

Innovative & Appropriate Sustainable Development in the digital Era

Book of Abstract

The 3rd International Conference on ASEAN Sustainable Development

ICASD 2026



**International College
Thaksin University**

Co-Host



Partners



Acknowledgements

The organizing committee of the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026) would like to express our sincere appreciation to all individuals and institutions who have contributed to making this conference possible. Under the theme, “Innovative & Appropriate Sustainable Development in the Digital Era”, this conference reflects our shared commitment to promoting meaningful dialogue, research, and practical solutions for sustainable development in a rapidly changing world.

We would also like to acknowledge the educational philosophy of Thaksin University, which greatly inspires this conference: “Thaksin University focuses on learning outcomes of learners towards social innovation competence and entrepreneurship with wisdom, ethics, leading development through active learning management”. This philosophy serves as an important foundation for ICASD 2026, guiding our efforts to create a platform that encourages knowledge creation, ethical leadership, innovation, and active engagement among participants.

In particular, we would like to extend our heartfelt appreciation for the participation of young researchers, including undergraduate students and high school students, whose enthusiasm, creativity, and academic potential bring special value to this conference. Their involvement reflects our strong belief that the future of sustainable development depends on empowering the next generation of scholars and change-makers.

We are equally grateful to our co-hosts, partners, keynote speakers, reviewers, presenters, and participants from various institutions and countries for their academic support, collaboration, and trust. The international nature of this conference demonstrates the strength of cooperation across borders and highlights the importance of exchanging diverse perspectives in addressing sustainable development challenges.

Finally, we sincerely hope that the 3rd ICASD will serve not only as a venue for academic exchange, but also as a meaningful starting point for future collaborations, including joint research, publications, student development, and long-term institutional partnerships. We deeply appreciate everyone’s contribution and look forward to continuing this valuable journey together.

Conference Organizers

- **Chairperson**

Dr. Pittayatorn Kaewkong

- **Co-Chairperson**

Mr. Abdunfatah Masamae

Dr. Ye Jin Kim

- **Advisory Committee**

1. President of Thaksin University
2. Vice President for Research and Innovation
3. Dean of the International College
4. Dean of the Faculty of Economics and Business Administration
5. Dean of the Faculty of Law
6. Dean of the Faculty of Agro-and-Bio Industry
7. Dean of the Faculty of Multidisciplinary Sciences and Entrepreneurship
8. Dean of the Faculty of Engineering

- **Academic Committee**

1. Dr. YeJin Kim, Republic of Korea
2. Prof. Dr. Yves Gagnon, Canada
3. Prof. Dr. Thin Thin Aye, Myanmar
4. Prof. Dr. Nattaphan Kecharananta, Thailand
5. Assoc. Prof. Dr. Darwina Arshad, Malaysia
6. Assoc. Prof. Dr. Hendrik Bin Lamsali, Malaysia
7. Assoc. Prof. Dr. Thanapauge Chamaratana, Thailand
8. Assoc. Prof. Dr. Puttharak Prabnok, Thailand
9. Assoc. Prof. Dr. Somkiat Saithanoo, Thailand
10. Assoc. Prof. Dr. Wassana Suwanvijit, Thailand
11. Assoc. Prof. Dr. Jompob Waewsak, Thailand
12. Assoc. Prof. Dr. Sompong O-Thong, Thailand
13. Assoc. Prof. Papontee Teeraphan, Thailand
14. Asst. Prof. Dr. Muhammad Zulqarnain Arshad, Pakistan
15. Asst. Prof. Dr. Min-Soo Maeng, Republic of Korea
16. Asst. Prof. Dr. Morakot Ditta-Apichai, Thailand
17. Asst. Prof. Dr. Sanit Srichookiat, Thailand
18. Dr. Pittayatorn Kaewkong, Thailand
19. Dr. Nattanan Thongmak, Thailand
20. Dr. Chenxu Liu, China
21. Dr. Yang Wang, China
22. Dr. Saw Htay Myint, Myanmar
23. Dr. Hyung Woo Lee, Republic of Korea
24. Dr. Edy Kurniawan, Indonesia
25. Dr. Min Liu, China
26. Dr. Chana Chancham, Thailand
27. Dr. Muhammad Hassan Arshad, Pakistan

Conference Organizers

28. Dr. Wasin Praditsilp, Thailand
29. Dr. Sattra Keawphang, Thailand
30. Dr. Kanyanit Wichianrat, Thailand
31. Mr. Md Ahbabur Rahman, Bangladesh
32. Mr. Abdunfatah Masamae, Thailand
33. Mr. Songkomkrit Chaayakan, Thailand
34. Mr. Witawin Siripoonsap, Thailand
35. Miss. Phyu Phyu, Myanmar
36. Miss Paweena Junpradit, Thailand
37. Miss Fontip Kaewsuwan, Thailand

- **Organizing Committee**

1. Dr. Pittayatorn Kaewkong, Dean of the International College
2. Mr. Abdunfatah Masamae, Vice Dean of the International College
3. Dr. Nattanant Thongmak, Assistant to the Dean of the International College
4. Dr. YeJin Kim
6. Dr. Muhammad Hassan Arshad, Head of the BBA Program of International College
6. Dr. Min Liu
7. Ms. Thitthaya Jansuk
8. Ms. Siriporn Petmanee, Head of the International College Office
9. Ms. Paweena Junpradit
10. Mrs. Chatpavee Ruppradit
11. Ms. Fontip Kaewsuwan

- **Abstract and Proceeding:**

1. Dr. Pittayatorn Kaewkong
2. Mr. Abdunfatah Masamae
3. Dr. YeJin Kim
4. Dr. Muhammad Hassan Arshad
5. Dr. Min Liu
6. Ms. Paweena Junpradit
7. Ms. Fontip Kaewsuwan



Message from the President Thaksin University

It is my great pleasure to extend a warm welcome to all distinguished scholars, researchers, practitioners, and students attending the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026). On behalf of Thaksin University, I would like to express our sincere appreciation to everyone who has contributed to and participated in this important academic gathering.

This conference provides a valuable platform for scholars and professionals from diverse disciplines and countries to exchange knowledge, share research findings, and engage in meaningful dialogue on issues related to sustainable development. Under the theme “Innovation & Appropriate Sustainable Development in the Digital Era,” the conference highlights the importance of integrating innovation, technology, and collaborative approaches in addressing the complex challenges facing our societies today.

In the context of the ASEAN region and the wider global community, sustainable development requires not only academic insight but also practical cooperation among universities, research institutions, governments, and communities. International conferences such as ICASD play a vital role in fostering these connections and encouraging the exchange of ideas that can lead to practical and sustainable solutions.

Thaksin University remains committed to supporting academic excellence, international collaboration, and the advancement of knowledge that contributes to sustainable and inclusive development. We hope that this conference will inspire new perspectives, strengthen academic networks, and encourage future collaborations among participants.

I would like to thank the organizing committee, partners, and contributors for their dedication and hard work in making this conference possible. I wish all participants a fruitful conference and an enjoyable stay in Hatyai, Songkhla.

A handwritten signature in blue ink that reads "N. Chitniratna" with a long horizontal flourish extending to the right.

Associate Professor Dr. Nathapong Chitniratna
President of Thaksin University



Message from the Vice President Research and Innovation, Thaksin University

Research and innovation play an essential role in addressing the complex challenges faced by societies around the world today. The 3rd International Conference on ASEAN Sustainable Development (ICASD 2026), therefore, serves as an important academic forum for scholars, researchers, practitioners, and students to share knowledge, present research findings, and strengthen international research collaboration.

In recent years, rapid technological advancement and digital transformation have created both opportunities and challenges for sustainable development. The integration of innovation, interdisciplinary research, and responsible application of digital technologies is increasingly necessary in order to develop practical and sustainable solutions that respond to the needs of society.

The theme of this conference, “Innovation & Appropriate Sustainable Development in the Digital Era,” highlights the importance of promoting research that not only advances academic knowledge but also contributes to social, economic, and environmental sustainability. Through scholarly exchange and collaboration, conferences such as ICASD provide a valuable platform for researchers to explore new perspectives and foster meaningful partnerships across institutions and countries.

Thaksin University remains committed to supporting research and innovation that contribute to sustainable development at both regional and global levels. It is hoped that this conference will encourage productive discussion, inspire new research initiatives, and strengthen academic networks among participants.

I would like to express my sincere appreciation to the organizing committee, co-host institutions, keynote speakers, reviewers, and all contributors whose efforts have made this conference possible.

I wish all participants a fruitful conference and a pleasant stay in Thailand.

Associate Professor Dr. Samak Kaewsuksaeng
Vice President Research and Innovation
Thaksin University



Message from the Dean International College, Thaksin University

On behalf of the International College, Thaksin University, it is my great pleasure to welcome all participants to the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026). This conference provides an important platform for scholars, researchers, policymakers, and practitioners to exchange ideas and share research that contributes to sustainable development within the ASEAN region and beyond.

In an era marked by rapid social, economic, and environmental changes, sustainable development has become a shared responsibility for nations, institutions, and communities. The ASEAN region, with its diverse cultures, dynamic economies, and unique environmental challenges, offers both opportunities and responsibilities for collaborative solutions. ICASD 2026 brings together interdisciplinary perspectives to address these challenges and explore innovative approaches to achieving sustainable and inclusive growth.

At Thaksin University International College, we strongly believe that higher education institutions play a crucial role in promoting knowledge creation, international collaboration, and responsible global citizenship. Conferences such as ICASD not only provide opportunities for academic dialogue but also help strengthen networks that support research, innovation, and sustainable practices across borders.

I would like to express my sincere appreciation to all authors, reviewers, keynote speakers, and organizing committee members whose contributions have made this conference possible. Your participation and commitment to advancing knowledge are invaluable to the success of this event.

I wish you all a productive conference and a rewarding exchange of ideas.

A handwritten signature in blue ink, appearing to read 'P. Kaewkong', with a long horizontal flourish extending to the right.

Dr. Pittayatorn Kaewkong
Dean, International College Thaksin University, Thailand



Message from the Dean Faculty of Law, Thaksin University

The Faculty of Law at Thaksin University is deeply honored to serve as a co-host for the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026). This esteemed conference convenes distinguished scholars, researchers, and practitioners across multidisciplinary fields to engage in intellectual discourse and chart strategic trajectories toward sustainable development within the ASEAN region and beyond.

Sustainable development transcends mere economic prosperity and technological innovation; it is intrinsically intertwined with the rule of law, robust institutional frameworks, and equitable access to justice. Comprehensive legal structures and sound governance are indispensable pillars in fostering sustainable societies, protecting fundamental rights, ensuring egalitarianism, and enforcing accountability.

The thematic symposia of this conference—most notably those dedicated to Peace, Justice, and Strong Institutions—profoundly emphasize the critical function of legal architectures in fortifying governance and propelling sustainable progress. Rigorous legal scholarship and constructive policy dialogues are instrumental in architecting institutional frameworks that champion inclusive and conscientious development.

In our capacity as a co-host of ICASD 2026, the Faculty of Law takes immense pride in facilitating this academic nexus, which fosters interdisciplinary synergy and substantive deliberation among global experts. Such dynamic exchanges are pivotal in bridging the gap between empirical research, policymaking, and pragmatic application to effectively mitigate the multifaceted challenges confronting contemporary society.

On behalf of the Faculty of Law, I extend my profound gratitude to the organizing committee, esteemed keynote speakers, diligent reviewers, and all participants whose invaluable contributions have actualized this conference.

I wish you all a highly productive, intellectually stimulating, and inspiring conference.

A handwritten signature in black ink, appearing to be 'Krisda Apinawatawornkul'.

**Assistant Professor Dr. Krisda Apinawatawornkul
Dean of the Faculty of Law
Thaksin University**



Message from the Dean

Faculty of Economics and Business Administration, Thaksin University

It is my distinct honor and privilege to welcome all distinguished delegates, scholars, and practitioners to the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026).

This year's theme, "Innovative & Appropriate Sustainable Development in the Digital Era," arrives at a critical juncture for the ASEAN community. As we navigate the complexities of rapid digital transformation, we must remain steadfast in our commitment to development that is not only technologically advanced but also ecologically resilient and socially inclusive.

At the Faculty of Economics and Business Administration, Thaksin University, our vision is to be a leading institution that fosters innovation and serves as a center of excellence in business education, dedicated to creating tangible value for both the economy and society. In this capacity, we recognize that the digital era provides us with sophisticated tools to accelerate the transition toward a Circular Economy. By optimizing resource life cycles and minimizing waste through digital intelligence, we can significantly bolster Energy Security across our region—reducing our dependence on finite resources and building a more self-reliant, sustainable energy landscape.

The concept of "appropriateness" remains at the heart of our discussions. It serves as a reminder that innovation must be strategically tailored to the unique environmental and socioeconomic contexts of ASEAN nations. ICASD 2026 stands as a premier platform for intellectual exchange, where we can bridge the gap between theoretical research and practical application, ensuring that our collective efforts lead to sustainable prosperity.

On behalf of the Faculty and the organizing committee, I would like to express my sincere gratitude to our sponsors, partners, and most importantly, the participants for their invaluable contributions. Your insights are the catalysts for the transformative change our region requires.

I wish you all an intellectually stimulating conference and a memorable stay in the historic province of Songkhla.

Warm Regards,

A handwritten signature in black ink, appearing to read "P. Duangchinda".

(Dr. Pinit Duangchinda)
Dean of Economics business and administration
Co-Chair, ICASD 2026



Message from the Dean Faculty of Engineering, Thaksin University

On behalf of the Faculty of Engineering, Thaksin University, it is my great pleasure to extend a warm welcome to all participants of The 3rd International Conference on ASEAN Sustainable Development (ICASD 2026) under the theme “Innovation & Appropriate Sustainable Development in the Digital Era.”

The Faculty of Engineering is honored to co-host this important international conference. Our faculty is committed to the mission of producing professional engineers and creating innovations for society, with a strong emphasis on applying engineering knowledge and technology to address real-world challenges and support sustainable development.

In today’s rapidly evolving digital era, innovation, engineering solutions, and interdisciplinary collaboration play a crucial role in advancing sustainable development across economic, environmental, and social dimensions. This conference provides an excellent platform for scholars, researchers, and practitioners from around the world to share research findings, exchange ideas, and build international collaboration that contributes to sustainable development in the ASEAN region and beyond.

We sincerely hope that ICASD 2026 will foster meaningful academic exchange, inspire innovative ideas, and strengthen networks among global scholars and institutions.

I would like to express my appreciation to the International College and all partners involved in organizing this conference, and I wish the conference every success.

J. KAEW-ON

Assoc. Prof. Dr. Jatuporn Kaew-On
Dean, Faculty of Engineering
Thaksin University



Message from Dean
Faculty of Agro- and Bio-Industry, Thaksin University

It is with great pride and pleasure that the Faculty of Agro- and Bio-Industry, Thaksin University, extends a warm welcome to all distinguished participants of the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026).

This important academic platform brings together researchers, educators, practitioners, and policymakers from across ASEAN and beyond to exchange knowledge, share innovations, and discuss practical approaches to advancing sustainable development. The conference theme strongly aligns with the United Nations Sustainable Development Goals (SDGs) and reflects our collective commitment to addressing global challenges through regional cooperation and scientific progress.

As one of the co-hosting institutions, the Faculty of Agro- and Bio-Industry is honoured to support this international forum, which promotes collaboration and knowledge exchange across agriculture, biotechnology, food systems, environmental management, and sustainable socio-economic development.

We sincerely believe that the discussions and outcomes of this conference will encourage new partnerships, stimulate future research, and contribute meaningfully to sustainable development within the ASEAN region and beyond.

On behalf of the Faculty Agro- and Bio Industry, we would like to express our sincere appreciation to the organising committee, keynote speakers, presenters, and all participants for their valuable contributions. We wish everyone a productive and inspiring experience at ICASD 2026.

Assistant Prof. Dr. Rutrada Theppradit
Dean of Faculty of Agro- and Bio-Industry
Thaksin University



Message from Dean

Faculty of Multidisciplinary Sciences and Entrepreneurship, Thaksin University

On behalf of the Faculty of Multidisciplinary Sciences and Entrepreneurship, Thaksin University, it is my great honor and pleasure to welcome you to the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026). We are truly privileged to serve as a co-host of this important international academic gathering.

This conference provides a valuable global platform for scholars, practitioners, and policy contributors to exchange ideas and research findings that advance sustainable development in ASEAN and beyond. In particular, the discussions today reflect the shared commitment to the five key dimensions of the Sustainable Development Goals: People, Prosperity, Planet, Peace, and Partnership. These pillars remind us that sustainable development requires not only knowledge and innovation but also collaboration across institutions, disciplines, and nations.

The Faculty of Multidisciplinary Sciences and Entrepreneurship is proud to actively contribute to this conference in several important roles. As a co-hosting institution, our faculty has supported the organizational and coordination processes that help connect partners and ensure the smooth implementation of this academic event. In addition, members of our faculty have been invited to serve as expert reviewers and academic contributors in the peer-review process, helping to maintain the scholarly quality and rigor of the conference proceedings.

Furthermore, we are pleased to share that the Faculty has encouraged and supported active academic participation from our members. In this conference, our faculty contributed research papers, reviewers involved in the development and preparation of these studies. This reflects our strong commitment to fostering research collaboration, interdisciplinary learning, and knowledge dissemination within the international academic community.

Beyond this year's event, the Faculty of Multidisciplinary Sciences and Entrepreneurship remains committed to continuously supporting international academic conferences such as ICASD through collaboration, academic networking, and institutional support. We believe that such partnerships are essential for strengthening sustainable academic ecosystems and ensuring the long-term sustainability of international scholarly engagement.

Finally, I would like to extend my sincere appreciation to the organizing committee, our international partners, reviewers, presenters, and participants for your dedication and contributions. Your engagement makes this conference a meaningful space for dialogue, innovation, and collective progress toward a sustainable future.

Rungrawee Jitpakdee.

Assoc. Prof. Dr. Rungrawee Jitpakdee
Dean, Faculty of Multidisciplinary Sciences and Entrepreneurship
Thaksin University



Welcome Message from the President of the Korean Association of Thai Studies

On behalf of the Korean Association of Thai Studies, I would like to extend a warm welcome to all participants, scholars, and distinguished guests.

The Korean Association of Thai Studies has long been dedicated to promoting mutual understanding between Korea and Thailand through interdisciplinary research and academic exchange, thereby strengthening the scholarly foundation of bilateral relations. In the context of a rapidly changing international order and structural transformations across Asia, academic reflection on regional studies and inter-state cooperation has become more important than ever. In response to these evolving challenges, we have gathered here today to further deepen scholarly communication and collaboration.

This conference will provide a meaningful platform for in-depth discussions on the social, cultural, political, and economic transformations taking place in Korea, Thailand, and the broader Southeast Asian region. By bringing together researchers from diverse academic backgrounds and experiences, we hope to facilitate the exchange of knowledge and the expansion of perspectives, contributing to a more comprehensive and balanced understanding of the region.

In particular, this occasion goes beyond a simple forum for research presentations; it serves as a starting point for building a sustainable academic community and laying the groundwork for future collaboration among the next generation of scholars. The Korean Association of Thai Studies remains fully committed to strengthening academic networks, promoting joint research, and expanding people-to-people exchange between our two countries.

I sincerely thank all of you for your participation despite your busy schedules, and I hope this conference will lead to meaningful discussions and productive cooperation.

Thank you.

A handwritten signature in black ink that reads "Bongchul Kim". The signature is written in a cursive, flowing style.

Prof. Bongchul Kim
President
Korean Association of Thai Studies



Message from the Co-Host :

China–Laos–Thailand High-Speed Railway Impact Research Centre

On behalf of the research project “The Hi-SCool Project: Impact of the China–Laos–Thailand High-Speed Railway Impact Research Centre,” supported by the Lancang-Mekong Cooperation Special Fund, I would like to express my sincere appreciation to the Thaksin University International College for generously providing our research project center with the opportunity to be part of this distinguished international conference.

Along the academic journey, a platform for presenting research findings is not merely a venue for reporting what research we have conducted and what results we have obtained. Rather, it serves as an open space for mutual learning and intellectual exchange among scholars who stand together in the shared position of seekers of knowledge. It also offers valuable opportunities to cultivate academic collaboration among scholars, researchers, teachers, and students from different institutions. Such exchanges ultimately nurture scholarly growth that will contribute to building a better and more enlightened society in the future.

I sincerely hope that everyone will enjoy the opportunity to exchange ideas and learn from one another, and perhaps even find “new friends” through participation in the 3rd International Conference on ASEAN Sustainable Development (ICASD 2026).

With respectful regards.

Associate Professor Dr. Thanapauge Chamaratana
Head of The Hi-SCool Project
Faculty of Humanities and Social Sciences
Khon Kaen University



Message from President Scientists and Engineers Without Borders (SEWB), Korea

On behalf of Scientists and Engineers Without Borders (SEWB), Korea, I would like to express my sincere congratulations on the 3rd International Conference on ASEAN Sustainable Development (ICASD).

It is a great honor for SEWB to serve as a co-host of this meaningful conference. We are truly pleased to join Thaksin University and our partners in ASEAN in promoting collaboration for a sustainable future.

SEWB is a non-profit organization that brings together scientists and engineers who wish to use science, technology, and education to support communities and contribute to solving global challenges. Through partnerships with universities, researchers, and students, we aim to promote practical solutions related to the Sustainable Development Goals (SDGs).

We believe that ICASD provides an important platform for sharing knowledge, building networks, and developing collaborative solutions for our shared future. SEWB is honored to take part in this initiative, and we look forward to continuing our cooperation with friends across ASEAN.

Thank you, and we wish the conference great success.

A handwritten signature in blue ink that reads "Kwanwoo Shin". The signature is fluid and cursive, with a stylized "S" at the end.

Kwanwoo Shin
President
Scientists and Engineers Without Borders (SEWB), Korea
www.sewb.org



Message from the Partner of ICASD 2026 CEO Shenzhen LIMON Technology Co., Ltd.

On behalf of Shenzhen LIMON Technology Co., Ltd., it is my great pleasure to express our appreciation for the opportunity to participate in the 3rd International Conference on ASEAN Sustainable Development (ICASD). This conference provides an important platform for scholars, institutions, and industry leaders to exchange ideas and explore collaborative solutions for sustainable development.

As global communities continue to face challenges related to environmental sustainability, economic development, and social progress, international cooperation and knowledge sharing have become increasingly important. ICASD plays a valuable role in bringing together diverse perspectives to address these complex issues and promote innovative approaches for a sustainable future.

We are honored to support the conference and to take part in the nomination process for a partner to support the academic contribution, as well as discussions regarding the Sustainable Development (SD) Association, especially on the theme "Innovative and Appropriate Sustainable Development in the Digital Era". We believe these initiatives will strengthen academic collaboration and contribute to long-term sustainable development across the ASEAN region.

We look forward to meaningful discussions, knowledge exchange, and future cooperation through this important international platform.

Warm regards,

A handwritten signature in black ink, appearing to read '张景然' (Zhang Jingran).

Zhang Jingran
Legal Representative
Shenzhen Lingmou Wisdom Technology Co., Ltd.



Message from President Myanmar Creative University (MCU)

First and foremost, I would like to extend my sincere congratulations on the successful organization of the 3rd International Conference on Sustainable Development 2026 (ICASD 2026).

On behalf of Myanmar Creative University (MCU), I would also like to express our deepest appreciation to Thaksin University, TSU for your continued friendship and partnership, and for kindly granting MCU the opportunity to participate as a Co-Host in the 1st, 2nd, and now the 3rd ICASD.

Among the many remarkable achievements of Thaksin University, ICASD stands out as a highly valuable initiative that contributes not only to regional and institutional development but also to partner universities. The conference provides an excellent platform for scholars from various international universities to present their research, exchange perspectives, and gain valuable global academic experience. It is indeed a meaningful and beneficial program for all participants.

We sincerely wish Thaksin University continued success and growth, and hope that it will carry on organizing impactful international conferences such as ICASD 2026 in the years to come. Please accept my highest regards and congratulations.

A handwritten signature in black ink, appearing to be 'Saw Htay Myint'. The signature is fluid and cursive, with a small mark above the first letter.

Prof. Dr. Saw Htay Myint
(Co - Host, Conference Chair and Reviewer ICASD-2026)
President
Myanmar Creative University (MCU)

3RD ICASD 2026 AGENDA



The 3rd ICASD PresThe 3rd International Conference ASEAN Sustainable Development (ICASD 2026)

THEME: “Innovative & Appropriate Sustainable Development in the Digital Era”

• Day 1: Academic Conference (April 2, 2026; Thursday)

Time	Agenda
08:00 – 08:30	Preparing Poster Presentations
08:30 – 09:00	Registration
09:00 – 09:30	Opening Ceremony (MC: Mr. Budy Prastyo) <ul style="list-style-type: none"> • TSU Video • Cultural Performance • Welcoming by Dr. Pittayatorn Kaewkong, the chair of ICASD Committee, the Dean of International College, Thaksin University • Reporting by Dr. Yejin Kim, the co-chairperson of ICASD Committee, the Dean of International College, Thaksin University • Opening by Assoc. Prof. Dr. Nathapong Chitniratna, the President of Thaksin University • Photo session
09:40 – 10:20	Keynote Lecture 1: Prof. Bongchul Kim <ul style="list-style-type: none"> • Topic: <i>Middle Power countries in the Digital Age: Korea and Thailand</i>
10:20 – 11:00	Refreshment
11:00 – 11:40	Keynote Lecture 2: Mr. Mohd Hairulnzam Ibrahim <ul style="list-style-type: none"> • Topic: <i>Coral Sustainability and Restoration Innovation in Coral Reef: Connectivity Between Marine Biology and Marine Engineering</i>
11:40 – 13:00	Lunch
13:00 – 15:00	Oral Presentations by Participants 1: Session 1-1, 1-2, 1-3, 1-4, and 1-5
15:00 – 15:15	Refreshment
15:15 – 17:00	Oral Presentations by Participants 2 and 3: <ul style="list-style-type: none"> • Sessions 2-1, 2-2, and 2-3 / Online Sessions: 3-1, 3-2, 3-3 and 3-4 Poster Presentations by Participants (Parallel Session)
17:00 – 17:30	Closing Ceremony (MC: Mr. Budy Prastyo) <ul style="list-style-type: none"> • Awards and Announcement: Outstanding Presentation and Honorable Presentation • Closing by Mr. Abdunfatah Masamae, the Vice Dean of International College, Thaksin University

- **Day 2 : n Sustainable Development Field Visit (April 3, 2026; Friday- Optional)**

Time	Agenda
08:30 – 09:00	Meeting at the lobby of The Crystal Hotel (Please register through QR code. Frist come, first served. Only 50 seats are available.)
09:00 – 12:00	This offers participants an opportunity to explore local cultural heritage, community-based learning, and place-based sustainability practices in Songkhla. <ul style="list-style-type: none">• Visit to the Folklore Museum at the Institute for Southern Thai Studies, Thaksin University• Exploring Songkhla Old Town• Return to The Crystal Hotel

Important Notes :

1. Thank you for joining and contributing to the 3rd ICASD 2026.
Your participation makes this event meaningful and impactful.

2. Oral Presentations

- Each presenter is allotted 15 minutes, including time for questions and reflections.
- All presenters in the oral presentation sessions are kindly requested to arrive at their presentation room at least 10 minutes before the session starts to ensure smooth operation.
- Please prepare your presentation in PDF format and submit it to your session room during lunch and refreshment time.

