online Platforms and Micro-Credentials in Language Learning Contexts

Presented By

Ts. RASHIDAH BINTI LIP
POLITEKNIK TUN SYED HASIR SYED ISMAIL (PTSM)

International Conference on Business Studies and Education (ICBE) 2026

RASHIDAH BINTI LIP (PTSN)

CAROLINE P.EDDY KPM-Guru

DR GEETHA A/P NADESAN (PTSB)

16:25 | hja-ccwe-icu

meet.google.com/kve-pfgx-vfa

International Conference on Business Studies and Education (ICBE)

4:33 PM | kve-pfgx-vfa





A heartfelt appreciation and sincere gratitude are extended to all parties involved, either directly or indirectly, in ensuring the success of ICBE. Special thanks are also due to those who have offered their unwavering support and contributed their time, effort, and financial resources to the success of this program. It is hoped that the successful organization of ICBE will serve as a driving force propelling us all toward greater achievements.

Regards,
ICBE PUBLICATION

<https://www.icbe.my>