3. Poster Presentations

- Each poster presenter will be given 5–8 minutes to present when the Chair and Co-chair arrive at the designated poster area.

LIST OF CHAIRS AND CO-CHAIRS OF THE 3RD ICASD

Sessions	Chair and Co-Chairs
Oral Presentations 1: 13:00 – 15:00	
Session 1-1 (Crystal Grand Ballroom)	People • Chair: Asst. Prof. Dr. Saw Htay Myint • Co-chair: Dr. Wasin Praditsilp
Session 1-2 (ChanManee Room: 3rd floor)	People 2 • Chair: Assoc. Prof. Dr. Thanapauge Chamaratana • Co-chair: Mr. Thura Swe
Session 1-3 (Sorapong Room: 3rd floor)	Planet 1 • Chair: Prof. Dr. Min-Soo Maeng • Co-chair: Assoc. Prof. Dr. Phanat Kittiphattanabawon
Session 1-4 (ChanNapha Room:3rd floor)	Planet 2 • Chair: Assoc. Prof. Dr. Jompob Waewsak • Co-chair: Dr. Hyung Woo Lee
Session 1-5 (Sirirat Room: 3rd floor)	Prosperity 1 • Chair: Assoc. Prof. Papontee Teeraphan • Co-chair: Assoc. Prof. Dr. Nazlina Zakaria
Oral Presentations 2 (Onsite): 15:15 – 17:00	
Session 2-1 (ChanManee Room: 3rd floor)	Planet 3, Peace and Partnership • Chair: Asst. Prof. Dr. Sanit Srichookiat • Co-chair: Asst. Prof. Dr. Morakot Ditta–Apichai
Session 2-2 (Sorapong Room: 3rd floor)	People 3 • Chair: Asst. Prof. Dr. Muhammad Zulqarnain Arshad • Co-chair: Dr. Kanyanit Wichianrat
Session 2-3 (ChanNapha Room:3rd floor)	People 4 and Prosperity 2 • Chair: Assoc. Prof. Dr. Darwina Arshad • Co-chair: Assoc. Prof. Dr. Puttharak Prabnok
Oral Presentations 3 (Online): 15:15 – 17:00: Links will be updated soon	
Session 3-1 (Sirirat Room: 3rd floor)	Multidisciplinary • Chair: Dr. Min Liu
Session 3-2 (Sirirat Room: 3rd floor)	Multidisciplinary • Chair: Dr. Muhammad Hassan Arshad
Session 3-3 (Sirirat Room: 3rd floor)	Multidisciplinary • Chair: Mr. Md Ahabur Rahman
Session 3-4 (Sirirat Room: 3rd floor)	Multidisciplinary • Chair: Ms. Phyu Phyu • Co-chair: Ms. Hera Liu
Poster Presentations: 15:15 – 17:00 (Parallel with Oral Presentations 2 and 3)	
Session 4-1 (Crystal Grand Ballroom)	People and Prosperity • Chair: Assoc. Prof. Dr. Hendrik Bin Lamsali • Co-chair: Dr. Sattra Keawphang
Session 4-2 (Crystal Grand Ballroom)	Planet • Chair: Prof. Dr. Seok Dockko • Co-chair: Asst. Prof. Dr. Niramol Juntarachat

Awards and Evaluation Criteria for the 3rd ICASD

1. For each oral presentation session at the 3rd ICASD, two awards will be selected by the Chair and Co-chair: **Outstanding Presentation** and **Honorable Presentation**. These awards will be presented during the **Closing Ceremony (17:00–17:30)**.
2. For the **Poster Session for high school students, Gold, Silver, and Bronze Awards** will be given based on the total scores: **90% and above for Gold, 80% and above for Silver, and 70% and above for Bronze**. The poster presentations will be evaluated based on five criteria: originality and significance, methodology, results and findings, discussion and conclusions, and overall presentation and understanding. Certificates for the awardees will be provided after the conference in **PDF format**.

ORAL PRESENTATIONS SESSION



Oral Presentations 1 (13:00-15:00)

Session 1-1 : People

Chair:Asst. Prof. Dr. Saw Htay Myint

Co-chair: Dr. Wasin Praditsip

Time	Article No.	Presenter and Research Title
13:00-13:15	26-P2-09 PG-92	Presenter: Norzieiriani Ahmad and Farah Zainab Research title: Digital Transparency, Consumer Trust, and Sustainable Consumption: A Conceptual Framework for ASEAN Economies
13:15-13:30	26-P1-04 PG-44	Presenter: Min Liu, Pittayatorn Kaewkong, Thanapauge Chamaratana, May Thin Khine, Nann Oak, and Kritsada Phatchaney Research title: Engaging Higher Education and Communities for Socio-Cultural Sustainability through Ecotourism in Borderlands of the Greater Mekong Subregion
13:30-13:45	26-P1-05 PG-45	Presenter: Mario Dimapilis Research title: Optimizing supervision practices for nursing students in implementing the CHASE model in Community Health Nursing Related Learning Experience Course: An Autoethnography
13:45-14:00	26-P1-10 PG-50	Presenter: Prajak Chertchom Research title: A Structural Framework for Evaluating Teaching and Learning Satisfaction and Its Influence on Academic Performance: Strategic Insights for Business Information Systems Education
14:00-14:15	26-P1-20 PG-60	Presenter: Jobert Ramos, Gwen Angelie Ordenacion, Erimay Flor Pagunsan, Julieah Loubeth Pon-an, James Cesar Puetes, Jhanine Rivera, Darla Camille Santillan, James Daniel Santorcas, Lianna Rose Espino, MAN, and RN Research title: The Moderating Effect of Resilience on the Relationship Between Academic Burnout and Academic Performance among First-Year Nursing Students in St. Anthony's College
14:15-14:30	26-P5-11 PG-144	Presenter: Juang Rudianto Putra Research title: Indonesian EFL Students on Reading Digital Multimodal Texts:A Descriptive Case Study
14:30-14:45	26-P1-43 PG-82	Presenter: Hasamon Pengman, and Komonmanee Kettapan Research title: The Development of Students' Communication and Collaborative Thinking Skills in Organizational Behavior and Human Resource Management Courses through Debate-Based Learning

Session 1-2: People 2

Chair: Assoc. Prof. Dr. Thanapauge Chamaratana

Co-chair: Mr. Thura Swe

Time	Article No.	Presenter and Research Title
13:00-13:15	26-P1-08 PG-48	<p>Presenter: Zuraida Hassan Research title: The Influence of Learning Organization Dimensions on Readiness for Change Among Public Sector Employees in Malaysia</p>
13:15-13:30	26-P1-15 PG-55	<p>Presenter: Patcharawan Manasiri, and Ekkarin Sungtong Research title: English Education Reform Policy in Thai Secondary Schools: Policy Formulation, Implementation, and Outcomes</p>
13:30-13:45	26-P1-16 PG-56	<p>Presenter: Linn Htet Aung Research title: Inner Development Goals in Higher Education: Deepening SDG Practice Beyond Awareness</p>
13:45-14:00	26-P1-39 PG-78	<p>Presenter: Chadchai Khogkhaio, and Ekkarin Sungtong Research title: Recommendations for Thailand's STEM Education Policy Implementation in the Disruptive Era</p>
14:00-14:15	26-P1-07 PG-47	<p>Presenter: Yejin Kim, Pittayatorn Kaewkong, Nasreya Tamingmat, Imteenal Maruesa, and Hatwanee Tade-in Research title: Conceptualizing Pathways to Better Academic Outcomes: Performance, Procrastination, Stress, Anxiety, and Burnout, among Undergraduates in Southern Thailand</p>
14:15-14:30	26-P1-32 PG-72	<p>Presenter: Linn Htet Aung, and Wanchai Dhammasaccakarn Research title: SDG-aligned student behavior in university shared learning spaces: a methodological review</p>
14:30-14:45	26-P1-33 PG-73	<p>Presenter: Fahad Tanweer, Yejin Kim, Somkiat Saithanoo, and Muhammad Hassan Arshad Research title: Understanding Patterns of Absenteeism among Undergraduate Students at Fatoni University and Ways to Improve It</p>

Session 1-3: Planet 1

Chair: Prof. Dr. Min-Soo Maeng

Co-chair: Assoc. Prof. Dr. Phanat Kittiphattanabawon

Time	Article No.	Presenter and Research Title
13:00-13:15	26-P3-29 PG-128	Presenter: Minsoo Maeng and Seok Dockko Research title: A project of 100-ton biogas plant for the supply of sustainable renewable energy (Biogas) in Tanzania
13:15-13:30	26-P3-02 PG-102	Presenter: Kritsada Phatchaney, Min Liu, Jirachaya Jeawkok, Nachapong Janjula, and Thanapauge Chamaratana Research title: Perceived Impacts of Urbanization on Hinterland Peri-Urban Areas: Opportunities Risks and Challenges for Sustainable Development
13:30-13:45	26-P3-03 PG-103	Presenter: Zaigham Ali, Ashraf Hussain, Jompob Waewsak, Shahid Ali, and Yves Gagnon Research title: Geospatial Decision-Support for Thailand's Clean Energy Transition: Optimizing Solar and Wind Energy Sites
13:45-14:00	26-P3-04 PG-104	Presenter: Ashraf Hussain, Zaigham Ali, Jompob Waewsak, Shahid Ali, and Yves Gagnon Research title: Performance Analysis of a Solar PV System for Industrial Rooftop Applications in the EEC of Thailand: A Case Study of PTTGC 4 Rayong
14:00-14:15	26-P3-12 PG-111	Presenter: Wanwisa Phasuk and Julalak Chorachoo Ontong Research title: Development of Anthocyanin-rich Sang Yod rice (<i>Oryza sativa</i> L.) Lip Oil as a Natural Cosmetic Colorant
14:15-14:30	26-P3-24 PG-123	Presenter: Chiranan Chatsomboon, Chana Chancham, and Kritsadakorn Yanavimut Research title: Integrating Machine Learning with IoT Soil Sensors for Sustainable Land Management: A System Architecture Design
14:30-14:45	26-P3-27 PG-126	Presenter: Phakin Katathikankul, Chana Chancham, and Supagorn Katathikankul Research title: AGING LIFE: An Innovative Emergency Response Trainer for Cardiopulmonary Resuscitation (CPR) Education

Session 1-4: Planet 2

Chair: Assoc. Prof. Dr. Jompob Waewsak

Co-chair: Dr. Hyung Woo Lee

Time	Article No.	Presenter and Research Title
13:00-13:15	26-P3-28 PG-127	<p>Presenter: Jompob Waewsak, Chana Chancham, Sonphol Chiwamonkhonkarn, Zaigham Ali, and Yves Gagnon</p> <p>Research title: Techno-Economic Assessment of Solar Rooftop Photovoltaic with Battery Energy Storage System towards Net-Zero Energy Building: A Case Study of the Faculty of Nursing, Thaksin University, Thailand</p>
13:15-13:30	26-P3-05 PG-105	<p>Presenter: Hyung Woo Lee, Johnner Sitompul, and Yejin Kim</p> <p>Research title: Development of a Closed-Loop Multistage Purification System for High-Viscosity Adhesive Wastewater: A Sustainable Approach for Industrial-Community Coexistence</p>
13:30-13:45	26-P3-13 PG-112	<p>Presenter: Muhammad Hassan Arshad, Yejin Kim, Md Ahabur Rahman, Louis Khwankhao Perpoil Chitkament, and Arnt Bhone Myint</p> <p>Research title: Anchor Institutions for a Blue Future: A Conceptual Framework for University-Led Sustainable Development in Coastal Southern Thailand</p>
13:45-14:00	26-P3-25 PG-124	<p>Presenter: Louis Khwankhao Perpoil Chitkament, Muhammad Hassan Arshad, and Arnt Bhone Myint</p> <p>Research title: Green Technology Orientation and SME Sustainability Performance: A Conceptual Framework for Thailand's Low-Carbon Transition</p>
14:00-14:15	26-P3-26 PG-125	<p>Presenter: Thidarat Juthong, Wanphen Buakong, Komkrich Chokphasombat, and Patcharee Muangrak</p> <p>Research title: Development of a Standardized Salak Wine Production Process for the Ban Khok Maew Organic Salak Community Enterprise, Phatthalung Province, Thailand</p>
14:15-14:30	26-P3-30 PG-129	<p>Presenter: Jun Yun, Nirmal Kumar Shahi, Minsoo Maeng, Hyejeong Hwang, and Seok Dockko</p> <p>Research title: Sustainable Removal of Phosphate and Arsenic from Water Using Ferro-Manganese Binary Oxide in Pakistan</p>

Session 1-5: Prosperity 1

Chair: Assoc. Prof. Dr. Papontee Teeraphan Co-chair: Assoc. Prof. Dr. Nazlina Zakaria

Time	Article No.	Presenter and Research Title
13:00-13:15	26-P2-03 PG-86	Presenter: Nazlina Zakaria, Umair Aftab Akhtar, and Shahid Maqsood Research title: Quality, Innovation, and Renewable Energy: Drivers of Business Resilience in SMEs
13:15-13:30	26-P2-01 PG-84	Presenter: Songkomkrit Chaiyakan Research title: Development and Application of IMADPort Software in Investment Strategy
13:30-13:45	26-P2-02 PG-85	Presenter: Nann Oak, Min Liu, Pittayatorn Kaewkong, Abdunfatah Masamae, and Ocha Wimala Sahda Putri Research title: From Ecotourism to e-Ecotourism: Exploring Digital Transformations for Sustainable Tourism Development
13:45-14:00	26-P2-04 PG-87	Presenter: Sunsanee Wongsawat, Thianthip Diawkee, and Purimprat Songsri Research title: A Management Model for Tourism Destinations Based on Creative Tourism Concepts to Enhance the Grassroots Community Economy: A Case Study of Chomdao Lanyor
14:00-14:15	26-P2-10 PG-93	Presenter: Joonpyo Lee Research title: Comparative Analysis of Skilled Migration Regimes in Asia: The Cases of Korea, Thailand, and Japan
14:15-14:30	26-P2-12 PG-94	Presenter: Ershad Selesa, Abdullah Chelong, and Ruslee Nuh Research title: Recommendations from Financial Organization Leaders on Poverty Management in Pattani Province
14:30-14:45	26-P2-13 PG-96	Presenter: Witawin Siripoonsap Research title: The Cost of Assimilation: Historical "Thaification" and the Loss of Linguistic Capital in the Sadao-Bukit Kayu Hitam Trade Corridor

Oral Presentations 2 (15:15-17:00)

Session 2-1: People, Peace and Partnership

Chair: Asst. Prof. Dr. Sanit Srichookiat

Co-chair: Asst. Prof. Dr. Morakot Ditta-Apichai

Time	Article No.	Presenter and Research Title
15:15-15:30	26-P4-01 PG-132	Presenter: Tana Maneepruk and Vanpra Seubsakulajinda Research title: Structural Violence and State Legitimacy: Immigration Law Enforcement in the United States
15:30-15:45	26-P1-36 PG-76	Presenter: Budy Prastyo, Yejin Kim, Joyce Panton Canilao, and Ray Francis Antilligando Gamban Research title: Promoting Volunteerism among University Students: A Case Study during the 2025 Songkhla Flood
15:45-16:00	26-P5-12 PG-145	Presenter: Kyaw Win, Kaung Kyaw Lin, and Thin Thin Aye Research title: Retail Service Quality, Customer Satisfaction and Customer Loyalty of Ocean Supercenter in Yangon
16:00-16:15	26-P5-14 PG-147	Presenter: Sandi Thin Thin Zaw, Kaung Kyaw Lin, and Thin Thin Aye Research title: The Effect of Visual Merchandising Factors on Consumer Impulse Buying Behavior of Next Generation Clothing Stores in Yangon
16:15-16:30	26-P5-17 PG-150	Presenter: Nat Luxchaigul, and Ranchida Sangkhaduang Research title: Synergizing Development Administration: A Collaborative Partnership Framework for Systemic Change in Thailand's Southern Border Provinces
16:30-16:45	26-P1-37 PG-77	Presenter: Yejin Kim, Nasreya Tamingmat, Imteenal Maruesa, Hatwanee Tade-in Research title: From Self-Understanding to Better Relationships: Thai Education Students' Experiences in a Six-Week Enneagram Program

Session 2-2 : People 3

Chair: Asst. Prof. Dr. Muhammad Zulqarnain Arshad Co-chair: Dr. Kanyanit Wichianrat

Time	Article No.	Presenter and Research Title
15:15-15:30	26-P1-09 PG-49	Presenter: Muhammad Zulqarnain Arshad and Congying Liu Research title: From Classroom Care to Digital Support: Ecological Foundations for a Teacher-Responsibility, AI-Integration and Student Well-Being Framework
15:30-15:45	26-P1-35 PG-75	Presenter: Budy Prastyo, Yejin Kim, Wasan Kanchanamukda, and Diyaporn Wisamitanan Research title: Volunteer Engagement and Leadership Development in Higher Education: A Conceptual Framework Integrating Empathy and Civic-Mindedness
15:45-16:00	26-P1-22 PG-62	Presenter: Kritsadakorn Yanavimut, Chiranan Chatsomboon, Yejin Kim Research title: Exploring AI Usage Patterns in English Language Learning and Their Relationship to Educational Inequality: Evidence from Thai Undergraduate Students
16:00-16:15	26-P1-24 PG-64	Presenter: Ramdan Nugraha, Yejin Kim, Pittayatorn Kaewkong, Paweena Junpradit, and Fontip Kaewsuan Research title: Navigating Cross-Cultural Adjustment among International Students in Thailand: A Case Study of Myanmar Students at Thaksin University, Songkhla Campus
16:15-16:30	26-P1-26 PG-66	Presenter: Ray Francis A. Gamban, Pittayatorn Kaewkong, Yejin Kim, Fahad Tanweer, Joyce Panton Canilao, Paweena Junpradit, and Fontip Kaewsuan Research title: Constructing Intercultural Engagement: Student Perspectives within an Internationalized University in Southern Thailand
16:30-16:45	26-P1-34 PG-74	Presenter: Phyu Phyu Research title: Assessment for Learning in Higher Education Through Teachers' Lens: A Qualitative Interview Study with International PhD students

Session 2-3: People 4 and Prosperity 2

Chair: Assoc. Prof. Dr. Darwina Arshad

Co-chair: Assoc. Prof. Dr. Puttharak Prabnok

Time	Article No.	Presenter and Research Title
15:15-15:30	26-P2-08 PG-91	Presenter: Darwina Arshad, Muhammad Zulqarnain Arshad, Nazlina Zakaria, Norzieiriani Ahmad, and Munirah Kamaruddin Research title: From Field to Framework: A Strategic Farmer-Centric Approach (R.I.C.E.) to Sustainable Rice Productivity in Kedah
15:30-15:45	26-P1-40 PG-79	Presenter: Bradley E. Opatz Jr. Research title: Sustainability in ASEAN Higher Education: Culturally Responsive Teaching as a Student-Centered Framework
15:45-16:00	26-P1-42 PG-81	Presenter: Patcharawan Manasiri and Ekkarin Sungtong Research title: English Education Reform Policy in Thai Secondary Schools: Policy Formulation, Implementation, and Outcomes
16:00-16:15	26-P1-25 PG-65	Presenter: Sanruthai Jaruchavalit and Bongkoch Dararut Research title: Conversion Therapy and the Law: Lessons from Article 3 of ECHR for Thailand
16:15-16:30	26-P2-14 PG-97	Presenter: Joyce P. Canilao, Min Liu, Yejin Kim, and Abdunfatah Masamae Research title: The Role of Women's Empowerment in Sustainable Tourism: A Systematic Review
16:30-16:45	26-P2-16 PG-99	Presenter: Naphatphon Chsuwan, Tidarat Sukying, and Jiraporn Kongrode Research title: Factors Influencing Consumers' Purchase Intention toward Upcycling Products: The Roles of Perceived Value and Environmental Self-Identity

Oral Presentations 3: Online (15:15-17:00)

Session3-1 (Online): Multidisciplinary 1

Chair:Dr. Min Liu

Time	Article No.	Presenter and Research Title
15:15-15:30	26-P1-01 PG-41	Presenter: Kristine Mae B. Escote, Nikko O. Espartero, Soleil Dyana H. Esporsado ,Angelique M. Estioso, Danica G. Fenete, and April Eunice B. Gi Research title: Knowledge, Attitudes, and Practices toward Rabies Prevention among Nursing Students of St. Anthony's College
15:30-15:45	26-P5-04 PG-137	Presenter: Thu Zar Win, and Chit Poe Wah Research title: The Effect of Relationship Marketing on Customer Retention of Ayeyarwady Bank, Sagaing
15:45-16:00	26-P1-12 PG-52	Presenter: Romeo Jr. S. Gasalao, Gail Aaliyah T. Evangelio, Jamille Aleyah O. Flaminia, Kurt Andrew P. Fundal, Jeff Ray P. Gallano, Pryljem L. Gellang, and Aris Kendell R. Bungabong Research title: Factors Contributing to Impostor Syndrome Among Nursing Students of St. Anthony's College
16:00-16:15	26-P1-18 PG-58	Presenter: Rhea Jucel R. Torres, Rita Mae O. Sealongo, Reema Diane L. Servacio, Mary Aprilee F. Suño, Jannah Marie B. Tobias, Faye Ann Jella G. Train, Kristine Kaye Viesca, Aris Kendell R. Bungabong, PhDNS, and RN Research title: Life Stories of Individuals Living with Bipolar Disorder: A Narrative Inquiry
16:15-16:30	26-P5-08 PG-141	Presenter: Nattaphan Kecharananta and Saw Htay Myint Research title: Digital Transformation, Digital Divide, and Human Capital Development through Education: The Case of Myanmar's Youth
16:30-16:45	26-P1-21 PG-61	Presenter: Sean Andrei N. Tuason, Dannah Avigelle S. Sebidos, Jash Lyn M. Severino, Dana Allyiah D. Valenzuela, Jessa Mae H. Vilvar, Mia Irish Anne L. Zamora, Tina Mae Y. Zamora, Arlynn Faith C. Sanchez, MAN, and RN Research title: Resilience in the Face of Change: Indigenous Responses to Climate Challenges in Sitio Igcabagti, Tobias Fournier, Antique
16:45-17:00	26-P2-15 PG-98	Presenter: Hafiz Waqas Ahmed Ansari, Waida Irani Mohd Fauzi, Muhammad Imran Research title: Conceptualizing the Blockchain Traceability and Transparency as Drivers of Purchase Intention for Blockchain-Based Food Products in Malaysia

Session3-2 (Online): Multidisciplinary 2

Chair: Dr. Muhammad Hassan Arshad

Time	Article No.	Presenter and Research Title
15:15-15:30	26-P1-02 PG-42	<p>Presenter: Gerard Bien Magdayao, Fiona Goleña, Shaira Claire Gonzales, Tiffany Lois Importante, Shanaya Lancara, Princess Kaye Mondejar, Hans Christian Mosquera, Christian James Onoy, and Jofred Martinez PHDNS, MAN, MAEd, RN, LPT, CHA, and DipHLM</p> <p>Research title: Knowledge, Skills, and Attitude of Nurses toward Evidence-Based Practice Competence in Angel Salazar Memorial General Hospital</p>
15:30-15:45	26-P5-02 PG-135	<p>Presenter: Khin Nyein Nyein Soe, Chit Poe Wah, and Thin Thin Aye</p> <p>Research title: The Effect of Knowledge Management Practices on Knowledge Worker Performance of Public Hospital in Mandalay</p>
15:45-16:00	26-P1-14 PG-54	<p>Presenter: Nie Rose R. Matillano, Stepanie J. Gomez, Alexia Kaye S. Juanillo, Crismel Paul A. Lazaro, Lovella S. Manalo, Karen Kaye G. Mongao, Rolly Anthony A. Nambong, and Jofred M. Martinez</p> <p>Research title: Behind Bars, Beyond Care: Challenges and Experiences of Persons Deprived of Liberty in Accessing Healthcare Services</p>
16:00-16:15	26-P2-07 PG-90	<p>Presenter: Elbert C. Dalumpines, Shaina Maye M. Braga, Resty Flor C. Cabañero, Eurica Joy M. Cabrillos, Alexa Marie L. Cajigas, Mary Grace G. Cata, Vinz Gievan P. Dalmino, Trishia Loretz T. De Los Santos, and Ms. Arlynn Faith C. Sanchez, MAN, and RN</p> <p>Research title: Awareness, Attitude, and Preventive Practices on Leptospirosis Among Young Adults in a Selected Barangay in the Province of Antique</p>
16:15-16:30	26-P1-23 PG-63	<p>Presenter: Honey Jane S. Centino, Christine E. Bornales , Divine Valerie S. Calanoy, Ricca Salome B. Castillejo, Avril Stephanie C. Cayetano, Jan Aero Prince A. Cordero, Shane Abegail N. Diana, and Jofred M. Martinez</p> <p>Research title: Spiritual Well-Being and Quality of Life Among Hemodialysis Patients in the Province of Antique</p>
16:30-16:45	26-P5-13 PG-146	<p>Presenter: Kyi Kyi Win, and Kaung Kyaw Lin</p> <p>Research title: Contribution of Cropping Patterns on Food Security in Bago West Region in Myanmar</p>

Session3-3 (Online): Multidisciplinary 3

Chair:Mr. Md Ahbabur Rahman

Time	Article No.	Presenter and Research Title
15:15-15:30	26-P5-03 PG-136	Presenter: May Zun, Chit Poe Wah, and Thin Thin Aye Research title: Organizational Culture and Employee Performance at Private Bank in Mandalay
15:30-15:45	26-P5-05 PG-138	Presenter: Kay Thi Soe and Saw Htay Myint Research title: The Effect of Entrepreneurial Thinking on the Sustainability of SMES in Myanmar
15:45-16:00	26-P1-17 PG-57	Presenter: Gian Paulo G. Banaynal, Mercy Shane M. Abia, Emie Rose C. Alamis, Ronalyn A. Armonio, Crezel Mitz P. Baculna, Khristine Bea S. Balbuena, Michelle Bertolano, and Czerwin S. Juales, PhDNS, DPA, MAN, RN, and CHA Research title: Teaching Effectiveness and Caring Attitudes: A Perception Study from Nursing Students at St. Anthony's College
16:00-16:15	26-P5-09 PG-142	Presenter: Wai Wai Htet, and Saw Htay Myint Research title: A Study on Sustainable Development Through Efficient Delivery Services on Customer Satisfaction in Monywa, Myanmar
16:15-16:30	26-P5-10 PG-143	Presenter: Wai Wai Lwin, and Saw Htay Myint Research title: A Study on Utilization of Maternal Health Care in Maubin Township
16:30-16:45	26-P2-05 PG-88	Presenter: Jenny S. Barcebal, Cielo Azia J. Acub, Bennia Mae F. Antang, Candy Blaise M. Arsenio, Carlos Miguel L. Azurin, Althea G. Badoy, Trixie Mae Y. Barillos, and Arlynn Faith C. Sanchez, MAN, and RN Research title: Beyond Fragile Beginnings: Lived Experiences of Mothers Whose Preterm Babies Have Been Admitted to the Neonatal Intensive Care Unit
16:45-17:00	26-P5-07 PG-140	Presenter: Lwin Moe Thu and Saw Htay Myint Research title: Role of Digital Literacy in Student Adoption of QR Code Payments in Monywa

Session3-4 (Online): Multidisciplinary 4

Chair:Ms. Phyu Phyu

Co-chair: Ms. Hera Liu

Time	Article No.	Presenter and Research Title
15:15-15:30	26-P1-11 PG-51	Presenter: Kaethyl Henna M. Magbanua, and Jofred M. Martinez Research title: Between Acceptance and Uncertainty: Lived Experiences of Transgender Individuals in Accessing Healthcare Services
15:30-15:45	26-P5-06 PG-139	Presenter: Hsu Thiri Zaw, and Saw Htay Myint Research title: Digital Health Literacy and Sustainable Health Behavior in Myanmar: The Role of Health Communication and Media Exposure
15:45-16:00	26-P1-13 PG-53	Presenter: Shaye Kia Ylliah S. Elisan, Nicole Kate S. Eguilos, Angel E. Espago, Jade Mariel B. Escaner, Christine Faith Q. Escaner, Danet May C. Evan, Jahna Mikaela B. Gillado, and Jofred M. Martinez Research title: Predictors of Psychological Well-Being Among Nursing Students in St. Anthony's College
16:00-16:15	26-P1-19 PG-59	Presenter: Kurt Clarence B. Ballarta Research title: Living with Autism: Exploring the Lived Experiences of Family Caregivers of Persons with Autism Spectrum Disorder in Antique
16:15-16:30	26-P2-06 PG-89	Presenter: John Mark M. Anteza, Richelle Alonzo, Afaq Mohammad Chaudry S. Aslam, Philippe Glennson L. Baleña, Janine G. Ballenas, Dennielle M. Barsolis, Hannah Faith Belarmino, Leah Gie G. Belaya, Czerwin S. Juales, PhDNS, MAN, and RN Research title: Attitude Towards Death and Dying and Perceived Quality of Life among Middle-aged Clients with Chronic Illnesses Admitted at a Government Hospital in the Province of Antique
16:30-16:45	26-P5-15 PG-148	Presenter: Zin Mar Kyu, Kaung Kyaw Lin, and Thin Thin Aye Research title: Examining The Impact Of Social Media Adoption On SME Performance: Evidence From Mandalay Using TOE Framework
16:45-17:00	26-P5-16 PG-149	Presenter: Arnt Bhone Myint, Muhammad Hassan Arshad, and Louis Khwankhao Perpoil Chitkament Research title: Beyond Rhetoric: A Partnership Paradigm for Sustainable Tourism Development in Southern Thailand's Hospitality Sector

Poster Presentations (15:15-17:00)

Session4-1: People, Prosperity and Partnership

Chair: Assoc. Prof. Dr. Hendrik Bin Lamsali

Time	Article No.	Presenter and Research Title
15:15-17:00	26-P1-03 PG-43	Presenters: Apiwat Promma, Rak Boonluaea, and Krittamet Sittisan Research title: An AIoT-Based Preventive Physical and Mental Health Monitoring System for Students
15:15-17:00	26-P1-27 PG-67	Presenters: Parnee Tongrom Research title: The Development of Academic Achievement in "Substance Separation" Using the Active Learning PEAupacE Model in Fundamental Science for Matthayom 2 Students, Woranari Chalerm School, Songkhla
15:15-17:00	26-P1-28 PG-68	Presenters: Thanyawadee Sepmongkollerd Research title: Development of Problem-Solving Competency in a Digital Context and Computational Thinking of Grade 10 Students through Project-Based Learning
15:15-17:00	26-P1-29 PG-69	Presenters: Wandee Sanho Research title: Development of an Active Learning Model Integrating Phenomenon-Based Learning (PhenoBL) and 5Es Inquiry to Enhance Thinking Abilities and Academic Achievement in Physics for Grade 12 Students
15:15-17:00	26-P1-30 PG-70	Presenters: Wannida Phunphetchana Research title: Development of Scientific Explanation Competency through the 5E Learning Model Integrated with Board Games
15:15-17:00	26-P1-31 PG-71	Presenters: Butsarin Vongsvilas and Chitsanuch Chatapon Research title: Development of Active Learning Management to Enhance Group Work Performance and Academic Achievement of Grade 11 Students in Physical Science (Chemistry), Course Code V32121
15:15-17:00	26-P1-41 PG-80	Presenters: Bongchul Kim Research title: The Evolution of International Legal Relations between Korea and Thailand: Diversification, Multilayering, and Specialization
15:15-17:00	26-P2-11 PG-94	Presenters: Natthiya Srisawat, Kamonlak Dambua, Chamaiporn Krabat, Butrin Klaimanee, and Chadchai Khogkhao Research title: An Investigation of Fish Species Diversity Using Trap Sampling at Different Time Periods in Khlong Na Thap Chana District, Songkhla Province
15:15-17:00	26-P5-01 PG-134	Presenters: Ei Ei Po, Chit Poe Wah, and Khin Daisy Soe Research title: The Effect of Organizational Culture On Job Satisfaction Of Private Schools In Keng Tung Township

Session4-2: Planet

Chair: Prof. Dr. Seok Dockko

Co-chair: Asst. Prof. Dr. Niramol Juntarachat.

Time	Article No.	Presenter and Research Title
15:15-17:00	26-P3-01 PG-101	Presenters: Syeda Ayshia Akter, Shafikur Rahaman, and Shariar Hossen Sabbir Research title: Carbon Sequestration and Physiochemical Characteristics of Soil in the Tidal Saltmarsh Ecosystem, Bansbaria, Chattagram
15:15-17:00	26-P3-06 PG-106	Presenters: Bannakorn Anan, Yanisa Limsakul, Benjaporn Buachan, and Piya Phalakhaj Research title: A Comparative Study of the Thermal Properties of a Developed Natural Extract-Based Pain-Relief Gel and Standard Commercial Pain-Relief Gel Products
15:15-17:00	26-P3-08 PG-107	Presenters: Natthachai Niammuneee , Natchanon Pakpoompong , Natnicha Khumwum, and Piya Phalakhaj Research title: A Comparative Study of Velocity Measurements Between GPS Sensors, Mobile GPS, and Physical Speed to Evaluate Accuracy and Operational Limitations
15:15-17:00	26-P3-09 PG-108	Presenters: Atitaya Sriwilad, Kanokwan Kantasut, Wanwanat Roop-o, and Piya Phalakhaj Research title: Study on the Heating Efficiency of Polyimide Electric Heating Films and Thermal Storage Performance Evaluation of Thermal Conductive Gels
15:15-17:00	26-P3-10 PG-109	Presenters: Nahathai Supapatttharajinda, Kanokwan Charoenmak, Tadarat Kaewpunk, and Nukoon Chuayniam Research title: The Magic Senser Cane Project
15:15-17:00	26-P3-11 PG-110	Presenters: Pimpisa Chotirat, Sirivasana Chobtaeng, and Wipaporn Thanomsak Research title: Structural Modification of Water Hyacinth Fibers through Lignin and Hemicellulose Removal for Biodegradable Bioplastic Plant Pots
15:15-17:00	26-P3-14 PG-113	Presenters: Thitirat Thanomnual, Jiratchaya Promkeaw, Patcharaporn Panlawan, Chadchai Khogkhao, and Butrin Klaimanee Research title: A Study of the Effects of Cassia siamea Leaf Extract on the Coagulation Delay of Natural Rubber Latex
15:15-17:00	26-P3-15 PG-114	Presenters: Supanun Thongsuwan, Pheemsinee Pinmanee, Pantila Worapan, Butrin Klaimanee, and Chadchai Khogkhao Research title: Performance Evaluation of Shock-Absorbing FFB Chute/Slider
15:15-17:00	26-P3-16 PG-115	Presenters: Chanapa Maduea, Machaya Palasa, Arisa Panich, and Monsiri Jitpakdee Research title: Soil Quality and Its Influence on Cempedak-Jackfruit Fruit Quality :A Case Study of Lung Wee Garden , Koh Yo, Songkhla

Session4-2: Planet

Chair: Prof. Dr. Seok Dockko

Co-chair: Asst. Prof. Dr. Niramol Juntarachat.

Time	Article No.	Presenter and Research Title
15:15-17:00	26-P3-17 PG-116	Presenters: Pinyada Kongsan, Supawit Keawsamsee, Picharat Sricha, Butrin Klaimanee, and Chadchai Khogkhao Research title: The Results of the Study on Pimsen Mango (<i>Mangifera indica</i>) Peel Extract in Controlling Mealybugs
15:15-17:00	26-P3-18 PG-117	Presenters: Puripat Maneepak, Kodchakorn Srisuankaew, Punyisa Manee, Chadchai Khogkhao, and Butrin Klaimanee Research title: The Effects of Using a Pig Vocalization Recording Device in a Slaughterhouse
15:15-17:00	26-P3-19 PG-118	Presenters: Watcharapon Prasansong, Natthapat Chamnan, Pornthep Tongsook, Butrin Klaimanee, and Chadchai Khogkhao Research title: Performance Testing Results of a Plastic Kite-Bow Leaf Cutting Machine
15:15-17:00	26-P3-20 PG-119	Presenters: Chayanee Thongrak, Tuchsanee Khruninart, Nantawan Seemai, and Suchat Boonsanong Research title: PM 2.5 Dust Collector that uses Electrostatic Precipitator
15:15-17:00	26-P3-21 PG-120	Presenters: Anunya Chusengcharoen, Jirawat Senglan, Napassorn Prayoon, and Sirawut Chanachai Research title: The Effects of Different Concentrations of <i>Leucaena</i> Leaf Extract on the Mortality Rate of <i>Aedes aegypti</i> Larvae
15:15-17:00	26-P3-22 PG-121	Presenters: Naphatsorn Choto, Napaphat Chuchuen, and Rosalee Sama-air Research title: Natural Rubber Latex-Based Synthetic Leather Reinforced with Sugarcane Leaf Cellulose
15:15-17:00	26-P3-23 PG-122	Presenters: Manassanan Jitprapun, Artharee Yeechotchung, Wasawat Dundhanasarn, and Rosalee Sama-air Research title: Chitosan-Coated Water Hyacinth Paper for Copper(II) Ions Adsorption
15:15-17:00	26-P3-31 PG-130	Presenters: Eunsung Lee, Minsoo Maeng, and Seok Dockko Research title: Improving Flotation Performance of Microbubbles Using Energy-Efficient Technology

GROUP 1 PEOPLE



ID-26-P1-01

Knowledge, Attitudes, And Practices Toward Rabies Prevention Among Nursing Students Of ST. Anthony'S College

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Abstract: Rabies remains a major public health concern in the Philippines, underscoring the importance of ensuring that future healthcare professionals possess adequate knowledge, positive attitudes, and appropriate preventive practices. This study assessed the knowledge, attitudes, and practices (KAP) toward rabies prevention among nursing students of St. Anthony's College using a quantitative descriptive-correlational design. A total of 258 nursing students from all year levels enrolled during Academic Year 2024–2025 participated in the study. Data were collected through a validated, self-administered questionnaire measuring knowledge, attitudes using a 5-point Likert scale, and self reported preventive practices. Descriptive statistics and Pearson's correlation coefficient were utilized for data analysis. Results showed that respondents demonstrated a high level of knowledge, with an overall mean score of 83.41%, reflecting a strong foundational understanding of rabies prevention. Nursing students also exhibited a strong positive attitude toward rabies prevention ($M = 4.40$), particularly regarding the seriousness of the disease and the importance of preventive measures. Preventive practices were rated high ($M = 4.36$), with common behaviors including immediate wound washing following animal bites and prompt consultation for post-exposure prophylaxis; however, community based practices such as reporting stray or suspected rabid animals were less consistently observed. Significant but weak positive correlations were found between knowledge and attitude ($r = 0.216, p < .001$), knowledge and practices ($r = 0.141, p = 0.024$), and attitude and practices ($r = 0.229, p < .001$). While nursing students demonstrated commendable levels of knowledge, attitudes, and practices toward rabies prevention, the weak correlations highlight the need for targeted educational interventions to enhance the translation of knowledge and attitudes into consistent preventive behaviors.

Keywords: Rabies Prevention, Knowledge, Attitude, and Practices (KAP), Nursing Students, Post-Exposure Prophylaxis, Public Health Nursing

ID-26-P1-02

Knowledge, Skills, and Attitude of Nurses toward Evidence-Based Practice Competence in Angel Salazar Memorial General Hospital

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Abstract: Evidence-based practice (EBP) is vital to delivering safe, high-quality, and patient-centered nursing care. Despite positive attitudes toward EBP, its implementation remains limited, particularly in rural and resource-constrained healthcare settings due to gaps in knowledge, skills, and organizational support. This study sought to assess nurses' knowledge, skills, and attitudes toward EBP competence and to examine their interrelationships, as well as the influence of demographic factors. A descriptive correlational design was employed using paper-based surveys comprising a sociodemographic questionnaire and the Evidence-Based Practice Competence Questionnaire (EBP-COQ). Results revealed that nurses demonstrated moderately favorable attitudes ($M = 3.81$), along with moderate levels of skills ($M = 3.44$) and knowledge ($M = 3.32$). Demographic variables showed no significant differences, except those nurses assigned to general wards reported more positive attitudes toward EBP compared with those in specialized areas ($U = 2736.000$, $p = .002$). Correlation analysis indicated significant positive relationships among all domains: attitudes and skills ($r = .561$), attitudes and knowledge ($r = .466$), and skills and knowledge ($r = .688$). The study underscores the urgent need for structured EBP training programs and organizational support systems to enhance nurses' competence and facilitate the integration of EBP into everyday clinical practice, particularly in resource-limited healthcare institutions.

Keywords: Evidence-Based Practice, Knowledge, Skills, Attitude, Descriptive-Correlational Design

ID-26-P1-03

An AIoT-Based Preventive Physical and Mental Health Monitoring System for Students

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Abstract: Emotional stress is a significant factor that affects students' mental health and learning performance. However, early detection of stress-related risks remains limited, as conventional assessment methods primarily rely on self-reported questionnaires, which lack objectivity and continuous monitoring. This study therefore aims to develop an AIoT-based early warning system for students' mental health, utilizing non-invasive electroencephalography (EEG) combined with artificial intelligence analysis for systematic and continuous risk assessment. The proposed system employs a wearable EEG device with a headphone-like design, with electrodes positioned behind the ears (TP9 and TP10) to capture brainwave activity associated with emotional regulation and stress-related neural processes. EEG signals, particularly within the alpha and beta frequency bands, are extracted and analyzed to derive stress risk indicators. In addition, the system integrates relevant physiological data, including heart rate variability, as well as basic behavioral information such as activity level and sleep patterns, to enhance the reliability and accuracy of the assessment. All collected data are transmitted to a cloud-based platform, where artificial intelligence algorithms analyze long-term data patterns and detect anomalies indicative of mental health risk. The system provides real-time visualization and early warning notifications via a mobile application, supporting stress awareness, preventive self-care, and the reduction of potential mental health problems among students. This research aligns with the United Nations Sustainable Development Goals, particularly SDG 3 (Good Health and Well-Being) and SDG 4 (Quality Education), by promoting preventive, technology-driven, and student-centered mental health monitoring in educational environments.

Keywords: Artificial Intelligence, Internet of Things, Electroencephalography (EEG), Mental Health Monitoring, Students

ID-26-P1-04

Engaging Higher Education and Communities for Socio-Cultural Sustainability through Ecotourism in Borderlands of the Greater Mekong Subregion

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Abstract: This study aims to examine the role of higher education and community cooperation in fostering socio-cultural sustainability through ecotourism development in the Greater Mekong Subregion (GMS). Focusing on the ecologically diverse and culturally rich regions of Xishuangbanna in southwest China and Luang Namtha in northern Laos, the research explores the role of these partnerships in localizing the Sustainable Development Goals (SDGs). A mixed-methods design was employed, combining content analysis of in-depth interviews with 40 key informants, field observations, and documentary research data with regression analysis of 385 survey responses. The findings reveal that education-led collaboration and cultural heritage preservation are critical enablers of socio-cultural sustainability in ecotourism settings. Results indicate that education and cooperation ($\beta = 0.267$) and cultural conservation ($\beta = 0.207$) significantly influence local perceptions of sustainable development outcomes. The findings suggest that fostering collaboration between higher education institutions and local communities can effectively localize the sociocultural sustainability by enhancing cultural resilience and social inclusion in ecotourism development. This highlights the need for integrated policies that incorporate education and cultural heritage into sustainable development strategies in the borderland regions of the GMS.

Keywords: Education, Ecotourism, Socio-Cultural Sustainability, Community Development, Greater Mekong Subregion

ID-26-P1-05

Optimizing supervision practices for nursing students in implementing the CHASE model in Community Health Nursing Related Learning Experience Course: An autoethnography

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Abstract: This autoethnographic study explores how a Community Health Nursing (CHN) instructor optimizes supervision of nursing students while implementing the Community Health Assessment Sustainable Education (CHASE) model in a CHN Related Learning Experience course. Although CHASE promotes sustainable, community-based health assessment and interventions, many CHN instructors, including the researcher, have limited familiarity with it, creating supervision and implementation challenges. Existing literature highlights the importance of strong supervision, reflective practice, peer learning, and community-based problem-solving, but there is little context-specific evidence, particularly in the Philippines, on how CHN instructors navigate innovative models like CHASE. Guided by an interpretivist-constructivist paradigm, the study employs autoethnography to examine the instructor's lived experience during CHASE-based supervision. Data are drawn from reflective journals, field notes, and personal notes from in-depth pre- and post-conference interviews with students and fellow CHN instructors. Iterative thematic and narrative analyses, informed by constructivist, reflective, situated, and transformative learning theories and communities of practice, are used to identify epiphanies or transformative realizations. The analysis reveals critical incidents and epiphanies related to supervisory challenges, adaptive strategies, and evolving pedagogical practices. Four central themes emerge: commitment to effective supervision, facilitation of student learning, professionalism in supervision, and deep immersion in the community context. The study contributes to the scholarship of CHN supervision, refines CHASE-related teaching-learning processes, and offers context-specific evidence to inform curriculum enhancement, faculty development, and community-engaged nursing education in the Philippines and similar settings.

Keywords: autoethnography, community, health, nursing, supervision

ID-26-P1-06

PAY SATISFACTION AND WORK OVERLOAD AS PREDICTORS OF TURNOVER INTENTION IN MALAYSIAN PRIVATE HIGHER EDUCATION INSTITUTIONS: THE MODERATING ROLE OF POLYCHRONICITY

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Abstract: The primary objective of this study is to examine the influence of pay satisfaction and work overload on turnover intention among academicians in private higher education institutions (HEIs). The study also investigated the moderating role of polychronicity in the purported linkages. This study adopted a quantitative approach to answer the research objectives. Data were collected via a survey from 334 academicians in the private HEIs in Klang Valley, Malaysia. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 25.0 and Partial Least Square (Smart PLS) version 4.0. Based on the statistical analyses conducted, the findings reported that pay satisfaction and work overload had a significant impact on academicians' turnover intention. Polychronicity was found to be a significant moderator in the relationship between pay satisfaction and turnover intention. Discussions emphasized on the critical roles of pay satisfaction and work overload in predicting academicians' turnover intention. The moderating effect of polychronicity is also substantiated in the pay satisfaction and turnover intention link. As for practical ramifications, efforts must be taken by the relevant parties to restructure pay scheme and workload distribution to rectify the problem regarding high turnover rate among academicians in private HEIs. Finally, directions for future research and conclusion are also highlighted.

Keywords: pay satisfaction, work overload, turnover intention, academicians, private higher education institutions, Malaysia

ID-26-P1-07

Conceptualizing Pathways to Better Academic Outcomes: Performance, Procrastination, Stress, Anxiety, and Burnout, among Undergraduates in Southern Thailand

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Abstract: Despite growing concern about academic behaviors—especially academic performance and procrastination—and efforts to enhance education quality by reducing risk factors, limited research has examined the mechanisms linking key psychological factors (stress and anxiety) to academic burnout and outcomes among undergraduates in Southern Thailand. This study aims to propose a conceptual framework that clarifies the relationships among academic stress and anxiety, academic burnout, academic procrastination, and academic performance among undergraduate students in Southern Thailand. Using a qualitative literature review, this study analyzes secondary data through content analysis of contemporary research on stress, anxiety, burnout, procrastination, and achievement in higher education. The synthesis proposes a conceptual framework in which academic stress and anxiety are linked to higher levels of student burnout. Academic burnout is further conceptualized as a mediating mechanism between psychological distress and academic outcomes: elevated burnout is associated with increased academic procrastination, often described as an emotional avoidance response, and with decreased academic performance (e.g., GPA). Although this study is limited by its reliance on secondary sources, the proposed framework highlights plausible relationships to be tested in the Southern Thai context and offers practical implications for strengthening mental health services and academic support systems in local universities.

Keywords: Academic procrastination, Academic burnout, Undergraduate, Conceptualized framework, Southern Thailand

ID-26-P1-08

The Influence of Learning Organization Dimensions on Readiness for Change Among Public Sector Employees in Malaysia

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Abstract: The dynamic nature of organizational change necessitates a high level of readiness among employees to ensure the sustainability of public service delivery. This study aims to identify the dimensions that constitute a learning organization model within the Malaysian public sector and evaluate their relationship with employees' readiness for change. Adopting a quantitative research design, data were collected via survey questionnaires distributed to public sector personnel. The gathered data were analyzed using the Statistical Package for the Social Sciences (SPSS) and Smart Partial Least Squares (Smart-PLS). The findings identified seven key dimensions forming the learning organization model, with strategic leadership emerging as the most dominant influence. Furthermore, the study empirically confirms a positive and significant relationship between learning organization dimensions and readiness for change. The implications of these findings for human resource management in fostering a learning culture to navigate public sector transformation are discussed, alongside the study's limitations and recommendations for future research.

Keywords: Learning Organization, Readiness for Change, Public Sector, Civil Servant, Strategic Leadership

ID-26-P1-09

From Classroom Care to Digital Support: Ecological Foundations for a Teacher-Responsibility, AI-Integration and Student Well-Being Framework

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Abstract: This theoretical article develops a lean conceptual framework describing how the teacher responsibility can promote student mental health in higher education by the mediating factor of AI integration in learning. The model is based on the Ecological Systems Theory, which places teacher responsibility as a proximal classroom factor that organizes facilitating processes, such as clear guidance, formative feedback, and scaffolding, and responsibly deployed AI tools (adaptive practice, intelligent tutoring, conversational agents) offer timely and personalized support, which decreases cognitive load and enhances autonomy and competence. We formulate testable hypotheses that state that (a) there exists a direct positive correlation between teacher responsibility and student mental well-being and (b) there is an indirect impact through the adoption of AI. The paper describes suggested operational definitions and reflective scales (adapted teacher responsibility, Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), and AI-integration scales), provides a procedure/statistical solution to method bias, and provides a roadmap to empirical validation (using a cross-sectional survey and mediation analysis). In theory, the work incorporates both human and technological supports into an ecological framework, beyond siloed approaches to education and ed-tech. In practice, the work supports educators and institutions in co-designing responsibility-informed teaching with the use of ethically governed AI use to create inclusive and supportive learning environments to meet emerging student mental-health issues. The framework is designed to guide evidence-based policy and course design in fast-digitizing systems, with Malaysia being a topical setting to be tested in the future

Keywords: Teacher responsibility; AI integration; Student mental well-being; Higher education; Ecological systems theory

ID-26-P1-10

A Structural Framework for Evaluating Teaching and Learning Satisfaction and Its Influence on Academic Performance: Strategic Insights for Business Information Systems Education

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Abstract: This study investigates the tendency of the students toward individualized examination system in higher education and introduces factors predicting this trend. The final sample comprised 197 participants who completed the survey on socio-demographic variables, learning styles, assessment expectations, feedback effectiveness and flexible-assessment attitudes. Descriptive analysis indicated that kinesthetic (37.6%) and auditory (24.9%) learning styles were most favorable among students, with higher percentage of females. These results illustrate the variety of learning styles and the importance for broader assessment methods which consider multiple learner types. Prediction of student's preference for personalized assessment The D3 model remembers this is a decision tree (D3) model was trained to predict students' preference for personalized assessment at stratified 10-fold cross validation step. The model divided the responses into three categories. The accuracy of prediction was in moderate range of 64.97% with a kappa statistic of 0.3054 denoting to fair level agreement beyond chance. However, the model was successful in identifying the two main categories well, with recall equal to 0.740 and 0.570, respectively. In general, the results suggest that individualized and adaptive formative assessments are well-received by students, especially when they are accompanied by transparent scoring criteria, clear rubrics and meaningful feedback. These findings support the existing literature that argues for personalized learning pathways with an indication that higher education providers should consider implementing adaptive and student-centered types of assessment to help increase engagement, motivation and achieve learning outcomes.

Keywords: Personalized assessment, Data Mining, Decision Tree Algorithm, Predictive Modeling, Satisfaction Analysis, Educational Data Analytics

ID-26-P1-11

Between Acceptance and Uncertainty: Lived Experiences of Transgender Individuals in Accessing Healthcare Services

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Abstract: Transgender individuals face significant barriers in healthcare, including discrimination, delays, and denial of care. These challenges contribute to poor mental and physical health outcomes, discouraging healthcare utilization. This study examines the lived experiences of transgender individuals in accessing healthcare services in public medical facilities in San Jose de Buenavista, Antique, highlighting challenges and potential improvements. This phenomenological descriptive study conducted in-depth interviews with seven (7) transgender individuals aged 18 and above during the second semester of the academic year 2024-2025. Data collection included interviews, field observations, and document analysis. Thematic analysis identified key patterns related to healthcare access, challenges, and coping mechanisms. Six (6) themes emerged. Healthcare Accessibility and Inclusivity highlights disparities in access, with transgender-specific services being limited. Healthcare Providers' Knowledge and Training Gaps reveal inconsistencies in provider competence regarding transgender healthcare needs. Discrimination and Stigma in Healthcare shows experiences of misgendering and bias, leading to discomfort. Bureaucratic Barriers and Scheduling Issues emphasize inefficiencies that create delays and frustration. Empathy and Support from Healthcare Providers illustrate varying levels of affirming or neutral care. Future Improvements stress the need for LGBTQ+-inclusive policies and provider training. Transgender individuals face inconsistent healthcare experiences, limited specialized services, and provider knowledge gaps. Institutional reforms, provider education, and inclusive policies are essential to ensuring equitable, respectful, and accessible healthcare for transgender individuals.

Keywords: Lived experiences, transgender individuals, healthcare access, qualitative study, San Jose de Buenavista, Antique

ID-26-P1-12

Factors Contributing to Impostor Syndrome Among Nursing Students of St. Anthony's College

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Abstract: Impostor syndrome presents a significant challenge to the well-being and success of nursing students. This study investigated the prevalence of impostor syndrome, its key contributing factors, and its severity. It also examined how impostor feelings differed across student demographics and correlated with specific academic and social pressures. A quantitative, descriptive-correlational design was employed with 258 nursing students from St. Anthony's College. Data were gathered using a standardized questionnaire featuring the Clance Impostor Phenomenon Scale (CIPS). The data were analyzed using descriptive statistics, Mann-Whitney U test, Kruskal-Wallis test, and Spearman's rank correlation. Impostor syndrome was found to be highly prevalent, affecting 99.6% of respondents. The most significant contributing factors identified were personal background, peer relationships, and academic pressure. While a majority of students (69%) reported moderate impostor feelings, the severity was significantly higher in later year levels. Statistically significant differences were also noted based on first-generation status. Furthermore, peer relationships, academic pressure, and clinical performance showed a moderate negative correlation with the severity of impostor syndrome. Faculty support, however, did not have a significant correlation. Impostor syndrome is a pervasive issue among nursing students that intensifies as they advance in their education. The findings indicate that academic, social, and clinical pressures are primary drivers of these feelings. This study highlights a critical need for educational institutions to develop targeted support systems. Implementing strategies focused on mentorship, resilience training, and fostering a supportive learning environment is essential to build student confidence and ensure the future nursing workforce is well-prepared for professional practice.

Keywords: Impostor Syndrome, Nursing Students, Academic Pressure, Peer Relationships, Clinical Performance

ID-26-P1-13

Predictors of Psychological Well-Being Among Nursing Students in St. Anthony's College

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Abstract: This study examined the predictors of psychological well-being among nursing students at St. Anthony's College using a descriptive-predictive research design. A total of 258 students were selected through stratified sampling to ensure proportional representation across year levels. Standardized instruments were administered to measure psychological well-being, self-efficacy, perceived stress, mindfulness, and resilience. Descriptive statistics revealed that respondents demonstrated a generally moderate to positive level of psychological well-being ($M = 5.03$, $SD = 0.58$). Self-efficacy was moderate ($M = 2.58$, $SD = 0.65$), indicating fair confidence in managing academic and clinical challenges. Perceived stress was also moderate ($M = 2.57$, $SD = 0.82$), suggesting that while students experienced stressors, these were not excessively high. Mindfulness scores reflected relatively low dispositional mindfulness ($M = 2.38$, $SD = 0.50$), indicating challenges in sustained present-moment awareness. Resilience demonstrated a moderate level ($M = 3.18$, $SD = 0.08$), suggesting adaptive coping capacity in response to stress and adversity. Multiple linear regression analysis revealed that perceived stress significantly and negatively predicted psychological well-being, whereas resilience, mindfulness, and self-efficacy significantly and positively predicted psychological well-being. Sociodemographic variables did not show statistically significant predictive relationships when psychological variables were controlled. The findings underscore the importance of strengthening modifiable psychological resources and implementing structured stress-management and well-being interventions within nursing education to promote optimal psychological functioning among students.

Keywords: Psychological Well-Being, Perceived Stress, Resilience, Self-efficacy, Mindfulness

ID-26-P1-14

Behind Bars, Beyond Care: Challenges and Experiences of Persons Deprived of Liberty in Accessing Healthcare Services

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Abstract: Healthcare access is a fundamental human right, yet Persons Deprived of Liberty (PDLs) face significant barriers, including overcrowding, inadequate medical staff, bureaucratic delays, and inconsistent medication supplies, which create serious health disparities and often leave detainees without timely care. Despite global human rights frameworks advocating for equitable healthcare, real-world detention conditions frequently fall short. This study examined the healthcare access experiences and challenges of PDLs in the Antique Provincial Jail using an exploratory descriptive qualitative approach, with purposive sampling of ten detainees. Data were collected through in-depth interviews, field observations, and document reviews, and analyzed using thematic analysis to identify patterns in healthcare access, challenges, and coping mechanisms. Five key themes emerged: A Doctor Who Never Comes, highlighting infrequent check-ups and the absence of full-time healthcare staff; The Clock That Moves Too Slowly, exposing bureaucratic delays in accessing medical care; When Pills Are a Privilege, revealing the financial burden of self-funded medications; Compassion or Indifference?, reflecting varied experiences with healthcare personnel; and A Cure for the Forgotten, capturing participants' calls for policy reforms, permanent healthcare staff, streamlined referral systems, and integrated mental health services. Overall, the findings underscore critical gaps in prison healthcare and emphasize the urgent need for reforms aligned with international human rights standards, including the establishment of dedicated prison healthcare units, improved referral mechanisms, consistent medication supply, enhanced healthcare worker training, and comprehensive mental health integration, recognizing that ensuring healthcare for detainees is both a policy imperative and an ethical responsibility.

Keywords: Healthcare Access; Persons Deprived of Liberty; Prison Health; Lived Experiences; Qualitative Study

ID-26-P1-15

English Education Reform Policy in Thai Secondary Schools: Policy Formulation, Implementation, and Outcomes

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Abstract: This study examines the formulation and implementation of the English language teaching reform policy in secondary schools under the Office of the Basic Education Commission (OBEC). Using document analysis, it draws on key theoretical frameworks, including the Common European Framework of Reference for Languages (CEFR), Communicative Language Teaching (CLT), Van Meter and Van Horn's (1975) Policy Implementation Theory, and the critical policy analysis model of Chung and Cheung (1995). The purposes are: (1) to analyze the policy formulation process, (2) to investigate the mechanisms and processes of policy implementation, and (3) to evaluate the outcomes of policy enactment. The findings show that (1) in terms of formulation, the policy aims to enhance educational quality and develop human resources by reforming English teaching, curriculum, and assessment, and by setting CEFR-based targets for teacher training and testing; (2) in terms of implementation, it follows a hierarchical structure through Human Capital Excellence Centers (HCECs), covering curriculum and instructional development (CEFR, CLT), continuous teacher professional development, learner support through special programs, and technology use/CEFR testing; and (3) in terms of outcomes, students' English proficiency has improved but remains largely at basic levels (Pre-A1 to A2), while teacher development has been highly successful and has exceeded the original targets. Nevertheless, challenges remain regarding resources, teacher readiness, and diverse local contexts. The study recommends developing integrated policy mechanisms and providing ongoing professional development for teachers to ensure effective and sustainable English language teaching.

Keywords: English language teaching reform policy, CEFR, Policy Implementation, Thai Secondary Schools

ID-26-P1-16

Inner Development Goals in Higher Education: Deepening SDG Practice Beyond Awareness

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Abstract: Higher education institutions (HEIs) have consistently engaged with sustainable development goals (SDGs) through various means such as curriculum integration, campus campaigns, and “green” initiatives. However, in many contexts, these efforts remain weighted toward awareness-raising and curricula inclusion, with less evidence of durable, consistent student-led sustainability practice. Grounded in a narrative review of literature, this perspective paper argues that the key under-addressed limitation is insufficient attention to nurturing the inner human capacities that ensure more sustained sustainability practice. Drawing on the IDG framework, comprising five dimensions (Being, Thinking, Relating, Collaborating, Acting) with a set of associated skills, this paper examines why prevailing HEI approaches may be insufficient and how an IDG-informed lens can enable deeper SDG practice beyond awareness-oriented approaches. Based on the existing studies, this paper highlights recurring concerns that HEI sustainability education is often superficial and may not cultivate inner capacities needed for sustained sustainability practice. It also indicates that “inner transition” approaches appear more feasible if embedded in existing curricula rather than standalone modules, while empirical evidence on IDG-informed approaches in HEI sustainability remains scarce.

Keywords: Inner Development Goals (IDGs), SDGs, higher education, sustainability education

ID-26-P1-17

Teaching Effectiveness and Caring Attitudes: A Perception Study from Nursing Students at St. Anthony's College

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Abstract: Clinical instruction is fundamental in nursing education, where teaching effectiveness and caring attitudes influence students' learning and professional development. At St. Anthony's College, clinical instructors play a vital role in developing students' technical competence and compassionate practice. This study examined nursing students' perceptions of their instructors' teaching effectiveness and caring attitudes and determined whether differences existed based on selected demographic. A descriptive correlational design was used, involving 232 nursing students selected through stratified sampling across year levels. Data were gathered through an online survey utilizing the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) to measure teaching effectiveness and the Caring Dimension Inventory-25 (CDI-25) to assess caring attitudes. Students rated their clinical instructors highly in both teaching effectiveness (M = 5.77) and caring attitudes (M = 4.13). Nursing competence and professionalism received the highest evaluations, reflecting the value students place on clinical expertise. No significant differences in perceptions were found when grouped according to sex, year level, or socioeconomic background. The findings emphasize the importance of integrating instructional competence with genuine caring behaviors. Clinical instructors who demonstrate both qualities contribute to a supportive and meaningful learning environment, preparing nursing students for safe and compassionate patient care.

Keywords: Teaching Effectiveness; Caring Attitudes; Clinical Instruction; Nursing Students; Clinical Instructors

ID-26-P1-18

Life Stories of Individuals Living with Bipolar Disorder: A Narrative Inquiry

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Abstract: Bipolar disorder (BD) is a significant mental health challenge in the Philippines, affecting many individuals and contributing to high suicide rates. Despite legislative advancements like the Mental Health Act, access to care remains limited, especially in rural areas due to stigma and cultural beliefs. This study explored personal narratives of individuals with BD to understand meaning-making around identity, relationships, and coping over time. A qualitative narrative inquiry was employed, grounded in constructivism and interpretivism. Clandinin and Connelly's three-dimensional framework of temporality, sociality, and place. Eight BD-diagnosed participants were recruited via purposive and snowball sampling from rural Antique and urban Iloilo, Philippines. Semi-structured interviews were conducted face-to-face or online with consent for audio recording, and transcripts were analyzed using content analysis. Ethical standards, including informed consent, confidentiality, voluntary participation, and anonymity, were strictly observed. Findings revealed BD as a temporal journey from unrecognized symptoms to resilience, shaped by social stigma and familial dynamics, and influenced by place-based barriers like travel and limited resources. Cross-Cutting Themes and Patterns included: (1) Rising from the Storm: Strategies of Survival – adaptive coping turning challenges into strengths; (2) Soulful Anchors: Faith in the Face of Chaos – spirituality's dual role in solace and stigma; and (3) Weaving Worlds: Cultural Threads of Understanding – reframing BD as a "gift" for creativity, integrating traditional beliefs with biomedicine. The study emphasizes the need for culturally sensitive, person-centered care for individuals with bipolar disorder in Filipino communities. The findings support strengthening community care, reducing stigma, and improving rural mental health services.

Keywords: Bipolar disorder; lived experiences; narrative inquiry; Antique and Iloilo, Philippines.

ID-26-P1-19

Living with Autism: Exploring the Lived Experiences of Family Caregivers of Persons with Autism Spectrum Disorder in Antique

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Abstract: Autism Spectrum Disorder (ASD) is a lifelong neurodevelopmental condition that affects not only individuals diagnosed but also the families who care for them. In rural communities, caregiving is shaped by cultural values, limited access to services, and emotional resilience. Understanding the lived experiences of family caregivers is essential to developing inclusive and contextually responsive support systems. Family caregivers of persons with autism spectrum disorder (ASD) in the province of Antique face multifaceted challenges that shape their emotional well-being, social roles, and advocacy trajectories. This Study aimed to explore and interpret the lived experiences of family caregivers of persons with ASD in selected municipalities of Antique, Philippines. A qualitative phenomenological design was employed. Eight participants were selected through purposive and snowball sampling. Data were gathered via semi-structured interviews conducted in the local dialect, transcribed verbatim, and analyzed using Colaizzi's method. Informed consent was obtained, and confidentiality and cultural sensitivity were strictly observed. Five core themes emerged: (1) Veiled beginnings – delayed recognition and instinctive care; (2) Submerged strain – emotional fatigue and silent coping; (3) Fragmented bearings – systemic barriers and informal knowledge pathways; (4) Weighted orbits – stigma, family imbalance, and social pressure; and (5) Guiding luminescence – transformative growth, advocacy, and hope. The findings reveal that caregiving is both a burden and a source of purpose, shaped by cultural values, systemic limitations, and emotional resilience. The Study offers practical insights for health professionals, educators, and policymakers to develop inclusive, locally responsive support systems that honor the voices of family caregivers.

Keywords: Autism spectrum disorder; Family caregiving; Phenomenology; Antique province; Qualitative research

ID-26-P1-20

The Moderating Effect of Resilience on the Relationship Between Academic Burnout and Academic Performance among First-Year Nursing Students in St. Anthony's College

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Abstract: First-year nursing students experience high academic stress, which may lead to academic burnout. Burnout negatively affects learning, mental health, and academic performance, characterized by emotional exhaustion, cynicism, and reduced personal efficacy. Resilience, the ability to cope with stress and adversity, has been identified as a potential protective factor. However, limited studies in the Philippines have examined its moderating effect. The study aimed to determine the moderating effect of resilience on the relationship between academic burnout and academic performance. A descriptive-correlational design with moderation analysis was utilized. Total enumeration was used in selecting participants. Data were collected through self-administered questionnaires using the Maslach Burnout Inventory-General Survey and the Connor-Davidson Resilience Scale. Data were analyzed using descriptive statistics, Pearson correlation, and Hayes' PROCESS Macro Model 1. Results showed high levels of emotional exhaustion and personal efficacy, moderate cynicism, moderately low resilience, and good academic performance. Personal efficacy had a positive relationship with academic performance. Resilience significantly moderated the relationship between cynicism and academic performance. Furthermore, high resilience strengthens the negative effect of high cynicism on academic performance. Academic burnout exists among first-year nursing students and influences academic performance. Resilience does not consistently buffer burnout, but significantly influence how cynicism affect performance. Institutions should strengthen personal efficacy, integrate resilience training with counseling services, and implement early burnout screening.

Keywords: Resilience, Academic Burnout, Academic Performance, First-year nursing students, Nursing education

ID-26-P1-21

RESILIENCE IN THE FACE OF CHANGE: INDIGENOUS RESPONSES TO CLIMATE CHALLENGES IN SITIO IGCABAGTI, TOBIAS FORNIER, ANTIQUE

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Abstract: Indigenous Peoples in Sitio Igcabagti, Tobias Fornier, Antique experience the impacts of climate change through shifting weather patterns, agricultural disruption, and environmental hazards that threaten daily life and livelihoods. This study aims to explore and interpret narratives and cultural responses to the challenge of climate change among the Indigenous Peoples of Sitio Igcabagti, Tobias Fornier, Antique. A qualitative narrative inquiry guided by Clandinin and Connelly's three-dimensional framework of temporality, sociality, and place was employed. Thirteen participants were involved, consisting of ten individual interviews and one small group discussion with three participants, with data collected through in-depth semi-structured interviews, group discussion, and field observations. Key gatekeepers obtained permits, including the National Commission on Indigenous Peoples (NCIP), the barangay captain, the Tribal Leader, and the Elders, and ethical considerations such as informed consent, confidentiality, voluntary participation, and anonymity were strictly followed. Findings revealed that past experiences were marked by unpredictable rainfall, resource scarcity, and challenges in coping, while present resilience is reflected in stories of lived experiences, family and community cooperation, spirituality, and strong attachment to ancestral land. Resilience emerged as a dynamic, collective process of adaptation, recovery, and hope. The study provides culturally grounded evidence to inform Indigenous-responsive climate adaptation, disaster preparedness, and community-based interventions.

Keywords: Climate change, Indigenous Peoples, narrative inquiry, Sitio Igcabagti, Philippines

ID-26-P1-22

Exploring AI Usage Patterns in English Language Learning and Their Relationship to Educational Inequality: Evidence from Thai Undergraduate Students

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Abstract: Educational inequality in Thailand is closely linked to unequal access to private supplementary tutoring, particularly in English language learning. While paid tutoring can improve academic outcomes, it often advantages students from higher socioeconomic backgrounds. Advances in artificial intelligence (AI) offer an alternative form of learning support that is low-cost, widely accessible, and available independent of time and location. This study investigates AI usage patterns among Thai undergraduate students in English language learning and examines its implications for educational inequality. Using a quasi-mixed-methods approach, questionnaire data were collected from 200 undergraduate students at public universities in Thailand. Thematic analysis and descriptive statistics were employed to analyze qualitative and quantitative responses. Findings indicate that AI-assisted learning is widely used and perceived as effective for improving language skills, motivation, and confidence while reducing anxiety. Participants also highlighted significant economic benefits, noting that AI tools reduce reliance on costly private tutoring. Although students acknowledged limitations—particularly the lack of authentic human interaction—AI was considered sufficiently effective for independent learning. The results suggest that AI-assisted learning can serve as a compensatory resource, expanding access to quality language support for students with limited financial means and thereby contributing to the reduction of educational inequality.

Keywords: Artificial intelligence, English language learning, Educational inequality, AI usage patterns, Thai undergraduate students, Private tutoring

ID-26-P1-23

Spiritual Well-Being and Quality of Life Among Hemodialysis Patients in the Province of Antique

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Abstract: Patients undergoing hemodialysis face emotional distress, anxiety, and stress, compounded by the physical and psychosocial burdens of chronic illness. However, coping mechanisms, social support, and religious practices can enhance spiritual well-being and overall quality of life. This study examined the correlation between spiritual well-being and quality of life among hemodialysis patients in government hospitals in the Province of Antique. Data collection involved face-to-face interviews using structured survey questionnaires. The Spiritual Well-Being Scale (SWBS) (Paloutzian & Ellison, 1982) and the Quality-of-Life Questionnaire (Ruiz & Baca, 1993) were used to assess spiritual well-being and quality of life. Analytical tools and statistical methods identified correlations, providing insights into the role of spirituality in coping with hemodialysis challenges. The study found a strong positive correlation between spiritual well-being and quality of life in hemodialysis patients. Those practicing prayer, meditation, and religious gatherings showed greater resilience and lower stress, anxiety, and depression. Patients with lower spiritual well-being faced more emotional distress and less control. Social support from family, friends, and religious communities improved acceptance and life satisfaction. These findings emphasize the need for spiritual and psychosocial support in hemodialysis care. The study highlights the vital role of spiritual well-being in improving the quality of life of hemodialysis patients. Integrating spiritual care into treatment can enhance resilience and well-being. A holistic, patient-centered approach, including spiritual counseling, emotional support, and community engagement, can improve outcomes. Strengthening hospital-based spiritual care programs will further support patient well-being and life satisfaction.

Keywords: Spiritual Well-Being; Quality of Life; Hemodialysis Patients

ID-26-P1-24

Navigating Cross-Cultural Adjustment among International Students in Thailand: A Case Study of Myanmar Students at Thaksin University, Songkhla Campus

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Abstract: Political landscape in Myanmar following the February 2021 coup has become a strong driving force for the migration of Myanmar students abroad. Thailand is a logical destination due to its proximity and globally recognized educational quality. In further, region like Southern Thailand have its own political and cultural dynamics, which directly impact on how Myanmar students negotiate their identities within the local Thai majority and the dominant Muslim minority. Therefore, this study was conducted since there had been no academic studies specifically at one of the public campuses in Songkhla Province. The aims of this study is to investigate how Myanmar students navigate their cross-cultural adjustment experiences at one public campus in Songkhla Province. A qualitative approach through multi-level sampling technique was employed in this study. Data collection involves semi-structure interviews with the Myanmar students, triangulated with perspectives from Thai local students, campus staff, and academic members. The findings suggest that, firstly, the Myanmar students faced language barrier to their daily communication. Secondly, they maintained their mental health and psychological resilience by maintaining intensive communication with Myanmar students fellow. Thirdly, universities need to strengthen internationalization programs for staff, lecturers, and faculty members. Besides, the introduction of Thai local wisdom to international students should become the urgency as well.

Keywords: Cross-cultural adjustment, Myanmar students, educational migration, Southern Thailand.

ID-26-P1-25

CONVERSION THERAPY AND THE LAW: LESSONS FROM ARTICLE 3 OF ECHR FOR THAILAND

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Abstract: Debates surrounding the prohibition of so-called “conversion therapy” have intensified in recent years, particularly in relation to claims that such legislation would impermissibly interfere with the right to freedom of religion. This article critically examines the assertion that laws prohibiting efforts to change or suppress sexual orientation or gender identity constitute a clear violation of religious freedom. Drawing on international human rights law, with particular emphasis on Article 3 of the European Convention on Human Rights (ECHR), the article argues that conversion therapy, whether physical or non-physical in form, constitutes a serious affront to human dignity and may amount to inhuman or degrading treatment. Through an analysis of the European Court of Human Rights’ jurisprudence on State obligations under Article 3, the article demonstrates that States are subject not only to a negative duty to refrain from ill-treatment, but also to positive obligations to establish effective legal frameworks capable of preventing foreseeable harm inflicted by private actors. It contends that consent-based or religious exemptions are incompatible with the absolute nature of the prohibition of degrading treatment, given the inherently discriminatory and harmful character of conversion therapy. Although Thailand is not a party to the ECHR, the article advances the argument that Article 3 jurisprudence offers a persuasive normative model for domestic reform. By applying this framework to the Thai legal context, the article identifies a significant gap between Thailand’s international human rights commitments and the absence of specific legislation prohibiting conversion therapy. It concludes that effective prohibition requires the enactment of dedicated legislation recognising conversion therapy as a distinct human rights violation, thereby affirming the State’s responsibility to protect human dignity, equality, and personal autonomy, while clarifying the lawful limits of religious freedom.

Keywords: Gender Equality, Conversion Therapy, Human Dignity

ID-26-P1-26

Constructing Intercultural Engagement: Student Perspectives within an Internationalized University in Southern Thailand

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Abstract: For decades, internationalization has been a significant move in higher education, especially in the Global North, as globalization has become increasingly inevitable. Universities in other regions, including Southeast Asia such as Thailand, have followed this direction. It has become a national priority within Thailand's higher education policy. However, adapting Western curricula, offering English-medium programs, employing foreign teachers, recruiting international students, and engaging in virtual internationalization do not necessarily guarantee meaningful student engagement. In Thailand, like many non-English speaking countries, the internationalization of higher education appears more complex and nuanced, as western models interact with the local contexts. The discussion on internationalization has focused more on policy frameworks and institutional strategies but less attention has been given to students' lived experiences and their everyday intercultural interactions. Rather than treating students as passive recipients of internationalization policies, this study approaches them as meaning-makers who construct their own understandings of intercultural engagement within the university context. This study explores the perspectives on intercultural engagement of three groups of students in internationalized universities in Southern Thailand: international students, Thai students in international college, and Thai students in Thai-track programs. Guided by constructivism,, this qualitative study uses semi-structured interviews to explore how engagement is understood and experienced among students. This study aims to provide space for students to voice their perceptions of intercultural engagement and to contribute to ongoing discussions of interculturalism within university contexts. It also seeks to offer insights that may inform institutional efforts to better support students' intercultural engagement.

Keywords: Internationalization, Higher Education, Intercultural Engagement

ID-26-P1-27

The Development of Academic Achievement in "Substance Separation" Using the Active Learning PEAupacE Model in Fundamental Science for Matthayom 2 Students, Woranari Chalerm School, Songkhla

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Abstract: This research aimed to develop student academic achievement in "substance separation" and assess student satisfaction with the Active Learning PEAupacE Model. The participants were 57 Matthayom 2 students at Woranari Chalerm School. The research instrument was the PEAupacE Model, consisting of eight stages: Preparation, Elicitation, Active Learning, Use Systems Thinking, Planning by Collaboration, Analysis by Team Learning, Conclusion, and Evaluation. Data were analyzed using mean, standard deviation (S.D.), and t-test. The results revealed that students' academic achievement after the intervention was significantly higher than before at the .05 level. The pre-test mean score was 6.58 (S.D. = 1.81), which increased to a post-test mean of 16.53 (S.D. = 3.27). The t-test value was 23.73 with a significance level of .00. Furthermore, 90% of students expressed satisfaction at a "good" level or higher, meeting the specified criteria. The findings suggest that the PEAupacE Model effectively enhances learning engagement and systematic problem-solving skills in science education.

Keywords: PEAupacE Model, Substance Separation, Academic Achievement, Active Learning

ID-26-P1-28

Development of Problem-Solving Competency in a Digital Context and Computational Thinking of Grade 10 Students through Project-Based Learning

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Abstract: The objectives of this research were to study the academic achievement of students through Project-Based Learning (PBL); investigate the development of students' problem-solving competency in a digital context and computational thinking; and evaluate student satisfaction toward the learning management. The target group consisted of 39 Grade 10 students from Woranari Chaloeem School , Songkhla enrolled in the first semester of the 2025 academic year, selected through purposive sampling. The research instruments included PBL lesson plans, an academic achievement test, a problem-solving competency assessment form, a behavior observation form, and a satisfaction questionnaire. Data were analyzed using percentage, mean, and standard deviation. The results revealed that: Academic Achievement :100% of the students achieved post-learning scores higher than the established criteria of 65%. Competency Development : Students demonstrated systematic development in problem-solving and computational thinking. They were able to identify problems, analyze root causes, and utilize digital technology to create innovative applications for daily life problem-solving. Furthermore, students showed a marked increase in proficiency regarding digital innovation creation. Student Satisfaction: The students' satisfaction with the PBL approach was at a high level. The learning process stimulated enthusiasm, encouraged students to express their opinions confidently, and fostered pride in their created works.

Keywords: Project-Based Learning (PBL), Digital Problem-Solving Competency, Computational Thinking

ID-26-P1-29

Development of an Active Learning Model Integrating Phenomenon-Based Learning (PhenoBL) and 5Es Inquiry to Enhance Thinking Abilities and Academic Achievement in Physics for Grade 12 Students

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Abstract: This research aimed to: 1) develop an Active Learning model using Phenomenon-Based Learning (PhenoBL) integrated with Inquiry-Based Learning (5Es) in Physics; 2) study the effects of this model on the thinking abilities and academic achievement of Grade 12 students in the "Magnetism and Electricity" unit ; and 3) investigate student satisfaction. The target group consisted of 67 Grade 12 science-mathematics students at Woranari Chaloe School, Songkhla, during the 2025 academic year. Instruments included PhenoBL-5Es integrated lesson plans, assessment tools for thinking abilities and achievement, and a satisfaction evaluation form. Data were analyzed using mean (\bar{x}), standard deviation (S.D.), percentage, and a t-test for one sample. Findings revealed that: 1) the developed model's appropriateness was at the highest level ($t = 4.57$, S.D. = 0.39); 2) 81% of students achieved a "Competent" level or higher in thinking abilities, significantly exceeding the school's target at the .05 level; 3) students' average academic achievement score was 70.64%, significantly higher than the target at the .05 level ; and 4) overall satisfaction was at a high level ($t = 4.36$, S.D. = 0.70).

Keywords: Active Learning; Phenomenon-Based Learning (PhenoBL); 5Es Inquiry; Thinking Abilities; Academic Achievement

ID-26-P1-30

Development of Scientific Explanation Competency through the 5E Learning Model Integrated with Board Games

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Abstract: The research entitled "Development of Scientific Explanation Competency through the 5E Learning Model Integrated with Board Games" aimed to examine the development of scientific explanation competency, evaluate academic achievement in the unit on "Cells," and investigate the attitudes toward science among 7th-grade students at Woranari Chaloem School, Songkhla Province. The study was conducted during the first semester of the 2025 academic year with a sample of 119 students. The research instruments consisted of 5E lesson plans integrated with board games, a scientific explanation competency assessment, an academic achievement test, and a science attitude scale. Data were analyzed using mean, standard deviation, and t-test.

The findings revealed that students' scientific explanation competency scores were significantly higher than the predetermined 60% threshold at the 0.05 level. Similarly, their academic achievement following the implementation of the 5E-board game integrated learning was significantly higher than their pre-test scores at the 0.05 level. Regarding students' perceptions, the overall attitude toward science was at a high level with a mean of 4.14, which aligned with the research hypothesis. In conclusion, the integration of board games into the 5E learning model proved to be an effective pedagogical approach that successfully enhanced students' scientific explanation competencies, improved academic performance, and fostered positive attitudes toward science.

Keywords: 5E Learning Model, Board Games, Scientific Explanation Competency,

ID-26-P1-31

Development of Active Learning Management to Enhance Group Work Performance and Academic Achievement of Grade 11 Students in Physical Science (Chemistry), Course Code V32121

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Abstract: This quasi-experimental research aimed to enhance the academic achievement in Chemistry of Grade 11 students through Active Learning management emphasizing group processes, game-based analytical activities, artificial intelligence (AI) integration, and concept synthesis. The participants were Grade 11 students enrolled in Physical Science (Chemistry), Course Code V32121. The instructional design focused on learner-centered activities that promoted collaboration, critical thinking, and knowledge construction through structured group work and interactive learning strategies. Data were collected using pre-test and post-test achievement assessments and analyzed using statistical methods. The findings revealed that the mean post-test scores were significantly higher than the pre-test scores at the .05 level of significance. The results are consistent with Constructivist Theory, which emphasizes learners' active knowledge construction through meaningful experiences, and Cooperative Learning Theory, which highlights the importance of teamwork and positive interdependence in enhancing learning outcomes. The study suggests that Active Learning approaches integrating collaborative processes, analytical games, AI tools, and conceptual summarization effectively improve both academic achievement and essential 21st-century skills, including critical thinking, problem-solving, and teamwork. These findings support the continuous development of innovative instructional practices to meet the demands of rapidly changing educational contexts.

Keywords: Active Learning, Cooperative Learning, Constructivism, Academic Achievement, Chemistry Education

ID-26-P1-32

SDG-aligned student behavior in university shared learning spaces: a methodological review

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Abstract: There has been a surge of scholarly interest in students' sustainable behaviors within higher education institutions (HEIs) over the past decade, driven by the United Nations 2030 Agenda and its seventeen sustainable development goals (SDGs). Efforts have been made to investigate what and how students act sustainably, but little attention has been paid to how well we have studied them. This paper explores the methodological landscape of the field itself. It looks into how well the research designs are carefully executed, where the limitations lie, and where it has yet to explore. This study employs a narrative review of peer-reviewed studies by retrieving from major academic databases published between 2015 and 2025. Findings of the review indicate four recurring methodological patterns --- (i) a predominance of cross-sectional survey designs, which capture associations but not behavioral change, (ii) a persistent tendency to measure behaviors in single-domain terms, often prioritizing environmental dimensions, neglecting social dimensions, hence downplaying the multi-domain nature of what this paper terms SDG-aligned behavior, (iii) routine application of the theory of planned behavior (TPB), which often left unexplained the intention-behavior gap, which is the most policy-relevant question, and (iv) a limited representation of Southeast Asian university contexts, and university shared learning spaces in particular. This paper argues for research that is spatially anchored in shared learning spaces, multi-domain SDG-aligned behavior measurement, addresses the intention-behavior gap, and focuses on Southeast Asian HEI contexts.

Keywords: SDG-aligned behavior; Shared learning spaces; Higher education; Theory of Planned Behavior; Methodological review

ID-26-P1-33

Understanding Patterns of Absenteeism among Undergraduate Students at Fatoni University and Ways to Improve It

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Abstract: Student absenteeism among undergraduate students at higher education level is reported in many places. At Fatoni University, lecturers have observed recurring patterns of absenteeism among undergraduate students. This study aims to assess the reasons and the factors of absenteeism among undergraduate students at Fatoni University and to develop strategies to improve student attendance. The research adopts a qualitative action research design and is guided by an integrated theoretical framework combining Self-Determination Theory, Student Engagement Theory, and Self-Regulation Theory to examine motivational, engagement-related, and personal factors influencing absenteeism. Twenty undergraduate students who reported frequent absenteeism participated in the research. Data were collected through semi-structured interviews, group discussions, surveys, and researcher observations, and were analysed using thematic analysis to identify recurring patterns and underlying factors influencing student absenteeism. Findings provided a deeper understanding of the factors and reasons for absenteeism at Fatoni University and provided clear future guidelines to enhance attendance and engagement at the university.

Keywords: Student absenteeism, Student engagement, Self-regulation, Motivation, action research

ID-26-P1-34

Assessment for Learning in Higher Education Through Teachers' Lens: A Qualitative Interview Study with International PhD students

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Abstract: Assessment for Learning (AfL) is a key pedagogical approach in contemporary higher education, emphasizing the use of assessment to support and enhance the learning process itself. While the theoretical benefits of AfL are widely recognized, there is a need for deeper qualitative exploration into how educators from diverse educational backgrounds understand and implement these strategies in practice. This study aims to explore the in-depth perspectives and self-reported classroom practices regarding Assessment for Learning among a select group of international educators. The research specifically investigates their understanding of AfL, the strategies they employ, the challenges they face, and their views on the integration of AfL within higher education contexts, with a particular reference to the Myanmar higher education system. A qualitative research design was adopted, utilizing semi-structured interviews to collect rich, narrative data. The sampling method was purposive sampling, specifically employing criterion sampling. The predetermined criterion for inclusion was that participants must be current PhD students at a university in Hungary who possess significant prior teaching experience in higher education institutions in their home countries. This strategy ensured the selection of information-rich cases capable of providing deep insights into both teaching practice and the theoretical underpinnings of assessment. A total of ten participants were recruited. Data was collected using a comprehensive, researcher-developed interview guide comprising 20 open-ended questions covering topics such as the understanding and implementation of AfL strategies, student involvement, feedback, challenges, and future directions. The interviews were audio-recorded and transcribed verbatim. The transcribed data will be subjected to thematic analysis to identify, code, and interpret recurring patterns and themes related to teachers' perspectives and practices. This study is expected to yield detailed, contextualized accounts of how experienced educators navigate the principles of AfL. It will illuminate the specific strategies they find effective (e.g., peer assessment, formative feedback), the contextual and institutional barriers they encounter, and their perceptions of how AfL is, or could be, integrated into curricula, with special attention to the higher education landscape in Myanmar. By centering on the voices of teachers, this research will contribute practical insights for faculty development programs and institutional policies aimed at fostering a more learning-oriented assessment culture in higher education settings.

Keywords: Assessment for Learning (AFL), Higher Education, Teacher's perspectives

ID-26-P1-35

Volunteer Engagement and Leadership Development in Higher Education: A Conceptual Framework Integrating Empathy and Civic-Mindedness

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Abstract: The growing emphasis on socially responsible leadership in higher education has intensified scholarly attention toward the psychological mechanisms underlying leadership development. This study aims to review empirical research to develop a conceptual understanding of how volunteer engagement supports leadership development through empathy and civic-mindedness. Recognizing the multidimensional and multilevel nature of these constructs, this systematic review synthesizes empirical studies published between 2016 and 2026 that examine relationships among volunteer engagement, empathy, civic-mindedness (including civic responsibility), and leadership outcomes among university students. Using a systematic literature review approach, relevant studies were retrieved from major academic databases and screened using predefined inclusion and exclusion criteria. The reviewed evidence indicates that volunteer engagement is positively associated with empathy development and stronger civic-mindedness. These factors are, in turn, linked to leadership competencies, prosocial orientation, civic responsibility, and transformational leadership tendencies. Building on this synthesis, the study proposes a conceptual framework positioning empathy and civic-mindedness as key developmental pathways connecting volunteer experiences to leadership outcomes. Notably, the literature remains limited in Southeast Asian contexts and shows uneven integration of psychological and leadership development perspectives. This review advances the field by consolidating theoretical linkages, offering a guiding framework for future empirical testing, and informing the design of volunteer-based leadership initiatives and student development programs in higher education.

Keywords: Volunteer Engagement; Leadership Development; Empathy; Civic-Mindedness; Conceptual Framework

ID-26-P1-36

Promoting Volunteerism among University Students: A Case Study during the 2025 Songkhla Flood

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Abstract: Volunteerism serves as a vital force in advancing civic engagement, reinforcing social responsibility among students, and supporting sustainable community recovery, especially in post disaster contexts. This study explores how volunteerism was motivated, organized, and practiced among university students in response to the 2025 Songkhla floods, with particular emphasis on their motivations, roles, challenges, and contributions. Using a qualitative approach, this research engaged 20 student volunteers from three universities in Songkhla Province, Thailand. Adopting a micro-level analytical perspective, the study explores individual experiences within university-based volunteer initiatives. Participants were involved in diverse relief activities, including food preparation, aid distribution, campus shelter operations, and post-flood cleanup efforts. The findings revealed that while students were primarily driven by altruistic and empathetic motivations, their sustained engagement was heavily influenced by strong peer networks and proactive organizational support from their universities. Key challenges included managing logistical uncertainties and emotional stress. These insights provide a deeper understanding of student volunteerism that can help universities and policymakers create more inclusive, supportive, and sustainability-oriented frameworks for future disaster response and resilience-building.

Keywords: Student Volunteerism; Disaster Response; Songkhla Floods 2025; Community Resilience

ID-26-P1-37

From Self-Understanding to Better Relationships: Thai Education Students' Experiences in a Six-Week Enneagram Program

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Abstract: For future educators, recognizing and responding to individuals' diverse personality features is essential for building supportive relationships and effective communication. The Enneagram, a personality-based framework, offers a structured way to understand oneself and others and to promote healthier peer relationships. This study examined the perceived effectiveness of a six-week Enneagram classroom program for Thai undergraduate education majors. The program covered the three centers (Gut, Heart, and Head) and the core features of the nine types through active, self-reflective learning, including a brief type assessment, interactive lectures, personal reflection, small-group discussions and activities, and individual sharing. Using a qualitative approach, the study observed learning responses from 30 students and conducted semi-structured interviews with nine participants representing each Enneagram type. Thematic analysis found that the program enhanced self-awareness, clarified personal patterns, and deepened understanding of differences across types. Participants also reported improved strategies to reduce unnecessary conflict and communicate more effectively with peers—skills relevant to their professional development as educators. However, students perceived limited impact on their academic journey and reported few concrete academic improvement strategies gained from the program. Overall, Enneagram-based learning appears useful for interpersonal and reflective development among Thai pre-service educators, while additional academic-skills elements may be needed to support academic growth.

Keywords: Enneagram; Interpersonal communication; Self-awareness; Undergraduate Thai students

ID-26-P1-39

Recommendations for Thailand's STEM Education Policy Implementation in the Disruptive Era

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Abstract: This descriptive qualitative research aims to develop comprehensive recommendations for STEM education policy implementation in Thailand during the disruptive era. The study addresses the urgent need for educational transformation driven by rapid technological advancement and the global challenges of the post-COVID-19 landscape. The methodology was conducted in two distinct phases: in-depth interviews with 78 key informants from 13 schools across four regions of Thailand, and focus group discussions with 15 STEM education experts. Data were analyzed using grounded theory techniques, involving verbatim transcription and systematic coding to identify key thematic patterns. The findings reveal that effective STEM education management in the disruptive era encompasses seven critical aspects: 1) Strategic implementation, 2) Supportive organizational structure and management systems, 3) Authentic organizational leadership, 4) Smart resource management, 5) Systematic and effective teacher development, 6) Innovative and effective learning organization, and 7) Information technology and data management. Key recommendations emphasize the necessity of a growth mindset in leadership, the establishment of a centralized STEM data center by OBEC, and the enhancement of pedagogical competencies to keep pace with global changes. Furthermore, the study highlights the importance of building sustainable inter-school networks and flexible budget management to overcome existing challenges such as resource insufficiency and inconsistent implementation. These recommendations provide a strategic framework for policymakers and educational institutions to optimize STEM initiatives, ultimately fostering national competitiveness and preparing a skilled workforce for future technological innovations.

Keywords: STEM Education, Disruptive Era, Policy Implementation

ID-26-P1-40

Sustainability in ASEAN Higher Education: Culturally Responsive Teaching as a Student-Centered Framework

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Abstract: Sustainability in higher education is frequently framed through environmental initiatives, institutional policy, or digital innovation, while sustainable teaching practices have been given less attention. Higher education within ASEAN ostensibly promotes student-centered learning, yet implementation is often superficial and not aligned with the local culture of learners, resulting in the persistence of teacher-centered learning. The import of Western instructional approaches to Southeast Asia without cultural adaptation creates a pedagogical tension between instructional frameworks and practical realities. This position paper argues that culturally responsive teaching is a practical bridge that aligns instruction with learners' cultural contexts to reach learning goals through student-centered learning. Drawing on literature from the ASEAN context, this paper examines how culturally responsive teaching and student-centered instruction are pedagogically aligned and act together as a mutually reinforcing framework to foster English language learning outcomes. Research shows that culturally responsive teaching practices (1) support engagement and participation through sustaining cultural identities, and (2) facilitate student-centered learning by acknowledging learners' cultural environment and educational context. Culturally responsive teaching, as a form of sustainable pedagogy, directly advances SDG 4 by improving English language learning outcomes through culturally relevant practices, and SDG 10 by centering learners from non-Western cultural and linguistic backgrounds.

Keywords: ASEAN higher education; culturally responsive teaching; English language education; student-centered learning; higher education; sustainable education

ID-26-P1-41

The Evolution of International Legal Relations between Korea and Thailand: Diversification, Multilayering, and Specialization

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Abstract: Over the past several decades, relations between Korea and Thailand have evolved through various forms of cooperation, both direct and indirect, within the broader context of contemporary international society. As members of the international community, the two countries have participated in the international legal order and have developed cooperative ties across a wide range of fields, including politics, economics, trade, culture, and development cooperation. Through this process, their bilateral international legal relations have gradually expanded in scope and complexity. In particular, the legal relationship between the two countries has evolved in ways characterized by diversification in areas of cooperation, multilayering in institutional and legal frameworks, and increasing specialization in specific sectors. Against this background, this study examines the international legal relations between Korea and Thailand from multiple perspectives and analyzes the patterns and structures through which these relations have developed. By focusing on the processes of diversification, multilayering, and specialization in bilateral legal arrangements, the study seeks to identify the key characteristics of Korea–Thailand international legal relations. Based on this analysis, the research further aims to explore possible directions for the future development of their bilateral legal cooperation.

ID-26-P1-42

English Education Reform Policy in Thai Secondary Schools: Policy Formulation, Implementation, and Outcomes

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Abstract: This study examines the formulation and implementation of the English language teaching reform policy in secondary schools under the Office of the Basic Education Commission (OBEC). Using document analysis, it draws on key theoretical frameworks, including the Common European Framework of Reference for Languages (CEFR), Communicative Language Teaching (CLT), Van Meter and Van Horn's (1975) Policy Implementation Theory, and the critical policy analysis model of Chung and Cheung (1995). The purposes are: (1) to analyze the policy formulation process, (2) to investigate the mechanisms and processes of policy implementation, and (3) to evaluate the outcomes of policy enactment. The findings show that (1) in terms of formulation, the policy aims to enhance educational quality and develop human resources by reforming English teaching, curriculum, and assessment, and by setting CEFR-based targets for teacher training and testing; (2) in terms of implementation, it follows a hierarchical structure through Human Capital Excellence Centers (HCECs), covering curriculum and instructional development (CEFR, CLT), continuous teacher professional development, learner support through special programs, and technology use/CEFR testing; and (3) in terms of outcomes, students' English proficiency has improved but remains largely at basic levels (Pre-A1 to A2), while teacher development has been highly successful and has exceeded the original targets. Nevertheless, challenges remain regarding resources, teacher readiness, and diverse local contexts. The study recommends developing integrated policy mechanisms and providing ongoing professional development for teachers to ensure effective and sustainable English language teaching.

Keywords: English language teaching reform policy, CEFR, Policy Implementation, Thai Secondary Schools

ID-26-P1-43

The Development of Students' Communication and Collaborative Thinking Skills in Organizational Behavior and Human Resource Management Courses through Debate-Based Learning

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Abstract: This study aimed to develop a debate-based learning management plan for the course Organizational Behavior and Human Resource Management and to examine its effects on students' communication skills, collaborative thinking skills, and learning satisfaction. The sample consisted of 48 second-year students in Modern Trade and Service Innovation, divided into 16 groups, enrolled in the second semester of the 2024 academic year. The research instruments included debate-based lesson plans and questionnaires assessing skills and satisfaction. Data were analyzed using mean and standard deviation.

The results revealed that most students had moderate to good academic performance, with 80.50% achieving a grade of C or higher. Overall communication skills were rated at a high level (mean = 3.83), with listening skills showing the highest mean, followed by nonverbal communication and speaking skills. Collaborative thinking skills were also rated at a high level (mean = 4.19), with creativity and teamwork at the highest level, while critical thinking had the lowest mean. In addition, overall student satisfaction with debate-based learning was at the highest level (mean = 4.27), with the instructor dimension receiving the highest rating.

In conclusion, debate-based learning effectively enhances students' communication and collaborative thinking skills while generating a high level of satisfaction. However, further improvement is needed in speaking and critical thinking skills, as well as in adapting activities to better suit learners' contexts.

Keywords: Debate-based learning, Communication skills, Collaborative thinking skills, Student satisfaction

GROUP 2 PROSPERITY

ID-26-P2-01

Development and Application of IMADPort Software in Investment Strategy

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Abstract: This paper briefly develops the framework of constructing lower and upper bounds on asset allocation of lowest risk when a portfolio risk is represented by the mean absolute deviation and the future expected return of an individual asset is uncertain but bounded above and below. Heavily relying on the linear programming technique, the MATLAB linprog solver with the dual simplex algorithm is used primarily because MATLAB excels at matrix operations which provide a basis for the proposed method. The source codes are compiled using the MATLAB compiler, instead of a standard C compiler, due to the limitation of the MATLAB Coder under this specific algorithm. The resultant IMADPort software binary is distributed for free, is available for various operating systems including Windows (x64), macOS (Apple Silicon), and Linux (x64), and requires the specific set of the free MATLAB R2025b runtime. The difficulties of using the MATLAB Coder are also discussed in this work. As opposed to the Python skportfolio package, the IMADPort executable can provide useful bounds on one-month investment portfolios of bonds with different maturities at the expense of both long initial loading time and very large storage space required by the minimal MATLAB shared libraries.

Keywords: Investment strategy, Software development, Dynamic linking, Interval linear programming, Mean absolute deviation portfolio selection model

ID-26-P2-02

From Ecotourism to e-Ecotourism: Exploring Digital Transformations for Sustainable Tourism Development

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Abstract: As a sustainable approach to tourism development, e-ecotourism has gained increasing attention due to the growing integration of digital technologies in destination management. This study is to explore the role of digital technologies in facilitating the transition from traditional ecotourism to e-ecotourism by examining the tourist attraction area in Songkhla, Thailand, and exploring how traditional ecotourism can transition toward the e-ecotourism sector in the research area. This study adopts a qualitative approach through a systematic review combined with bibliometric analysis on ecotourism, e-ecotourism, and digital tourism transformation. The key findings indicate that digitalization plays a significant role in enhancing sustainable destination governance, improving visitor environmental awareness, and supporting ecological conservation efforts. The study highlights that e-ecotourism provides a promising pathway for future sustainable tourism development by integrating digital technologies with ecological principles, while facilitating innovative connections between the culture heritage and natural resources. This research contributes to the emerging literature on digital ecotourism by offering a conceptual understanding of how technology-driven approaches can support sustainable tourism transformation.

Keywords: Ecotourism, digital transformation, sustainable tourism, e-tourism

ID-26-P2-03

Quality, Innovation, and Renewable Energy: Drivers of Business Resilience in SMEs

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Abstract: The concern of this research is to examine the process of renewable energy integration through the implications for innovation in Pakistani SMEs. In this regard, a unique pathway was adopted to enhance business resilience through renewable energy integration in SMEs. To examine the path, PLS-based SEM is used to assess the research, based on data collected in two waves from 577 SMEs in Pakistan, with the target respondents being managers and senior managers involved in the energy integration process. The results underscore a synergistic relationship between innovation and quality practices in improving energy efficiency, policy compliance, and business resilience. This research contributes to the emerging discourse on sustainable energy adoption in developing economies by integrating innovation, quality, and resilience frameworks. It offers novel insights into how SMEs can leverage internal capabilities to navigate energy challenges and enhance resilience. The study provides practical implications for SME managers, policymakers, and energy stakeholders focused on capacity-building and green transformation.

Keywords: Organizational Innovativeness, Total Quality Management, Renewable Energy Integration, Business Resilience

ID-26-P2-04

A Management Model for Tourism Destinations Based on Creative Tourism Concepts to Enhance the Grassroots Community Economy: A Case Study of Chomdao Lanyor

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Abstract: This study aims to (1) examine the components of creative tourism management at Chomdao Lan Yo, (2) analyze its competitiveness and marketing potential, and (3) synthesize and design a creative tourism-based destination management model. A qualitative approach was employed, including field visits, on-site observations, and semi-structured interviews with key stakeholders. Data were analyzed through content analysis and conceptual synthesis. The findings led to the development of the “LAN-YO Model,” a creative tourism-based management framework grounded in local identity and ecological context. The model consists of six interrelated dimensions: (1) Resource-Based Identity, (2) Co-Creation Experience Design, (3) Living Creative Space, (4) Adapted Community-Based 6As Framework, (5) Integrated Value Chain Management, and (6) Grassroots Economic Multiplier. The model demonstrates how local natural and cultural capital can be transformed into structured participatory experiences through community-centered management mechanisms. By integrating creative tourism principles with value chain management, the model enhances income distribution, local value retention, and socio-cultural sustainability. The LAN-YO Model offers a transferable framework for small-scale community destinations seeking to strengthen grassroots economies through identity-driven and experience-based tourism management.

Keywords: Creative Tourism, Destination Management Model, Value Chain, Grassroots Economy

ID-26-P2-05

Beyond Fragile Beginnings: Lived Experiences of Mothers Whose Preterm Babies Have Been Admitted to the Neonatal Intensive Care Unit

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Abstract: Preterm birth, defined as giving birth to a baby before 37 weeks of pregnancy, alters mothers' daily lives as they care for fragile babies while enduring emotional, physical and psychosocial distress in the NICU. This study explored the lived experiences of mothers in the Province of Antique, emphasizing how they define their maternal role and adopt coping mechanisms. A descriptive phenomenological qualitative approach was employed. Eight mothers whose babies were admitted to local NICUs were identified through purposive and snowball sampling. Semi-structured interviews captured their narratives, and Colaizzi's method was applied to analyze maternal experiences. Four main themes emerged from the findings: (1) Turbulence of Unexpected Beginnings – the shock of premature delivery, imposed NICU separation, uncertainty, and worry about the future; (2) Burden Behind Bond – hypervigilance, financial strain, institutional barriers, and sleepless nights; (3) Hands of Hope – reliance on faith and prayer, resourcefulness in sustaining breastmilk, assurance from NICU teams, and shared caregiving from family and community; and (4) Motherhood Metamorphosis – increased awareness of risk and fragility, resilience, and reframing motherhood as strength and advocacy. The study emphasizes the need to recognize mothers as more than caregivers, but as individuals whose well-being defines their journey through preterm care. Providing empathetic communication, lactation assistance, financial aid, and psychosocial care can restore confidence and strengthen attachment, empowering mothers to move from crisis toward resilience and transformation. The study recommends strong support systems through mother-to-mother groups and exploring milk bank initiatives to improve maternal well-being and neonatal care.

Keywords: Preterm birth, Lived Experiences, Phenomenology, Neonatal Intensive Care Unit, Province of Antique

ID-26-P2-06

ATTITUDE TOWARDS DEATH AND DYING AND PERCEIVED QUALITY OF LIFE AMONG MIDDLE-AGED CLIENTS WITH CHRONIC ILLNESSES ADMITTED AT A GOVERNMENT HOSPITAL IN THE PROVINCE OF ANTIQUE

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Abstract: Life-threatening chronic illnesses heighten mortality awareness and influence both attitudes toward death and perceived quality of life, particularly during middle adulthood. This study examined attitudes toward death and dying and perceived quality of life among middle-aged clients with chronic illnesses admitted to a government hospital in the Province of Antique, and determined significant differences and relationships between these variables. A quantitative descriptive–correlational design was utilized involving 60 respondents aged 35–64 years selected through purposive sampling. Data were collected using a socio-demographic questionnaire, the Death Attitude Profile–Revised (DAP-R), and the World Health Organization Quality of Life–BREF (WHOQOL-BREF). Descriptive statistics and nonparametric tests, including Mann–Whitney U and Spearman's rank correlation, were applied. Findings revealed that respondents demonstrated a generally positive attitude toward death, with Neutral Acceptance obtaining the highest mean ($M = 5.97$, $SD = 0.73$), while Death Avoidance obtained the lowest ($M = 5.13$, $SD = 1.47$). Perceived quality of life was rated as good overall ($M = 3.78$, $SD = 0.65$), with Social Relationships scoring highest and Physical Health lowest. Age showed a significant difference in perceived quality of life ($U = 314.0$, $p = 0.045$). Significant positive correlations were found between Fear of Death ($r_s = 0.335$, $p = 0.009$) and Death Avoidance ($r_s = 0.283$, $p = 0.028$) with quality of life. Findings suggest that mortality awareness may function adaptively, reinforcing meaning and social connectedness. The study highlights the importance of integrating psychosocial and culturally responsive interventions in holistic nursing care for middle-aged clients with chronic illnesses.

Keywords: Death attitudes, Quality of life, Middle Adulthood, Chronic illness, Philippines

ID-26-P2-07

Awareness, Attitude, and Preventive Practices on Leptospirosis Among Young Adults in a Selected Barangay in the Province of Antique

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Abstract: Leptospirosis remains a significant public health concern in the Philippines, particularly in flood-prone areas. In 2024, the Department of Health recorded 7,234 cases nationwide, reflecting a 19% increase from the previous year. In Antique province, 44 cases and three deaths were reported from January to August 2024. Despite these data, limited barangay-level evidence exists regarding awareness, attitude, and preventive practices (AAP), especially among young adults. This study assessed the AAP on leptospirosis among young adults in Barangay San Angel, San Jose, Antique. A descriptive–correlational design was employed with 100 young adults in the selected barangay. Data were collected using the adapted questionnaire by Orencio et al. (2016). Data were analyzed using Frequencies and Percentages, Mean, Standard Deviation, Mann–Whitney U Test, and Spearman’s rho. Results showed respondents had high knowledge (8.04/10, 80.4%), positive attitudes (3.42), and moderate preventive practices (2.58). Knowledge significantly differed by sex and education, with females and college-level respondents scoring higher ($p < 0.05$), while attitudes and practices were similar across groups. Spearman’s rho revealed a moderate positive correlation between knowledge and attitude ($r = .371$, $p < 0.001$), a weak but significant correlation between knowledge and practices ($r = .240$, $p = .016$), and no significant correlation between attitude and practices ($r = .186$, $p = .063$). These findings indicate that higher awareness supports positive attitudes, but consistent preventive practices are limited by structural and environmental factors. Strengthened community-based health education and resource support are recommended to improve adherence to leptospirosis prevention measures.

Keywords: Leptospirosis, Awareness, Attitude, Preventive Practices, Young Adults

ID-26-P2-08

From Field to Framework: A Strategic Farmer-Centric Approach (R.I.C.E.) to Sustainable Rice Productivity in Kedah

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Abstract: Rice is central to Malaysia's food security and rural economy, particularly in Kedah, the nation's main rice-producing state. Despite decades of policy intervention and institutional support, productivity remains below target, with the national average yield at 3.77 tonnes per hectare and Kedah recording only 2.55 tonnes per hectare compared to the national goal of 7 tonnes per hectare (Department of Agriculture Malaysia, 2024). This gap highlights inefficiencies in farm-level planning, fragmented institutional coordination, and limited adaptive capacity among farmers. A previous 2015 study by Universiti Utara Malaysia (UUM) and the Muda Agricultural Development Authority (MADA) strengthened institutional governance but revealed ongoing behavioural and operational challenges at the field level. Building on this, the present study aims to identify key challenges and formulate best-fit, farmer-centric strategies to enhance rice yield and sustainability in Kedah. Using a qualitative, evidence-based approach, Focus Group Discussions (FGDs) will be conducted with farmers and institutional stakeholders from MADA and PPK to examine current practices, constraints, and success factors. Thematic findings will be synthesised using SWOT and TOWS analyses to develop actionable strategies and practical recommendations. The target groups include rice farmers, MADA officers, and PPK staff directly involved in farm planning and management. Expected outputs include a Farmer-Centric Action Framework (R.I.C.E. Framework) and proposed training module concepts for capacity building. The outcomes will improve farm-level planning, strengthen institutional coordination, and promote sustainable agricultural practices aligned with the Madani Economy and Sustainable Development Goals (SDG 2, 8, and 12).

Keywords: Rice farmers, Farmer-centric strategy, Action plan framework, Rice yield, And sustainability

ID-26-P2-09

Digital Transparency, Consumer Trust, and Sustainable Consumption: A Conceptual Framework for ASEAN Economies

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Abstract: In the digital economy, green marketing has evolved from symbolic environmental communication into a data-driven and transparency-oriented mechanism capable of shaping sustainable consumer behaviour. This conceptual paper examines the role of green digital marketing in influencing sustainable consumption behaviour in ASEAN economies, with particular emphasis on the mediating role of consumer trust and the moderating effect of eco-label counterfeiting in digitally heterogeneous markets. As consumers increasingly rely on social media, mobile platforms, and algorithmic recommendations for purchasing decisions, skepticism toward environmental claims have increased, especially in emerging Southeast Asian contexts characterized by uneven regulatory enforcement and varying levels of digital literacy. Grounded in the Theory of Planned Behaviour and trust-based consumer behaviour models, this study develops an integrative conceptual framework that positions green digital marketing as an interactive system combining persuasive communication with digital transparency mechanisms, such as QR-code traceability, blockchain-based authentication, and real-time supply chain disclosure. The framework explains how these technologies could reduce the negative effects of fake eco-labels, strengthen perceived behavioural control, enhance consumer trust, and ultimately increase sustainable purchase intentions. By synthesizing insights from digital marketing, sustainability governance, and behavioural science, this paper advances green marketing theory by reconceptualizing digital marketing not only as a promotional instrument but as a trust-building and transparency-enabling mechanism. The proposed framework provides strategic implications for firms, digital platforms, and policymakers seeking to promote Responsible Consumption and Production (SDG 12) and sustainable development across ASEAN economies.

Keywords: Digital Marketing, Trust, Eco-Label Counterfeiting

ID-26-P2-10

Comparative Analysis of Skilled Migration Regimes in Asia: The Cases of Korea, Thailand, and Japan

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Abstract: This study comparatively examines how skilled migration policies are institutionally designed in Asian countries under the structural pressures of low fertility, population aging, and industrial upgrading. Focusing on South Korea, Thailand, and Japan, it identifies distinct models of strategic migration policy by analyzing the institutional design and settlement pathways of high-skilled visa regimes. The analysis centers on Korea’s Top-Tier Visa, Japan’s Highly Skilled Professional Visa, and Thailand’s SMART and Long-Term Resident (LTR) visas. Using a three-dimensional framework—selection criteria, residence stability, and permanent residence linkage—it finds that all three countries redefine high-skilled migrants as strategic assets for industrial transformation and innovation. However, their institutional approaches diverge. Korea has developed a “settlement-oriented elite selection model,” combining strict absolute criteria with expedited access to permanent residency. Japan adopts a “managed and staged settlement model” based on a points system that enables gradual status advancement. In contrast, Thailand maintains a “conditional long-term residence and circulation model,” expanding residence stability while limiting automatic transition to permanent residency. These differences demonstrate that, despite similar demographic and industrial pressures, strategic migration policy varies according to national context and policy traditions. By typologizing skilled migration regimes in Asia through institutional design and settlement pathways, this study offers a comparative legal perspective on strategic migration governance in aging societies.

Keywords: High-Skilled Migration; Strategic Migration Policy; Settlement Pathways; Talent Visa Regimes; East Asia Comparative Study

ID-26-P2-11

An Investigation of Fish Species Diversity Using Trap Sampling at Different Time Periods in Khlong Na Thap Chana District, Songkhla Province

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Abstract: A study on fish diversity and species distribution was conducted in Khlong Na Thap, Chana District, Songkhla Province. The methodology involved using gillnets during two specific time intervals: 09:00 pm – 06:00 am and 01:00 am – 08:00 pm over a period of three days. Water quality testing, including pH, temperature, chlorine levels, and calcium carbonate, were also monitored. The results demonstrated a clear correlation between fish abundance and time periods. The highest volume of fish was recorded during the 09:00 pm – 06:00 am interval, characterized by an average water temperature of 29°C and a chlorine level of 0.05 mg/L. These conditions were found to be optimal for fish, resulting in increased biological activity and wider distribution throughout the area. Conversely, during the

01:00 am – 08:00 pm interval, few to no fish were captured. During this period, the average water temperature was 27°C, and the chlorine level rose to 0.1 mg/L. This increase in chlorine may negatively impact the respiratory systems and behaviors of the fish, causing them to avoid or migrate away from the study site. Furthermore, environmental factors such as seawater intrusion and lunar phases influenced water salinity, which subsequently affected fish behavior and distribution. In conclusion, the abundance and diversity of fish species in Khlong Na Thap are significantly dependent on fluctuating water quality and specific time periods.

Keywords: Water Quality, Gillnets, Abundance, Diversity, Environmental

ID-26-P2-12

Recommendations from Financial Organization Leaders on Poverty Management in Pattani Province

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Abstract: This qualitative study examines the underlying drivers of poverty and strategic management approaches in Pattani Province from the perspective of financial organization leaders. Utilizing a phenomenological approach, the research conducted semi-structured in-depth interviews with 10 key informants comprising executives from local Islamic cooperatives. The analysis is structured around three analytical pillars: situational and structural constraints, institutional mechanisms and strategies, and policy recommendations for sustainability. The findings reveal that systemic poverty in the region is driven by a complex interplay of limited capital access and ingrained structural inequalities. To address these challenges, Islamic cooperatives employ specialized financial mechanisms grounded in Sharia principles, which serve as vital tools for socio-economic empowerment. The study concludes that sustainable poverty alleviation requires a collaborative framework between financial institutions and the public sector. These results highlight the critical role of localized financial leadership in bridging resource gaps and fostering long-term community resilience through culturally-aligned policy interventions.

Keywords: Leadership, Poverty, Financial Organization, Leaders

ID-26-P2-13

The Cost of Assimilation: Historical "Thaification" and the Loss of Linguistic Capital in the Sadao-Bukit Kayu Hitam Trade Corridor

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Abstract: During the mid-20th century, Thailand's "Thaification" policies, fueled by Cold War-era "Red Scare" anxieties and the nationalist mandates of the Plaek Piboonsongkram administration, led to the systematic suppression of Chinese language education and dialect use among minority communities, creating a significant rift in cultural transmission in the border district of Sadao, Songkhla, especially when contrasted with the largely intact heritage maintenance of the neighboring Malaysian Chinese diaspora. This paper examines the long-term consequences of this cultural erosion through the lens of Sustainable Development Goals (SDGs), specifically Prosperity (Economic Growth) and Peace (Strong Institutions), by utilizing a mixed-methods approach to analyze the shift from a "Localized Dialect Identity" rooted in pre-communist folk traditions to a "Globalized Mandarin Identity" emerging among younger cohorts. By investigating how this modern Mandarin medium lacks the specific "Linguistic Capital" and nuanced "Bamboo Network" trust markers inherent in ancestral Teochew, Hakka, Hainanese, Hokkien and Cantonese dialects, the study explores how historical state-led assimilation may have inadvertently weakened the organic cross-border economic synergy of the Sadao-Bukit Kayu Hitam corridor, ultimately arguing that sustainable borderland development requires institutional frameworks that move beyond homogenization to recognize traditional intangible heritage as a critical asset for regional economic resilience and international partnership.

Keywords: Cultural Erosion, Thaification, Borderland Economics, Chinese Diaspora, Linguistic Capital

ID-26-P2-14

The Role of Women's Empowerment in Sustainable Tourism: A Systematic Review

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Abstract: Women play a significant role in sustainable tourism development. In Southeast Asia, women represent more than half of the workforce in the tourism sector; however, they earn less than their male counterparts, highlighting the ongoing gender inequality. To better understand this issue, it is important to examine existing research on women's empowerment in the context of sustainable tourism. This study conducts a systematic literature review to examine the role of women's empowerment in sustainable tourism. Relevant studies published between 2016 and 2026 were retrieved from the Scopus and Google Scholar databases. The extracted data were systematically evaluated and analyzed using thematic analysis. The review focuses on the key factors and impacts of women's empowerment in sustainable tourism, particularly across four dimensions: economic, social, psychological, and political empowerment. It also examines how women's empowerment contributes to the economic, social, and environmental aspects of sustainable tourism development. The findings revealed that key factors for women's empowerment are women's participation, skills and training, education, support from families, cultural identity and access to financial resources that resulted to their economic alleviation, cultural preservation, and environment responsibility. Furthermore, the study offers recommendations for future research and policy development aimed at strengthening women's empowerment in sustainable tourism, particularly in Southern Thailand and the broader Th

Keywords: Women's Empowerment, Sustainable Tourism, Systematic Review

ID-26-P2-15

Conceptualizing the Blockchain Traceability and Transparency as Drivers of Purchase Intention for Blockchain-Based Food Products in Malaysia

^{*1}
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Abstract: Ongoing food safety issues in Malaysia, including cases of contamination, mislabeling, and limited accountability, have raised serious concerns among consumers regarding the reliability of food products. These developments have underscored the importance of improving traceability and transparency across the food supply chain. In this context, blockchain technology has attracted increasing attention for its potential to provide secure, tamper-resistant, and easily accessible food information. This conceptual paper proposes a research framework that examines how blockchain traceability and blockchain transparency influence consumers' purchase intention toward blockchain-based food products in Malaysia, while also considering the roles of tech-savviness and health consciousness. The framework argues that blockchain traceability allows consumers to verify essential product attributes, such as origin, quality, safety, hygiene practices, ingredient information, and sustainability claims, thereby helping to reduce uncertainty and perceived risk. At the same time, blockchain transparency is expected to enhance consumers' understanding of food products by making information clearer and more comprehensible through blockchain-enabled platforms. The paper further suggests that consumer characteristics play an important role in shaping responses to these technological features. Health-conscious individuals are likely to place greater importance on detailed and reliable food information due to their concern for personal well-being, while tech-savvy consumers may be more willing and able to engage with digital systems and use blockchain-based information during their purchasing decisions. The proposed relationships are conceptually grounded in Signaling Theory, which explains how credible information cues can reduce information asymmetry, as well as in technology adoption perspectives such as UTAUT, which emphasize users' readiness to adopt new technologies. In addition, the Health Belief Model provides insight into how health consciousness influences food-related decision-making. For future research, this paper proposes a quantitative survey of Malaysian consumers, with structural equation modeling used to empirically test the framework. Overall, the study offers a foundation for future empirical work and provides practical insights for food industry stakeholders and policymakers seeking to strengthen consumer trust and encourage adoption of blockchain-based food products in Malaysia.

Keywords: Blockchain Technology, Transparency, Traceability, Signaling Theory, UTAUT, Food Industry

ID-26-P2-16

Factors Influencing Consumers' Purchase Intention toward Upcycling Products: The Roles of Perceived Value and Environmental Self-Identity

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Abstract: This quantitative research investigates the influence of perceived value and environmentally self-identity on consumers' purchase intention toward upcycling products, which are products created by transforming waste materials into higher-value items. The sample consisted of 385 consumers who were interested in upcycling products, selected using purposive sampling. Data were collected through online questionnaires distributed via social media platforms and recycling-related communities. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to analyze the general characteristics of respondents, while multiple regression analysis was employed to test the research hypotheses. The results indicated that most respondents were female, aged between 30 and 39 years, held a bachelor's degree, and worked as government officers or private employees. The overall level of perceived value toward upcycling products was rated at the highest level. Among the five dimensions of perceived value, product value showed the highest mean score, followed by conditional and cognitive value, emotional value, price value, and social value. The hypothesis testing results revealed that product value, conditional and cognitive value, social value, and price value significantly influenced consumers' purchase intention toward upcycling products at the 0.05 significance level, while emotional value showed no significant effect. Additionally, environmentally self-identity significantly influenced purchase intention. The findings suggest that consumers with strong environmental self-identity and high perceived value of product quality and usefulness are more likely to purchase upcycling products. These insights can support entrepreneurs and marketers in developing strategies to promote environmentally friendly products and expand sustainable consumption in the green market.

Keywords: Perceived value, Environmentally Self-identity, Purchase Intention, Upcycling products

GROUP 3 PLANET

ID-26-P3-01

Carbon Sequestration and Physiochemical Characteristics of Soil in the Tidal Saltmarsh Ecosystem, Bansbaria, Chattagram

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Abstract: Tidal salt marshes are globally recognized as important blue carbon ecosystems due to their ability to capture and store large amounts of atmospheric carbon within waterlogged soils. In Bangladesh, saltmarsh ecosystems are widely distributed along low-energy coastal and estuarine zones. This study aims to assess the potential soil organic carbon (SOC) stock and associated physiochemical characteristics of soils in the tidal saltmarsh ecosystem of Bansbaria, Chattagram. A total of 45 soil samples were collected from 15 locations in the three depth layers. SOC was estimated by the Walkley and Black wet oxidation method, and the physical and chemical properties, such as pH, EC, soil texture, macronutrients (N, P, K, and S), etc., were determined following standard procedures. Soil organic carbon storage at each depth was quantified, and statistical methods such as correlation analysis and Principal Component Analysis (PCA) were used to determine the significant factors that affect SOC distribution. The mean SOC stock of the whole profile (0–60 cm) ranged between 310 and 527 Mg ha⁻¹, where SOC content in the topsoil layer depth was higher (159.5 Mg C ha⁻¹). SOC decreased continuously with depth. SOC exhibits an apparent correlation with organic matter content, bulk density, texture, salinity, and nutrient status of soils among the different profiles, in which clay fraction and salt gradient were more important factors for carbon accumulation. The study highlights that the tidal saltmarsh soils of Bangladesh have a high capacity for carbon sequestration and emphasizes their importance in national strategies for climate change mitigation.

Keywords: Soil Organic Carbon (SOC); Tidal Saltmarsh; Macronutrients; Climate Change.

ID-26-P3-02

Perceived Impacts of Urbanization on Hinterland Peri-Urban Areas: Opportunities Risks and Challenges for Sustainable Development

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Abstract: This research article aims to examine perceptions of the impacts of urbanization on Hinterland peri-urban areas of Pattani City using a qualitative research methodology. The unit of analysis is at the community level, specifically the peri-urban communities located behind the Pattani port. The study area comprises Talubo Peri-Urban Area, Don Rak Peri-Urban Area, and Rusamilae Peri-Urban Area in Pattani Province. Data were collected from both secondary and primary data. Secondary data were obtained from research reports, books, and academic articles, while primary data were collected through in-depth interviews with 21 key informants, including municipal administrators, community leaders, and local residents. Qualitative data were analyzed using content analysis with the ATLAS.ti software. The results indicate that urbanization in all three Hinterland peri-urban areas has occurred rapidly, with development patterns concentrated along major roads connected to transportation networks, particularly Thailand's Highway No. 42. The factors driving urbanization in these peri-urban areas include: (1) educational institutions, (2) deep-sea fishing activities, (3) local market systems, and (4) residential development. Regarding perceptions of urbanization impacts, positive effects include: (1) improved educational systems, (2) increased access to healthcare services, (3) expanded employment opportunities, and (4) the emergence of local businesses initiated by younger generations. However, negative impacts were also identified, including: (1) environmental pollution, (2) flash flooding in abandoned agricultural areas, (3) high living costs, and (4) social and cultural changes. The approach to sustainable urban development suggests that peri-urban areas should be developed by emphasizing urban design that benefits local younger generations, alongside environmentally friendly and community-oriented urban planning.

Keywords: Urbanization, Hinterland, Peri-Urban, Sustainable Development, Pattani

ID-26-P3-03

Geospatial Decision-Support for Thailand's Clean Energy Transition: Optimizing Solar and Wind Energy Sites

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Abstract: To facilitate Thailand's transition to a low-carbon economy, it is crucial to strategically optimise the deployment of its renewable energy resources. Due to their inherent intermittency, the stochastic nature of solar and wind resources hinders their spatially optimal deployment. This study proposes a robust, data-driven framework for planning major renewable energy zones in Thailand by integrating Geographic Information Systems (GIS) and Multi-Criteria Decision Making (MCDM). The Analytic Hierarchy Process (AHP), a structured method within the MCDM framework, was employed to guide the siting of solar and wind energy resources based on expert-driven climatological, topographical, and environmental criteria. The study found that climatological factors are key, particularly when using high-resolution solar irradiance and wind speed data at a hub height of 200 m. The resulting suitability maps revealed distinct spatial trends, with highly viable solar zones (global horizontal irradiance GHI > 5 kWh/m²/day) abundant in the Central, Northeastern, and Northern regions, covering nearly 12,000 km² with site areas ranging from 0.6 km² to 2,000 km². Conversely, high-potential wind zones (wind speed > 10 m/s) are limited, occurring primarily in the Central and Northeastern corridors, and cover just 252 km². These findings offer a first insight into the unexplored potential of these resources and provide energy practitioners and policymakers with a validated roadmap to optimise land use, maximise energy output, and minimise environmental conflicts, supporting Thailand's clean and sustainable energy development goals.

Keywords: Renewable Energy, GIS, MCDM, AHP, Resource Assessment, Thailand

ID-26-P3-04

Performance Analysis of a Solar PV System for Industrial Rooftop Applications in the EEC of Thailand: A Case Study of PTTGC 4 Rayong

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Abstract: The Eastern Economic Corridor (EEC) of Thailand is a flagship hub of industries with the mission of promoting economic development in three eastern provinces of Thailand. Amongst its priorities, the EEC plans the creation of a Livable Smart City with low carbon emissions. Aligned with the objectives of the EEC, solar PV systems in industrial rooftop applications can play a vital role in meeting industry energy demands, while reducing greenhouse gas emissions. This study presents a performance analysis of a large-scale industrial rooftop solar PV system by selecting the PTTGC 4 facility in Rayong as a case study for the EEC region. A total rooftop area of 10,280 m² was modelled in PVSyst (Version 7.4.7) to evaluate the power generation and performance analysis of a grid-connected PV system under the local climatic conditions (Meteonorm 8.1 data, Rayong, 12.69°N, 101.15°E). The optimized system arrangement produced an installed capacity of 2.342 MWp using 3,808 monocrystalline modules along with 19 inverters at a tilt angle of 30°. Simulation results show that an annual energy output of 3.573 GWh, with an annual specific yield of 1,526 kWh/kWp and a high-performance ratio of 87.43%, indicating feasible irradiation conditions and efficient system design. Loss analyses indicate thermal losses (6.09%) and inverter losses (1.68%), reflecting strong operational reliability for PV deployment in the EEC. Rooftop solar PV systems can offset the grid consumption in energy-intensive industries in the region, thereby contributing to emissions mitigation and supporting Thailand's industrial decarbonization drive. The results demonstrate that solar PV rooftop utilization in industrial estates within the EEC represents a technically feasible and scalable pathway for reducing greenhouse gas emissions while increasing on-site renewable energy penetration. This case study provides an insight into a replicable framework for PV-based decarbonization evaluations in similar industrial settings across Southeast Asia.

Keywords: PVSyst, Performance Analysis, Solar PV, Energy Loss, Industrial Rooftop

ID-26-P3-05

Development of a Closed-Loop Multistage Purification System for High-Viscosity Adhesive Wastewater: A Sustainable Approach for Industrial-Community Coexistence

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Abstract: Wastewater generated from the manufacturing of water-activated adhesives presents a significant environmental challenge due to its complex composition and recalcitrant nature. This effluent, originating from the reactor washdown process, is characterized by high-viscosity gels, semi-liquid sludge, and a diverse array of dissolved chemicals from acrylic and starch synthesis. With Chemical Oxygen Demand (COD) concentrations ranging from 5,000 to 10,000 mg/L, the wastewater exhibits persistent adhesive properties across various physical states, necessitating a specialized treatment framework.

This study proposes a customized multistage purification process that dynamically assesses the physical, chemical, and biological properties of the wastewater at each treatment phase. By implementing adaptive treatment conditions tailored to the evolving state of the contaminants, we achieved a final effluent with a COD value below 20 mg/L. This high-purity water is subsequently reclaimed and reused within the production cycle, establishing a closed-loop system. The implementation of this technology not only mitigates the environmental footprint of adhesive manufacturing but also restores the local ecosystem by eliminating industrial pollution. Ultimately, this research demonstrates a scalable model for sustainable technology that fosters a harmonious relationship between industrial advancement and community environmental preservation.

Keywords: Wastewater treatment, Water-activated adhesives, Multistage purification, Wastewater reclamation, Sustainable technology

ID-26-P3-06

A Comparative Study of the Thermal Properties of a Developed Natural Extract-Based Pain-Relief Gel and Standard Commercial Pain-Relief Gel Products

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Abstract: This research investigated and compared the thermal properties of four locally-developed hot/cold gel formulations derived from natural raw materials: Aloe Vera/Cucumber, Tapioca Starch, Salted Stir-fry Starch, and Sugar-Salt Stir-fry Starch. These formulations were evaluated against a standard commercial gel to provide a cost-effective, eco-friendly, and chemical-free alternative for pain management in elderly and athletic populations.

The methodology focused on determining the specific heat capacity (c) using the principle of heat equilibrium, with a standard Aluminum 6061 as the medium. Heat retention capabilities were also analyzed. The results indicated that the standard gel possessed an average specific heat capacity of 1.08 0.11 with a retention time of 3 hours 45 minutes. In comparison, the developed gels—Aloe Vera/Cucumber, Tapioca Starch, Salted Starch, and Sugar-Salt Starch—exhibited specific heat capacities of 0.92 0.056, 1.14 0.17, 1.02 0.075, and 0.88 0.026, respectively. Their respective heat retention durations were 3:18, 3:34, 2:46, and 2:31 hours.

The analysis demonstrated that the Tapioca Starch gel was the most effective formulation. Its specific heat capacity was 5.6% higher than that of the standard gel, indicating superior thermal absorption. Furthermore, its retention duration of 3 hours 34 minutes closely aligned with the commercial standard, with a marginal difference of only 11 minutes. Due to its accessibility, low production cost, and high safety profile, Tapioca Starch gel serves as a highly viable natural alternative to conventional pain-relief products.

Keywords: Thermal Properties, Specific Heat Capacity, Tapioca Starch Gel, Heat Retention, Natural Pain-Relief.

ID-26-P3-08

A Comparative Study of Velocity Measurements Between GPS Sensors, Mobile GPS, and Physical Speed to Evaluate Accuracy and Operational Limitations.

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Abstract: This study aims to compare GPS-measured velocities with actual physical speeds and to evaluate positional accuracy (latitude and longitude) relative to a mobile GPS reference, while identifying the operational limitations of these sensors in real-world applications. The experimental framework evaluated three GPS models Ublox NEO-6M, Ublox NEO-7M, and L86-M33 tested on a motorcycle at controlled speeds of 30, 40 and 50 km/h. The results indicated that the L86-M33 sensor was the most accurate, providing mean speeds closest to the physical values at 28.36, 38.54 and 47.53 km/h, respectively. This was followed by the Ublox NEO-7M (27.31, 37.06 and 47.42 km/h) while the Ublox NEO-6M exhibited the highest margin of error, measuring only 26.65, 35.99 and 45.15 km/h. Furthermore, in comparison to the reference point (8.67542° N, 99.94793° E), the L86-M33 achieved the highest precision at 8.675335° N, 99.94792167° E, followed by the Ublox NEO-7M (8.675739° N, 99.947954° E) and the Ublox NEO-6M (8.65021° N, 99.88142° E). Notably, slight fluctuations in geographic coordinates were observed as the velocity increased. In conclusion, the L86-M33 demonstrated superior efficiency and accuracy in both velocity measurement and geographic positioning among the tested models. these findings offer valuable insights into the performance and constraints of each GPS sensor, serving as a critical guideline for hardware selection and a foundation for future developments to enhance satellite-based positioning precision.

Keywords: GPS Sensor Performance , Velocity Measurement Accuracy , Positional Precision , Comparative Analysis , L86-M33.

ID-26-P3-09

Study on the Heating Efficiency of Polyimide Electric Heating Films and Thermal Storage Performance Evaluation of Thermal Conductive Gels

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Abstract: This research aims to investigate the heating efficiency of polyimide electric heating films and evaluate the thermal performance of conductive gels. The study is divided into two parts: 1) analyzing the relationship between electrical potential (1–12 V) and the surface temperature of the polyimide film, and 2) analyzing the heat transfer efficiency by comparing the electrical power input with the actual thermal power absorbed by the gel. The results indicate a clear linear correlation between the electrical potential and the surface temperature. Over a heating duration of 300 seconds, the maximum temperature increased from 31.00°C to 102.25°C as the voltage was adjusted from 1 V to 12 V. Regarding the thermal performance evaluation at 6 V and 12 V, the heat transfer efficiencies were found to be 69.27% and 56.44%, respectively. In conclusion, the polyimide heating film demonstrates high thermal stability and precise responsiveness to voltage control. For medical heat compression applications, an electrical potential of 6 V is identified as the optimal level. This setting provides a maximum temperature of 52.97°C, which is within the safe range for skin contact to prevent burns, while maintaining the highest heat transfer efficiency. These findings support the potential development of polyimide-gel integrated systems as energy-efficient and safe medical devices.

Keywords: Polyimide heating film, Thermal conductive gel, Heat transfer efficiency, Medical heat compression device

ID-26-P3-10

The magic senser cane project

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Abstract: This study was developed a sensor-based smart cane designed to reduce the risk of accidents for visually impaired individuals and elderly people with visual limitations. The project combines assistive technology with practical design to improve mobility safety and independence. The system used high-performance sensors that can accurately detected obstacles within a predetermined range, allowing users to receive timely warnings and avoid potential hazards. The smart cane continuously scans the area in front of the user. When an obstacle is detected within the set distance, the device provides alerts through sound and vibration. This dual-alert system ensures clear notifications in different environments, including noisy surroundings. The cane is also lightweight and ergonomically designed for comfortable daily use. A key feature of this project is its commitment to sustainability. The cane is constructed using recycled and environmentally friendly materials, reducing environmental impact while maintaining durability and strength. This approach highlights the importance of combining innovation with responsible resource use. Testing results show that the smart cane effectively reduces the likelihood of collisions, especially within a detection range of up to one meter. Additionally, the project emphasizes affordability by using cost-effective components without compromising quality, making the device accessible to more users. Overall, this innovation enhances mobility, increases independence, and improves the overall quality of life for users, while promoting safety, sustainability, and accessibility.

Keywords: Cane, Sensor

ID-26-P3-11

Structural Modification of Water Hyacinth Fibers through Lignin and Hemicellulose Removal for Biodegradable Bioplastic Plant Pots

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Abstract: Water hyacinth is an invasive aquatic weed that rapidly proliferates in Thailand's water bodies, causing significant ecological and environmental impacts. However, it is a lignocellulosic biomass primarily composed of cellulose, hemicellulose, and lignin, which can be utilized for the development of sustainable bio-based materials. This study aimed to investigate the structural components of water hyacinth and apply the findings to the production of biodegradable bioplastic plant pots. The fibers were chemically treated to partially remove lignin and hemicellulose in order to increase the relative cellulose content, which serves as the main structural component responsible for mechanical strength. The treated fiber powder was blended with gelatin at a ratio of 2:1 by weight and compared with a 1:1 ratio. The results demonstrated that the 2:1 ratio provided superior mechanical strength and structural stability, whereas the 1:1 ratio exhibited brittleness and reduced durability. In water immersion tests, the material began to soften and swell within 3 days and showed significant tearing and structural deterioration within 7 days. In soil burial tests conducted over 15 days, clear biodegradation was observed, characterized by noticeable softening and fragmentation of the material. These findings indicate that the developed bioplastic possesses adequate functional stability during initial use while maintaining the ability to biodegrade naturally within a relatively short period. Therefore, this material shows strong potential for environmentally friendly plant pot applications and value-added utilization of water hyacinth biomass.

Keywords: Water Hyacinth, Lignocellulosic Biomass, Lignin Removal, Biodegradable Bioplastic

ID-26-P3-12

Development of anthocyanin-rich Sang Yod rice (*Oryza sativa* L.) lip oil as a natural cosmetic colorant

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Abstract: The increasing demand for natural cosmetic products has driven interest in plant-derived pigments as alternatives to synthetic colorants. Sang Yod rice (*Oryza sativa* L.), a traditional Thai rice variety rich in anthocyanins, represents a promising natural source of bioactive pigments with potential applications in cosmetic formulations. This study aimed to develop a natural lip oil formulation using anthocyanin-rich pigment extracted from Sang Yod rice and to evaluate its physicochemical and biological properties. The lip oil formulation was assessed for organoleptic characteristics, color, homogeneity, dispersion, and pH stability. In addition, its antimicrobial, anti-inflammatory, and hemolytic activities were evaluated. The results showed that the lip oil formulation exhibited good physical stability, satisfactory sensory properties, and no phase separation during the evaluation period. The formulation showed antibacterial activity with inhibition zone diameters of 10.5 ± 0.05 mm against *Staphylococcus aureus* ATCC 25922 and 9.70 ± 0.05 mm against *Escherichia coli* ATCC 25922, which were higher than those of the tested commercial lip products. Furthermore, nitric oxide production was reduced by 15.11-58.70% with treatments containing 250-500 $\mu\text{g/mL}$ of the lip oil formulations ($p < 0.05$), indicating its anti-inflammatory potential. These findings suggest that anthocyanin-rich extract from Sang Yod rice can be effectively utilized as a natural colorant and functional ingredient in lip oil formulations. The developed product provides a promising natural alternative for cosmeceutical applications while reducing reliance on synthetic additives.

Keywords: Antioxidant, Anti-inflammatory, Antibacterial, Cosmetic foemulation, *Oryza sativa* L.

ID-26-P3-13

Anchor Institutions for a Blue Future: A Conceptual Framework for University-Led Sustainable Development in Coastal Southern Thailand

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Abstract: This conceptual paper investigates the role of higher education institutions (HEIs) in southern Thailand as catalysts for a sustainable blue economy, directly contributing to the Planet (SDG 14: Life Below Water) and Prosperity (SDG 8: Decent Work and Economic Growth) dimensions of the Sustainable Development Goals. As the region's economy is heavily reliant on marine resources and tourism—sectors increasingly vulnerable to climate change and environmental degradation—there is an urgent need to transition toward sustainable practices. This paper proposes a conceptual framework positioning universities not merely as academic observers but as active "anchor institutions" driving regional sustainability transformation. Drawing upon theoretical lenses from ecological economics and community-based innovation, the study synthesizes literature on blue economy principles, sustainable tourism management, and transformative education. The proposed framework integrates three interconnected pillars: (1) Curriculum Co-creation for Green Competencies, which advocates for partnerships between universities, local tourism operators, and fishing communities to develop specialized curricula focused on marine conservation, eco-tourism management, and circular economy practices; (2) University-Led Community Enterprise Incubation, where HEIs establish living labs and business incubators supporting local entrepreneurs in developing sustainable seafood products and low-impact tourism ventures; and (3) Policy-Research Nexus for Coastal Stewardship, emphasizing the role of academic research in informing evidence-based environmental policy and fostering public-private-community partnerships for marine resource management. This conceptual model argues that by reimagining their civic mission, universities in southern Thailand can simultaneously address graduate employability, stimulate inclusive economic growth, and ensure the long-term ecological health of the Andaman Sea and Gulf of Thailand coastlines. The paper concludes by offering a research agenda for empirically validating this transformative role.

Keywords: Blue Economy, Higher Education, Sustainable Tourism, Anchor Institutions, Coastal Community Development

ID-26-P3-14

A Study of the Effects of Cassia siamea Leaf Extract on the Coagulation Delay of Natural Rubber Latex

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Abstract: This study examines the effectiveness of Cassia siamea leaf extract in delaying the coagulation of natural rubber latex (NRL), with the goal of identifying a sustainable natural alternative to synthetic chemical additives. The extract was prepared by fermenting 6 grams of finely chopped Cassia siamea leaves in 15 ml of clean water within a glass jar sterilized with hot water. The mixture was tightly sealed in the glass jar and left at room temperature overnight to ensure optimal bioactive extraction. The resulting ferment was subsequently tested with 15 ml samples of fresh NRL at varying concentrations of 0.15 ml, 0.30 ml, and 0.45 ml respectively, against a control group without additives extract for comparative analysis. Systematic monitoring indicated that Cassia siamea leaf extract effectively inhibited microbial growth, a key factor influencing protein aggregation and latex instability. Experimental results demonstrated that the concentration of 0.15 ml was the most effective, extending the coagulation time of the natural rubber latex to 3 hours, which was significantly longer than the control group. This study highlights the potential of Cassia siamea leaves as a natural, user-safe, and environmentally friendly latex coagulation retardant. The extract's antimicrobial properties contribute significantly to the inhibition of protein coagulation in fresh latex and offer a promising foundation for future applications in the agricultural and fresh latex production industries. By utilizing such botanical solutions, the industry can promote greener standards while reducing reliance on hazardous synthetic chemicals, ensuring both ecological sustainability and high-quality production outputs.

Keywords: Cassia Siamea, Natural Latex, Coagulation Delay, Natural Extract, Microbial Inhibition

ID-26-P3-15

Performance Evaluation of Shock-Absorbing FFB Chute/Slider

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Abstract: This project evaluates the efficiency of an impact-resistant slider designed to mitigate impact forces and minimize physical damage to oil palm fruits during the collection process, seeking to identify the optimal configuration for maximizing fruit protection while maintaining post-harvest quality. The experimental methodology utilized scaled-down simulation models with mass ratios ranging from 1:200 to 1:1000 (including 1:200, 1:400, and 1:1000) to accurately replicate real-world operational conditions. Testing involved releasing objects from specified heights to systematically compare the effects of a direct free fall against a controlled descent through a slider lined with shock-absorbing materials. Systematic monitoring indicated that the slider significantly reduces both the duration and peak intensity of impact compared to the direct fall. Experimental results demonstrated that the mechanism effectively dissipated kinetic energy, reducing physical damage measured on a scoring scale (0 = none, 1 = very low, 2 = moderate, and 3 = severe). While direct falls consistently resulted in Level 3 damage, the slider successfully lowered the impact to Level 2 or Level 1 depending on weight and height variables. This substantial mitigation of bruising and tissue damage confirms the mechanism's functional stability and robustness, providing a sustainable, practical solution for reducing post-harvest losses and enhancing agricultural productivity.

Keywords: Oil Palm, Shock-Absorbing Slider, Impact Mitigation, Fruit Quality, Agricultural Productivity

ID-26-P3-16

Soil Quality and Its Influence on Cempedak-Jackfruit Fruit Quality : A Case Study of Lung Wee Garden , Koh Yo, Songkhla.

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Abstract: This research aimed to: 1) study the physical and chemical properties of soil in Koh Yo that affect the growth of Cempedak-Jackfruit, and 2) analyze the relationship between soil nutrients and fruit quality, specifically sweetness and firmness. Data were collected from three designated locations: the flat middle garden (T1), the upland/hill area (T2), and the lower garden area (T3) at Lung Wee Garden, Koh Yo, Songkhla. Research instruments included the Hanna Soil Test Kit, a refractometer for Degrees Brix measurement, and sensory evaluation for firmness scoring. The results indicated that the soil pH in the study area ranged from 6.0 to 7.0, which is neutral and optimal for nutrient availability. The upland area (T2) exhibited "Excellent" levels of Potassium (K), while the highest Electrical Conductivity (EC) was found in the flat area (T1) at 102.67 ($\mu\text{S}/\text{cm}$). Regarding fruit quality, the average sweetness was exceptionally high at 30.13 °Brix, with the highest average recorded at T3 (lower garden) at 30.61 °Brix and individual pulses reaching up to 32.00 °Brix. In terms of firmness, all samples were at the over-ripe stage, resulting in a soft/mushy texture (Sensory Score = 3), which exceeded the measurement capacity of mechanical firmness testers. In conclusion, the neutral soil pH and the influence of mineral ions from the unique "three-water" ecosystem of Koh Yo directly contribute to the extraordinary sugar accumulation in Cempedak-Jackfruit. This high sweetness is a distinct quality hallmark of the area, despite the natural degradation of fruit firmness at peak maturity levels.

Keywords: Cempedak-Jackfruit, Soil Properties, Potassium, Degrees Brix, Koh Yo

ID-26-P3-17

The Results of the Study on Pimsen Mango (*Mangifera indica*) Peel Extract in Controlling Mealybugs

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Abstract: This project aimed to investigate the efficacy of tannin extract derived from Pimsen Mango peel in controlling mealybugs, which are significant agricultural pests that cause substantial damage to economic crops and agricultural productivity. The study utilized mango peel, an agricultural by-product from consumption, as a raw material for tannin extraction in order to enhance the value of agricultural waste and reduce reliance on synthetic pesticides. The extraction process involved washing the Pimsen mango peels, followed by drying and grinding them into a fine powder. The powdered mango peel was mixed with 95% ethanol at a ratio of 1:2 (w/v) and thoroughly agitated before being macerated for 24 hours. The mixture was subsequently filtered to separate the solid residue from the liquid phase, yielding a crude tannin extract from Pimsen mango peel. The obtained extract was diluted to various concentrations and evaluated for its insecticidal activity against mealybugs. Mortality rates were recorded and compared across different concentrations to assess the relationship between extract concentration and pest control efficacy. The results demonstrated that the tannin extract exhibited effective insecticidal properties, with higher concentrations resulting in increased mealybug mortality. This study indicates that tannin extract from Pimsen mango peel has strong potential as a natural pest control agent, offering an environmentally friendly and safer alternative to conventional chemical pesticides.

Keywords: Pimsen Mango Peel , Mealybugs , Agricultural Pests , Natural Pest Control

ID-26-P3-18

The effects of using a pig vocalization recording device in a slaughterhouse

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Abstract: This project aims to design and develop a silencer device for pig vocalizations in slaughterhouses. The device is designed as a muzzle-style apparatus to reduce noise levels generated during the handling process. Excessive noise in these facilities is a critical issue that contributes to animal stress, impacts the health of workers, and causes noise pollution for the surrounding environment and communities. The prototype was developed with a focus on ergonomic usability, safety, and the selection of materials with high sound-absorption and containment properties. Its structure is engineered to fit the pig's snout securely without interfering with the primary operational procedures of the slaughterhouse. Experimental results demonstrate that the silencer significantly reduces vocalization noise levels compared to cases without the device. This reduction minimizes noise disturbance within the workspace, lowers stress levels for both animals and personnel, and enhances the overall working environment. This project demonstrates an integrated approach, combining acoustic physics with engineering design, to mitigate noise pollution in slaughterhouses. It serves as a viable foundation for further industrial development and provides a long-term solution for reducing community noise impact.

Keywords: Pig Vocalization , Noise Reduction, Slaughterhouse , Acoustic Engineering , Noise Pollution , Animal Welfare , Sound-Absorption Materials

ID-26-P3-19

Performance Testing Results of a Plastic Kite-Bow Leaf Cutting Machine

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Abstract: This project aims to develop a plastic kite-bow leaf cutting machine to replace the traditional cutting method using scissors, which is time-consuming and often produces kite-bow leaves with uneven widths that affect kite quality and sound, especially in competitions. The researchers designed and constructed the machine using plastic drinking water bottles as raw materials for producing kite-bow leaves. The machine's efficiency was tested by measuring sound levels and evaluating the straightness of kite-bow leaves with widths of 4 mm and 8 mm. The results showed that five 4 mm kite-bow leaves tested three times each produced an average sound level of 81.40 dB, while the 8 mm kite-bow leaves had an average sound level of 65.47 dB. Therefore, the 4 mm kite-bow leaves are more suitable for competitive kite flying. In terms of straightness, the 4 mm leaves achieved an average straightness of 99.6%, while the 8 mm leaves achieved 99.4% compared with commercially available plastic kite-bow leaves. The straightness depends on the shape of the plastic bottle used for cutting.

Keywords: Kite-Bow, Cutting, Plastic, Sound Level, Straightness

ID-26-P3-20

PM 2.5 Dust Collector that uses Electrostatic Precipitator

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Abstract: This project was developed in response to air pollution problems, particularly PM_{2.5} particulate matter, which has significant health impacts and has exceeded standard levels in many areas of Thailand. The objective of this project was to develop an innovative PM_{2.5} dust collector to test its efficiency in capturing PM_{2.5} particles within an experimental chamber. The device is compact and equipped with an air suction fan, a negative ion generator, and a dust sensor. An Arduino UNO board is used to control the system. The device operates by receiving dust concentration values from the GP2Y1010AU0F dust sensor module, which is capable of detecting PM_{2.5} levels. The measured dust values are then compared with the device's performance criteria. In this study, incense smoke was used to generate dust particles for testing inside a controlled experimental chamber. The experimental results showed that the device was highly effective in capturing PM_{2.5} particles. The PM_{2.5} concentration decreased rapidly within the first 2 minutes, from 900 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 29 $\mu\text{g}/\text{m}^3$ and continued to decrease over time. Within 10 minutes, the efficiency exceeded 99%. In conclusion, the developed electrostatic PM_{2.5} dust collector can significantly improve air quality inside vehicles, reduce health risks for passengers, and has potential for further development into innovative or commercial applications.

Keywords: PM 2.5, Electrostatic, Dust, A controlled experimental chamber

ID-26-P3-21

The Effects of Different Concentrations of *Leucaena* Leaf Extract on the Mortality Rate of *Aedes aegypti* Larvae

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Abstract: While once confined to tropical regions, Dengue Mosquitoes (*Aedes aegypti*) have aggressively expanded across many continents, emerging as a formidable global threat. As primary vectors for devastating diseases such as Dengue fever, Yellow fever, and Chikungunya, this species increasingly jeopardizes public health, particularly in Southeast Asia. This study presents an eco-friendly approach by utilizing Mimosine, a potent non-protein amino acid extracted from Lead Tree leaves (*Leucaena leucocephala*), as a natural alternative to hazardous chemical pesticides. Mimosine effectively disrupts essential protein synthesis and inhibits metabolic enzymes, leading to larval development arrest and fatal energy depletion. This research aimed to compare extraction methods (blending vs. grinding) and identify the optimal concentration for larval control. Results indicated that the grinding method yielded significantly higher efficacy. This was attributed to the fact that blending caused excessive rupture of cell walls, releasing polysaccharides such as pectin and hemicellulose. These substances formed a viscous mucilage or gel-like consistency, which trapped the active compounds and reduced the bio-availability and effectiveness of Mimosine. In subsequent trials using the ground extract at concentrations of 1%, 2.5%, 5%, and 10% (v/v), the findings demonstrated a statistically significant dose-dependent relationship within a 24-hour observation period. The 10% concentration achieved the highest mortality rate, while the control group showed no significant mortality. These results confirm that *L. leucocephala* extract is a highly promising, sustainable bio-agent for managing mosquito populations worldwide.

Keywords: *Leucaena leucocephala*, Mimosine, *Aedes* larvae, Dose-dependent mortality, Larvicidal activity

ID-26-P3-22

Natural Rubber Latex-Based Synthetic Leather Reinforced with Sugarcane Leaf Cellulose

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Abstract: This study aimed to develop eco-friendly synthetic leather from agricultural waste by utilizing sugarcane fibers as the primary raw material, thereby adding value to agricultural residues and mitigating environmental problems associated with sugarcane burning. The production process involved fiber extraction, sheet formation, and drying. During the forming stage, the dried sugarcane fiber sheets were coated with natural rubber latex mixed with 0.4% formic acid per liter of water, which functioned as a coagulant. Two types of synthetic leather were fabricated: single-layer and double-layer sugarcane fiber leather. Property testing indicated that both types exhibited good water resistance. The single-layer leather demonstrated lower elasticity but higher heat resistance compared to the double-layer leather. This is because the structure of the double-layer leather is less conducive to heat dissipation. Consequently, the single-layer leather is suitable for upholstery, such as cushion and sofa covers, while the double-layer leather is more appropriate for cushion covers or products that are not exposed to high heat. This study demonstrates that sugarcane fibers have the potential to be used in the production of eco-friendly synthetic leather. This material can be further developed for various industries, such as leather goods, textiles, or packaging. It serves as a new alternative that helps reduce long-term pollution from agricultural burning, utilizes agricultural waste effectively to prevent PM 2.5 dust from open burning, and can generate additional income for farmers.

Keywords: Synthetic leather; Sugarcane fiber; Formic acid; Natural rubber latex

ID-26-P3-23

Chitosan-Coated Water Hyacinth Paper for Copper(II) Ions Adsorption

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Abstract: This study investigated the efficiency of chitosan-coated water hyacinth paper for the removal of copper(II) ions from synthetic wastewater. Water hyacinth, an invasive aquatic plant contributing to water pollution, was utilized as the base material for paper production. Chitosan extracted from shrimp shell waste was applied as a coating to enhance the adsorption capacity of the prepared paper. The adsorbent was fabricated using chitosan coating concentrations of 10, 20, and 30 g/L and evaluated in synthetic wastewater containing initial copper(II) ions concentrations of 75, 100, and 150 mg/L. All experiments were performed in triplicate to ensure reliability. Copper removal efficiency was determined by comparing the color intensity of treated solutions with standard copper solutions at concentrations of 25, 50, 75, 100, 125, and 150 mg/L. The results indicated that at an initial copper(II) ions concentration of 75 mg/L, complete removal (100%) was achieved using paper coated with 20 g/L chitosan at a contact time of 60 minutes. Comparable performance was observed with 30 g/L chitosan-coated at contact times of 30, 60, and 90 minutes. At an initial concentration of 100 mg/L, the maximum removal efficiency (75.00%) was obtained with 20 g/L and 30 g/L chitosan coatings at contact times of 60 and 90 minutes. For an initial concentration of 150 mg/L, the highest removal efficiency (50.00%) was achieved using 20 g/L chitosan at contact times of 60 and 90 minutes and 30 g/L chitosan at contact times of 30, 60, and 90 minutes.

Keywords: Water hyacinth paper; Chitosan coating; Copper(II) ions adsorption; synthetic wastewater

ID-26-P3-24

Integrating Machine Learning with IoT Soil Sensors for Sustainable Land Management: A System Architecture Design

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Abstract: This paper proposes a system architecture for an AI-enhanced IoT soil sensing and analytics system designed to optimize sustainable natural resource management. The system integrates simulated environmental sensors measuring three main parameters—soil moisture, temperature, and electric conductivity (EC)—with a machine learning framework to analyze data and predict comprehensive soil health. Through a virtual prototyping approach, a functional data pipeline successfully streams real-time, fused sensor data to a monitoring dashboard, translating complex raw environmental data into actionable, agricultural insights and advice. To rigorously validate the analytical engine, SoilSage AI, powered by a Random Forest classifier, underwent strict generalization testing. The model was trained on a dataset encompassing specific environmental ranges—moisture (10.0 – 90.0%), temperature (8.83 – 43.68 °C), and EC (0.085 – 4.3 dS/m)—to ensure it actively learned underlying patterns rather than overfitting. At 5-fold cross-validation was implemented, where the dataset was separated into five distinct subsets, iteratively training the model on full while evaluating it on the unseen fifth. This method confirmed a robust, generalized predictive accuracy of 99.4%, with the minimal stability variance of $\pm 0.8\%$ across all iterations. Future work will focus on transitioning this validated virtual architecture into physical field deployment to actively prevent architectural resource mismanagement, optimize soil nutrient or fertilizer utilization, and promote scalable, data-driven precision agriculture.

Keywords: Machine Learning, Internet of Things (IoT), Random Forest, Precision Agriculture, Soil Management

ID-26-P3-25

Green Technology Orientation and SME Sustainability Performance: A Conceptual Framework for Thailand's Low-Carbon Transition

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Abstract: This conceptual paper examines the intersection of green technology orientation and sustainability performance among small and medium enterprises (SMEs) in Thailand, framed within the United Nations Sustainable Development Goals (SDGs). As SMEs constitute over 99% of Thai enterprises yet face disproportionate barriers in the low-carbon transition, understanding their strategic orientations toward sustainability has become critically urgent. This research addresses the question: How does green technology orientation influence the environmental, economic, and social sustainability outcomes of Thai SMEs? Drawing upon the resource-based view and dynamic capabilities theory, the paper develops a conceptual framework proposing that green technology orientation—encompassing adoption of clean energy systems, AI-enabled efficiency improvements, and circular economy innovations—positively influences sustainability performance through the mediating mechanisms of operational efficiency and organizational legitimacy. The framework is contextualized within Thailand's evolving policy landscape, including the Green Enterprise Indicator development and recent investment incentives for SME technology upgrading. The paper specifically focuses on the "Planet" and "Prosperity" dimensions of the SDGs, arguing that green technology orientation enables SMEs to simultaneously reduce environmental footprints (SDG 12, 13) while enhancing competitiveness and accessing green finance (SDG 8, 9). This conceptual work contributes to emerging literature on SME green transitions in Southeast Asia and offers propositions for empirical testing, with implications for policymakers designing support mechanisms and SME managers navigating decarbonization pressures within global supply chains.

Keywords: Green technology orientation, SMEs, sustainability performance, Thailand, low-carbon transition, SDGs

ID-26-P3-26

Development of a Standardized Salak Wine Production Process for the Ban Khok Maew Organic Salak Community Enterprise, Phatthalung Province, Thailand

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Abstract: Abstract: Salak (*Salacca zalacca*) is a tropical fruit with a high sugar content, distinctive flavour, and potential as a raw material for fruit wine production. However, studies on optimising processes and improving the quality of salak wine are limited. This research aims to enhance the salak wine production process by optimising the fermentation process to meet product standards. The objective was to develop a consistent quality salak wine production process for the Ban Khok Maew Organic Salak Community Enterprise in Phatthalung Province. This was achieved using enzymes to digest the salak pulp, increasing sweetness and reducing turbidity, followed by bentonite precipitation, microfiltration, chemical analysis of the salak wine according to the Thai Industrial Standard (TIS) 2/2546, product labelling development, and taste testing. This study evaluated the sensory characteristics and consumer acceptance of salak wine. The results indicated moderate to good acceptance, while panellists suggested improving salak aroma, sweetness, and flavour intensity to enhance overall product quality and consumer appeal. Furthermore, this has resulted in three positive impacts: 1) Economically, it helps increase farmers' income from processing salak by at least 20%; 2) Socially, it strengthens employment, cooperation, and integration between universities, local agencies, and communities, as well as fostering community innovators; and 3) Environmentally, it reduces agricultural waste from substandard salak produce and adds sustainable value to local resources.

Keywords: Salak wine, Fermentation process control, Enzyme treatment, Community enterprise, Value-added agricultural products

ID-26-P3-27

AGING LIFE: An Innovative Emergency Response Trainer for Cardiopulmonary Resuscitation (CPR) Education

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Abstract: Cardiac arrest remains a leading cause of mortality worldwide, with survival rates remaining below 10% despite advances in emergency medicine. The global incidence of cardiac arrest continues to increase, reaching approximately 55 cases per 100,000 population annually. In pediatric populations, incidence and survival outcomes vary significantly by age, with infants experiencing the highest risk and lowest survival rates. Meanwhile, Thailand is rapidly transitioning into an aging society, where older adults account for approximately 21.58% of the population. This demographic shift has contributed to a rising burden of cardiovascular diseases, resulting in an estimated five deaths per hour nationwide. Early cardiopulmonary resuscitation (CPR) performed by bystanders can increase survival rates by two to three times, while each minute of delay in initiating CPR decreases the probability of survival by 7-10%. This study investigates global cardiac arrest incident trends, age-related survival outcomes, and the effectiveness of structured CPR training using an innovative emergency response training system. The system was designed to improve CPR learning through interactive feedback and guided practice. The results show significant improvements in compression accuracy and compression rate after one month of training. In addition, participants reported high levels of satisfaction with the training system. However, considerable gaps in public knowledge and CPR training remain, particularly in Thailand, where a large portion of the population lacks basic first aid skills. Strengthening CPR education through accessible, engaging, and technology-supported training innovations may enhance bystander intervention and ultimately improve survival outcomes in cardiac arrest emergencies.

Keywords: Cardiopulmonary resuscitation (CPR), Cardiac arrest survival, Bystander intervention, Aging society, Life-saving skills

ID-26-P3-28

Techno-Economic Assessment of Solar Rooftop Photovoltaic with Battery Energy Storage System towards Net-Zero Energy Building: A Case Study of the Faculty of Nursing, Thaksin University, Thailand

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Abstract: The transition toward low-carbon and energy-resilient infrastructure has intensified interest in Net-Zero Energy Buildings (NZEBs) across Thailand. This study assesses the technical and economic feasibility of achieving NZEB operation at the Faculty of Nursing, Thaksin University (Phatthalung Campus) through the integration of rooftop and carport solar photovoltaic (PV) systems with a battery energy storage system (BESS). A total of 941.2 kWp of PV capacity and a 3.072 MWh BESS were modelled in PVsyst using hourly simulations based on local meteorological conditions and measured building load data. The simulations quantified energy production, performance ratio, loss mechanisms, grid exchange, and battery dispatch. The hybrid system produced approximately 969 MWh annually, fully offsetting the building's annual electricity consumption and reducing grid imports to nearly zero in most months. A discounted cash-flow analysis was performed using a 70:30 debt-equity structure, Thai time-of-use (TOU) tariffs, and cost assumptions aligned with current national benchmarks for PV and BESS deployment. The results indicate strong economic feasibility, with a benefit-cost ratio greater than one, positive net present value (NPV), an internal rate of return (IRR) exceeding the 7% discount rate, and a competitive levelized cost of electricity (LCOE) relative to commercial tariffs. The BESS improved load matching, reduced on-peak grid demand, and enhanced system reliability. Overall, the findings demonstrate that the proposed PV-BESS configuration enables both technical self-sufficiency and financial viability, offering a replicable pathway for NZEB implementation in university campuses and other institutional buildings in tropical regions.

Keywords: solar rooftop PV; battery energy storage system; net-zero energy building; techno-economic assessment

ID-26-P3-29

A project of 100-ton biogas plant for the supply of sustainable renewable energy (Biogas) in Tanzania

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Abstract: Rural communities in Tanzania widely depend on firewood and charcoal for cooking energy, causing deforestation, indoor air pollution, and increased greenhouse gas emissions. To address these challenges, decentralized biogas systems utilizing livestock manure have been introduced as a sustainable renewable energy (Biogas) solution. This study shows the implementation of community-scale biogas projects in two Vocational Education & Training Authority (VETA) in Arusha Region, Tanzania: VETA Oljoro (2024) and VETA Monduli (2025). Each site installed a 100-ton anaerobic digestion biogas plant designed to convert cattle manure into renewable energy and organic fertilizer. The system includes a 50-ton biogas storage tank and produces approximately 56 m³ of biogas per day with an average composition of CH₄ (≈70%), CO₂ (≈25%), and trace gases. The generated biogas is distributed through an on-site gas pipeline network to institutional kitchens equipped with large-scale biogas stoves, replacing conventional biomass fuels such as firewood and charcoal. In addition, the anaerobic digestion process produces nutrient-rich organic fertilizer, which can be utilized for local agricultural activities. To evaluate the climate mitigation potential, the project applied the UNFCCC CDM methodology AMS-III.D (Methane recovery in animal manure management systems). The analysis indicates that methane recovery and utilization from the 100-ton biogas system results in an estimated greenhouse gas emission reduction of approximately 68.6 tCO₂e per year.

Keywords: Renewable energy, Biogas plant, Sustainability, Organic fertilizer, CDM

ID-26-P3-30

Sustainable Removal of Phosphate and Arsenic from Water Using Ferro-Manganese Binary Oxide in Pakistan

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Abstract: Effective removal of phosphate and arsenic from water is essential for preventing deterioration of water quality. This study synthesized starch-stabilized ferromanganese binary oxide (FMBO-S) using a co-precipitation method to enhance phosphate and arsenic adsorption and investigated the governing mechanisms. Physicochemical characterization showed that starch loading created a loose and rough surface with enhanced mesopore distribution; the average pore diameter increased from 14.89 Å to 25.16 Å. FMBO-S exhibited homogeneous dispersity (PDI < 0.5) and significantly improved adsorption capacity compared with FMBO (61.24 vs. 28.57 mg g⁻¹). Adsorption data fitted well with the pseudo-second-order and Freundlich models, indicating chemisorption and multilayer adsorption processes. FMBO showed strong pH dependence, whereas FMBO-S maintained stable performance across a wider pH range due to ligand exchange mechanisms. XPS results confirmed the involvement of Fe and Mn species in phosphate and arsenic adsorption, with a greater contribution of Fe in FMBO-S. Competitive adsorption experiments revealed minimal interference from Cl⁻, NO₃⁻, and SO₄²⁻, while CO₃²⁻ significantly reduced removal efficiency. These findings demonstrate that FMBO-S is a promising, low-cost adsorbent for efficient phosphate and arsenic removal from aqueous systems.

Keywords: Phosphate; Arsenic; Adsorption; FMBO; Water Treatment

ID-26-P3-31

Improving Flotation Performance of Microbubbles Using Energy-Efficient Technology

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Abstract: Global warming caused by urbanization, industrialization, and population growth is leading to climate change and threatening our sustainable lives. As a response to this climate crisis, a best available technique(BAT) that minimizes the emission of existing pollutants and is also economical is required. The purpose of this study is to develop a low-energy micro bubble generator to reduce energy consumption in water treatment facilities and to evaluate its performance in comparison with dissolved air flotation(DAF) and coagulation-flocculation processes. The low-energy micro bubble generator consists of an air injector, a chamber, and a nozzle. The experimental results showed that the low-energy micro bubble generator generated micro bubbles of similar size to DAF at an air injection rate of 5 ml/min. In addition, the flocculant concentration experiments showed that the low-energy micro bubble generator had 1.3-2.5 times higher turbidity removal efficiency than DAF and coagulation-flocculation processes even with flocculant injection of 8 mg/L or less. These results suggest that the low-energy micro bubble generator is effective in removing suspended solids from water and is an optimal solution for reducing carbon emissions. This study is expected to contribute to the increased utilization of this technology in industrial sites.

Keywords: Low-energy, Best available technique, Micro bubble generator, DAF, Coagulation-flocculation processes

GROUP 4 PEACE

ID-26-P4-01

Structural Violence and State Legitimacy: Immigration Law Enforcement in the United States

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Abstract: This article examines state violence against immigrants in the United States through the lens of peace studies and critical political theory. It argues that this violence is not episodic but structural, rooted in immigration policy, institutional practice, and security discourse. Drawing on Johan Galtung’s concept of structural violence, Max Weber’s theory of the state’s monopoly on legitimate violence, and Chaiwat Satha-Anand’s critical scholarship alongside theories of Othering and securitization. The article shows how coercive practices come to appear normal and justified in the name of law and national security. Home raids, arrests, and detention do not always take the form of direct physical force, yet they generate fear and precarity, undermining human dignity in systematic ways. By framing immigrants as “Outsiders” or “Security threats,” the state widens the scope of acceptable coercion and blurs the line between law enforcement and harm. Even in a democratic society, such practices can persist with limited moral scrutiny when security is placed above human dignity. The article concludes by urging a rethinking of security, justice, and the limits of state power in contemporary democracies.

Keywords: Structural violence, Immigration law enforcement, Securitization, Othering, State legitimacy, Peace studies

GROUP 5 PARTNERSHIP

ID-26-P5-01

THE EFFECT OF ORGANIZATIONAL CULTURE ON JOB SATISFACTION OF PRIVATE SCHOOLS IN KENG TUNG TOWNSHIP

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Abstract: This study explores the effect of organizational culture on job satisfaction of private schools in Keng Tung Township. Organizational culture which encompasses transformational leadership style, norms and values and supportive practice, plays a critical role for the job satisfaction. A quantitative research design was employed, utilizing structured questionnaires distributed to 120 employees of private schools by using simple random sampling method. The collected data were analyzed using reliability analysis, descriptive statistics, correlation analysis and multiple regression analysis methods to examine the effect of organization culture on job satisfaction of private schools in Keng Tung Township. The findings reveal that transformational leadership style, norms and values, and supportive practice are positively significant effect on job satisfaction. The study concludes with recommendations for school administrators to foster a positive cultural environment as a way to improve job satisfaction, employee retention, and employee performance. These insights are valuable for policy makers of private schools and school leaders seeking to enhance organizational effectiveness in the private education sector.

Keywords: Organizational culture, Leadership style, Norms and Values, Job satisfaction

ID-26-P5-02

The Effect of Knowledge Management Practices on Knowledge Worker Performance of Public Hospital in Mandalay

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Abstract: The main objective of this study is to investigate the effect of knowledge management practices on knowledge worker performance of public hospitals in Mandalay. Primary data are collected by using structured questionnaire with five-point Likert scale. In this study, the target population is knowledge workers of public hospitals in Mandalay. Knowledge workers are specialists, doctors, nurses, technicians, managers, and officers at public hospitals in Mandalay. Two-stage random sampling method is applied to ask knowledge workers from five public hospitals in Mandalay. (326) Knowledge workers are targeted as a sample size. Then, the targeted sample size is proportionally allocated to five public hospitals. Both descriptive and inferential statistics such as multiple linear regression and path analysis are used to analyze the primary data. The study found that knowledge management practices, especially knowledge sharing, knowledge application and knowledge retention have significantly positive effects on job satisfaction of knowledge workers. This study also proved that knowledge management practices, especially knowledge sharing, knowledge application and knowledge retention have significantly positive effect on knowledge worker performance of public hospitals. This study also revealed that job satisfaction mediate the relationship between knowledge management and knowledge worker performance. This study can contribute by providing hospital administration teams with better insights into knowledge management practices in order to improve employee performance.

Keywords: Knowledge Management Practices, Job Satisfaction, Knowledge Worker Performance, Public Hospitals

ID-26-P5-03

Organizational Culture and Employee Performance at Private Bank in Mandalay

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Abstract:This study aims to identify organizational culture and examine the relationship between organizational culture, organizational commitment, and employee performance at private banks in Mandalay. Moreover, the study analyzes the mediation effect of employee engagement on the links between organizational commitment and employee performance at private banks in Mandalay. In terms of method, 336 samples of employees were selected by two stages random sampling method from the target population of 1510, who are surveyed from 8 private banks in Mandalay. The primary data are collected from 336 respondents of different positions and different departments by using a simple random sampling method. Structured questionnaires are based on the data collected from eight private banks in Mandalay. Both descriptive and analytical methods such as correlation analysis, multiple regression analysis and path analysis are used to analyze quantitative data. The research indicated that three organizational culture traits: involvement, consistency and mission influence on organizational commitment at private banks in Mandalay. The result also supports that all three types of organizational commitment: affective, normative, continuance have positive effect on task performance of employees. It is found that the affective commitment has the most significant effect on task performance. This study also found that all the organizational commitment factors have positive significant effect on contextual performance. It indicates that the affective commitment has the most significant effect on contextual performance. Moreover, the finding indicated that employee engagement partially mediates between organizational commitment and employee performance at private banks.

Keywords: Organizational Culture, Organizational Commitment, Employee Engagement and Employee Performance

ID-26-P5-04

The Effect of Relationship Marketing on Customer Retention of Ayeyarwady Bank , Sagaing

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Abstract: This study aims to examine the effect of relationship marketing on customer retention of Ayeyarwady bank in Sagaing. Primary data were collected from 187 respondents using a 3-in-1 systematic sampling method. A structured questionnaires with five-point Likert Scale was used to gather the primary data. Reliability analysis, descriptive statistics, correlation analysis and multiple regression analysis were used to achieve the objectives of the study. According to the correlation result, relationship marketing dimensions have positive relationship with customer retention. According to the result of multiple regression analysis, customer trust, communication and switching barriers have a statistically significant and positive effects on customer retention. However, commitment and conflict handing do not have significant effect on customer retention. Therefore, it can be recommended that Ayeyarwady Bank should strengthen its relationship marketing strategies, particularly focusing on trust, communication, and switching barriers, to improve long-term customer retention. The study suggested that the bank should maintain transparency in its transactions and improve communication channels by providing clear information about its products and services.

Keywords: Customer Trust, Commitment, Communication, Conflict Handing, Switching Barriers, Customer Retention, Ayeyarwady Bank

ID-26-P5-05

The Effect of Entrepreneurial Thinking on the Sustainability of SMES in Myanmar

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Abstract: This study aims to analyze the effect of entrepreneurial thinking on the sustainability of SMEs and to examine the mediating effect of social media on the relationship between entrepreneurial thinking and SME sustainability in Mandalay, Myanmar. There are 300 women entrepreneurs in MWEA in Mandalay as listed in 2025. Simple random sampling method is used to select the 169 entrepreneurs from the list. The data collection is also performed online survey method using Google forms with a structured questionnaire. Primary data are collected from entrepreneurs of MWEA through structured questionnaires with a five-point Likert scale. Secondary data is gathered from textbooks, international research papers, articles, relevant websites, records, and documents of MWEA. Descriptive statistics and regression analysis are employed to analyze the collected data. The findings reveal that entrepreneurial alertness and entrepreneurial turn have positive and significant effect on SME sustainability. Moreover, social media mediates the positive and significant effect on the relationship between entrepreneurial turn and sustainability of SMEs. These findings highlight that the crucial role of entrepreneurial thinking and social media adoption in strengthening the long-term sustainability of small and medium enterprises. The study suggests that SME owners and managers should focus on fostering entrepreneurial thinking capabilities while strategically using social media platforms to achieve sustainable growth.

Keywords: Entrepreneurial thinking, Sustainability, Entrepreneurial Alertness, Entrepreneurial turn, Social media adoption

ID-26-P5-06

Digital Health Literacy and Sustainable Health Behavior in Myanmar: The Role of Health Communication and Media Exposure

¹
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Abstract: Sustainable development within ASEAN significantly depends on strong public health systems supported by informed and health-literate citizens. For developing member states such as Myanmar, the rapid expansion of digital media has transformed how health information is accessed, interpreted, and acted upon. However, disparities in digital health literacy may significantly influence individuals' capacity to engage in sustainable health behaviors. This study examines the relationship between digital health literacy and sustainable health behavior in Myanmar, with particular attention to the role of health communication and media exposure. Based on the Health Belief Model (HBM) and media dependency theory, the study proposes that digital health literacy develops individuals' ability to critically evaluate online health information and promoting preventive and sustainable health practices. Health communication and media exposure are regarded as facilitating processes that affect awareness, trust, and behavioral intention. This research will apply structured survey to gather data from individuals in certain regions of Myanmar as a component of a quantitative research methodology. Statistical analyses will assess the direct and indirect relationships among digital health literacy, media exposure, health communication, and sustainable health behavior. Therefore, this research aims to inform policy strategies aimed at strengthening public health communication frameworks in Myanmar and encouraging ASEAN's broader sustainability agenda, particularly in relation to SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education).

Keywords: Digital health literacy, Health communication, Sustainable development, Myanmar, ASEAN.

ID-26-P5-07

Role of Digital Literacy in Student Adoption of QR Code Payments in Monywa

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Abstract: This study examines the factors influencing students' intention to use MMQR code payment systems by applying a structural equation modeling approach. The research focuses on key constructs, including attitude, perceived ease of use, perceived usefulness, perceived security, and subjective norms, to understand their direct and indirect effects on intention to use. Data were collected through a structured questionnaire from 230 university students, and the reliability and validity of the measurement scales were confirmed with high internal consistency. The results show that attitude and perceived usefulness have a significant positive influence on students' intention to use MMQR payments, while perceived ease of use and subjective norms indirectly affect intention through attitude and perceived usefulness. The overall model demonstrates excellent goodness-of-fit and strong explanatory power for the main constructs. These findings suggest that students' adoption of MMQR payment systems is mainly driven by positive attitudes and perceived benefits, providing useful implications for policymakers and service providers seeking to promote digital payment adoption in the higher education context.

Keywords: Digital Literacy, MMQR Code Payment, Student Adoption, Structural Equation Modeling, Digital Payment Systems

ID-26-P5-08

Digital Transformation, Digital Divide, and Human Capital Development through Education: The Case of Myanmar's Youth

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Abstract: This article examines the interrelationships among digital transformation, the digital divide, and human capital development through the education system, with a particular emphasis on Myanmar and its younger generation. The analysis is situated within the context of the information society and the digital economy, where digital technologies have increasingly reshaped social, economic, and educational structures. In developing countries such as Myanmar, disparities in access to digital technologies and resources remain pronounced, posing significant challenges to inclusive development. The findings highlight education as a critical mechanism for enhancing human capital and mitigating the adverse effects of the digital divide. Nevertheless, Myanmar continues to confront structural constraints, including inadequate digital infrastructure, limitations in educational policy implementation, and persistent social inequalities. These factors significantly restrict equitable access to learning opportunities and impede the development of digital competencies among young people. The article argues for a more integrated approach that aligns educational development with digital transformation strategies, emphasizing digital skills formation, lifelong learning frameworks, and sustained investment in human capital. Such an approach is essential to fostering inclusive and sustainable development in Myanmar over the long term.

Keywords: Digital Transformation, Digital Divide, Education, Human Capital

ID-26-P5-09

A Study on Sustainable Development Through Efficient Delivery Services on Customer Satisfaction in Monywa, Myanmar

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Abstract: Nowadays, home delivery service has become a popular business. It plays an important role in modern life by providing convenience, saving time, and reducing the need for physical travel. This study investigates the factors influencing residents' satisfaction with Monywa Delivery Service (MDS). The sample consists of 235 respondents from Monywa who use Monywa Delivery Service (MDS), selected by using the cluster sampling method. Structured questionnaires with a five-point Likert scale were used to collect primary data. Statistical methods such as descriptive statistics, reliability analysis, correlation analysis, and multiple linear regression were applied. The correlation results show a positive relationship between tangibility, reliability, responsiveness, assurance, empathy, and residents' satisfaction with Monywa Delivery Service (MDS). Moreover, the multiple regression results indicate that all independent variables tangibility, reliability, responsiveness, assurance, and empathy have a direct and statistically significant relationship with residents' satisfaction with Monywa Delivery Service (MDS). This provides empirical evidence that improving these service quality dimensions can enhance overall satisfaction. The study provides a reference for future researchers who wish to examine service quality and satisfaction in similar local delivery services or other service industries in Myanmar.

Keywords: Home Delivery Service, Residents' Satisfaction, Service Quality Dimensions, Multiple Linear Regression, Monywa Delivery Service (MDS)

ID-26-P5-10

A Study on Utilization of Maternal Health Care in Maubin Township

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Abstract: Utilization of Maternal Health Care (MHC) services can save unnecessary severe complications and death among women during pregnancy, delivery, and after delivery and it is approximate determinant of maternal morbidities and mortalities. This study aims to investigate factors that influencing women's use of MHC services. This study examines the utilization of maternal health care services in Maubin Township, Ayeyarwady Region, an area where maternal health indicators remain a concern despite national efforts to improve healthcare access. The research aims to identify key socio-economic, cultural, and healthcare system determinants that affect the use of maternal health services in this township. The secondary data used for the study have been obtained from the 2023-2024 Health Survey of MOHS, a nationally representative survey of ever married women 15 to 49 years of age. In this study, the primary data from the Maubin Township survey were also used to determine which factors influencing the utilization of maternal healthcare. Using a sampling random method approach, data were collected from both quantitative surveys and qualitative interviews with local women of reproductive age, healthcare providers, and community leaders. Findings reveal that socio-economic status, including income level and education, plays a critical role in access to maternal healthcare, with financial barriers significantly limiting utilization. Cultural beliefs, traditional practices, and gender norms further impact healthcare-seeking behavior, often leading to delayed or reduced use of skilled services. Additionally, challenges within the healthcare system, such as limited facility availability, staffing shortages, and perceptions of low-quality care, further discourage utilization. This study underscores the need for targeted interventions that address economic disparities, promote cultural awareness, and strengthen the healthcare infrastructure in Maubin Township. These insights contribute valuable knowledge for policymakers and healthcare providers seeking to improve maternal health outcomes and reduce maternal mortality in underserved regions of Myanmar.

Keywords: Maternal health care services, socio-economic status, healthcare infrastructure

ID-26-P5-11

Indonesian EFL Students on Reading Digital Multimodal Texts: A Descriptive Case Study

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Abstract: This descriptive case study research explored Indonesian English as a Foreign Language (EFL) students' perception, experiences and challenges on reading and comprehending digital multimodal text. A total of one hundred and fifty students majoring English education at an Indonesian University participated in the study. Online questionnaires and interviews were used as the instruments to collect data. The quantitative data were analysed descriptively and presented in percentage while the qualitative ones were analyzed using Braun and Clarke's (2006) thematic analysis procedures. The study revealed that reading digital multimodal texts was perceived as not only motivating, interesting and entertaining, but also challenging. Due to teachers' limited knowledge in the field, students were not frequently taught reading comprehension through digital multimodal text. Additionally, they often got exhausted with digital multimodal text once it was utilised. Main challenges associated with reading digital multimodal texts included the use of graphic representations, unsupportive learning environment, and the unavailability of supporting facilities and infrastructure. Based on the findings, pedagogical implications and suggestions for future research are presented.

Keywords: Digital multimodal texts; EFL reading; Indonesian EFL

ID-26-P5-12

Retail Service Quality, Customer Satisfaction and Customer Loyalty of Ocean Supercenter in Yangon

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Abstract: This study aims to explore the retail service quality, customer satisfaction and customer loyalty of Ocean Supercenter, to analyze the effect of retail service quality on customer satisfaction of Ocean Supercenter and to examine the effect of customer satisfaction on customer loyalty of Ocean Supercenter in Yangon. A sample of 180 respondents were selected by using 5 in 1 systematic sampling method. The descriptive statistics, correlation analysis and multiple regression analysis were used to achieve the objectives of the study. According to the correlation result, all retail service quality has positive relationship with customer satisfaction. Among them, personal interaction, problem solving and store policy have strong and positive correlation with customer satisfaction. Physical aspects and reliability have moderate correlation with customer satisfaction. Customer satisfaction has moderate correlation with customer loyalty. According to the result of multiple regression analysis, personal interaction, physical aspects, and store policy dimensions of retail service quality have a statistically significant and positive effects on customer satisfaction. However, problem solving and reliability do not have significant effect on customer satisfaction although it is positive. Therefore, it can be suggested that physical aspects, reliability, personal interaction, problem-solving and policy are continuously needed to be focused by Ocean Supercenter.

Keywords: Physical Aspects, Reliability, Personal Interaction, Problem-solving, Policy, Customer Satisfaction, Customer Loyalty, Ocean Supercenter

ID-26-P5-13

Contribution of Cropping Patterns on Food Security in Bago West Region in Myanmar

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Abstract: Cropping patterns in farming system are crucial to improve economics of crop productivity for farmers. The objective of the study is to describe the cropping patterns and the influencing factors in the study area and identify the existing cropping patterns in the study area and examine the relationship between cropping patterns and the influencing factors. And also, to evaluate the food consumption scores of households in the study area and to analyze the association between cropping patterns, and household food security in the study area. The binary regression model is used in this study

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The Effect of Visual Merchandising Factors on Consumer Impulse Buying Behavior of Next Generation Clothing Stores in Yangon

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Abstract: The objectives of this study are to analyze the effect of visual merchandising factors on shopping enjoyment and to examine the effect of shopping enjoyment on consumer impulse buying behavior of Next Generation Clothing Stores in Yangon. There are twelve branches of Next Generation clothing stores in Yangon. Raosoft's formula was used to calculate the sample size as the population was unknown. The sample size was 267 customers who were asked a structured questionnaire by using systematic random sampling method. Every fifth of customers who came to buy the products at the store during working hours were selected to conduct the survey. 193 out of 267 customers responded complete answers to analyze the primary data. Descriptive method and regression method were used in this study. According to the regression analysis, the findings show that among four variables of visual merchandising, store layout and promotional signage have positive effects on shopping enjoyment. It is also found that shopping enjoyment has a significant effect on consumer impulse buying behaviors of Next Generation clothing stores in Yangon.

Keywords: window display, store layout, promotional signage, store atmosphere, shopping enjoyment and consumer impulse buying behavior

ID-26-P5-15

EXAMINING THE IMPACT OF SOCIAL MEDIA ADOPTION ON SME PERFORMANCE: EVIDENCE FROM MANDALAY USING TOE FRAMEWORK

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Abstract: Small and medium enterprises (SMEs) are crucial for economic growth in emerging markets like Myanmar. This study examines the impact of social media adoption on SME performance in Aung Myae Thar Zan Township, Mandalay, using the Technological–Organizational–Environmental (TOE) framework. Data were collected from 168 SME owners and managers through structured questionnaires and analyzed using descriptive statistics, reliability testing, and regression analysis. The findings indicate a high level of social media adoption among SMEs, primarily driven by technological factors, as well as environmental factors. Organizational factors, particularly management support, show a moderate influence. The results further reveal that social media adoption significantly improves SME performance by enhancing sales growth, brand visibility, customer engagement, and market insights. Younger and more educated entrepreneurs are more likely to adopt social media, while older firms and managers demonstrate slower adoption due to limited digital literacy and perceived lack of necessity. Many SMEs do not allocate a dedicated budget for digital marketing. The study confirms the mediating role of social media adoption between TOE factors and firm performance. These findings highlight the strategic importance of digital transformation in strengthening SME competitiveness and promoting sustainable economic growth in emerging economies.

Keywords: Social Media Adoption; Small and Medium Enterprises (SMEs); TOE Framework; Firm Performance

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Beyond Rhetoric: A Partnership Paradigm for Sustainable Tourism Development in Southern Thailand's Hospitality Sector

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Abstract: This conceptual paper examines the partnership paradigm for sustainable tourism development in southern Thailand, addressing the critical gap between sustainability aspirations and implementation realities in the region's hospitality sector. While Thailand's southern provinces—particularly Phuket, Krabi, and surrounding islands—represent a global tourism hotspot, recent empirical studies reveal persistent barriers to sustainability adoption, including financial constraints, knowledge deficits, and limited stakeholder collaboration. Concurrently, research demonstrates that current tourism carrying capacity, particularly regarding water resources, has been exceeded, with Phuket's water supply sufficient for fewer than nine million tourists annually despite receiving over ten million visitors. This paper proposes a conceptual framework grounded in stakeholder theory and the GSTC's partnership-oriented themes of resilient communities and carrying capacity management. The framework integrates multi-sectoral collaboration models encompassing government incentives, industry consortia, community-based tourism networks, and academic partnerships, as exemplified by emerging best practices in Thai community lodges and homestays. By synthesizing evidence from recent qualitative studies on boutique hotel barriers and community reflection research, this paper argues that partnership-based approaches—rather than isolated corporate initiatives—offer the most viable pathway for operationalizing sustainable development in southern Thailand's tourism industry. The conceptual model provides actionable propositions for policymakers, destination management organizations, and hospitality operators seeking to transform sustainability rhetoric into collaborative practice.

Keywords: Sustainable tourism, stakeholder collaboration, southern Thailand, hotel industry, carrying capacity

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Synergizing Development Administration: A Collaborative Partnership Framework for Systemic Change in Thailand's Southern Border Provinces

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Abstract: This research analyzes the interdependent relationship between the administration of development and development administration through collaborative partnerships, proposing a framework for multi-stakeholder engagement in Thailand's Southern Border Provinces. Utilizing a qualitative design, the study conducted a documentary analysis of academic literature, policy frameworks, and digital data (2017–2025). The research was purposively scoped to the region's multicultural context, focusing on the tripartite collaboration between higher education institutions (HEIs), local administrative organizations (LAOs), and private enterprises. Data were processed using content and constant comparative analysis through a two-stage methodology: theoretical triangulation of Fred W. Riggs' dual dimensions of development administration and conceptual synthesis of collaborative governance and collective impact principles.

The findings reveal that driving HEIs in this sensitive region necessitates a dual-track approach. First, the Administration of Development requires universities to transition from "ivory towers" to "development partners," engaging in collaborative fieldwork to achieve Sustainable Development Goals (SDGs). Second, the Development of Administration positions universities as "targets of development," emphasizing institutional capacity building and the elimination of bureaucratic rigidity as prerequisites for success.

Consequently, the study constructs a "Synergy Framework" for collaborative partnerships, highlighting the university's role as a "Facilitative Lead" or "backbone organization" to bridge mistrust in multicultural societies. Critical elements for systemic synergy include establishing a shared vision for collective impact, implementing integrated mechanisms such as joint committees to synchronize resources, and employing inclusive leadership to foster social capital and shared ownership within vulnerable communities.

Keywords: Development Administration, Collaborative Partnership, Interdependent Relationship, Synergy Framework, Southern Border Provinces

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