International Student Research Congress

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3rd International Student Research Congress (ISRC) 2026

"Sustaining an era of GenZ-fied researchers"

February 7, 2026 • Hybrid Conference

STI West Negros University, Bacolod City, Philippines (onsite)

Zoom (online)

BOOK OF ABSTRACTS

The International Student Research Congress series is published annually.

For more information, visit the website **https://iiari.org/conference/isrc.**

Aims and Scope

The dynamic research environment requires diverse generational researchers. Hence, the International Student Research Congress provides a platform for the next generation student-researchers around the world to connect, collaborate and learn from multidisciplinary research outputs. It fosters research culture and academic excellence to high school and undergraduate (technical/vocational, college and university) students.

Objectives

The conference aims to:

- Provide a platform for the high school and undergraduate research outputs;
- Continuously develop strong research culture among students;
- Enhance free and accessible knowledge sharing through open access publication;
- Educate the community of scholars through updates on current topics and issues;
- Foster collaboration among student-researchers around the globe; and
- Develop camaraderie among junior fellows.

Conference Tracks

1. Education

- Higher education administration and governance;
- Policy development and implementation in education;
- Teacher education, professional development, and retention;
- Educational leadership styles and their impact on school performance;
- School-community partnerships and stakeholder engagement;
- Innovations in educational management and decision-making;
- Inclusive education and special education needs;
- Globalization and internationalization of education;
- Equity, diversity, and access to education;
- Digital literacy and ICT integration in the classroom;
- Hybrid, blended, and online learning approaches;
- Education for sustainable development (ESD);
- Mental health, well-being, and resilience in education;
- Post-pandemic challenges and opportunities in education;
- 21st-century skills and competency-based education;
- Curriculum reforms and localized curriculum development;
- Innovative teaching methodologies and active learning strategies;
- Assessment for learning vs. assessment of learning;
- Alternative assessment techniques (portfolios, performance-based assessment);

- Student motivation, engagement, and cognitive development;
- Early childhood education and developmental approaches;
- Multilingual and multicultural education;
- Educational management and leadership;
- Current trends and issues on education and educational management;
- Curriculum development, teaching and learning pedagogies, assessment and student cognitive development;
- Social issues relevant to the societal and educational development; and
- Other topics on educational research.

2. Humanities and Social Sciences

- Law and Politics;
- Philosophy and Religion;
- Geography and Anthropology;
- Communication and Modern Languages;
- Ancient and Modern Literature;
- Arts and Art Appreciation;
- Humanities and Human Behavior;
- Economic, social and environmental issues;
- Psychology and learning; and
- Other topics on social sciences.

3. Science & Technology

- Biological sciences, biotechnology, and life sciences applications;
- Environmental science, climate change, and sustainable ecosystems;
- Physical sciences (physics, chemistry, mathematics, statistics);
- Earth sciences (geology, oceanography, meteorology, space science);
- Agricultural and food sciences (food technology, nutrition, crop science);
- Health sciences (public health, biomedical research, pharmaceutical sciences);
- Science education pedagogy, curriculum development, and assessment;
- STEM education and integration in schools and higher education;
- Innovations in laboratory techniques, equipment, and methodologies;
- Ethical, social, and philosophical issues in science;
- Technology, Technological Innovation, and Technical Education;
- Information and communication technology (ICT) and digital transformation;
- Artificial intelligence, robotics, and machine learning applications;
- Big data, data science, and analytics for decision-making;
- Internet of Things (IoT) and smart technologies;

- Cloud computing, cybersecurity, and digital forensics;
- E-learning, educational technology, and virtual learning environments;
- Technical-vocational education and workforce skills development;
- Renewable energy technology (solar, wind, hydro, geothermal);
- Smart cities and sustainable urban development;
- Emerging technologies (nanotechnology, biotechnology, quantum computing);
- Science, applied science and science education;
- Technology, technological innovation and technical education;
- Engineering, engineering design and development and engineering education; and
- Other topics on science and technology.

4. Management

Business Management

- Business, management and accounting education;
- Entrepreneurship, entrepreneurial development and business management;
- Applied concepts of management, human resource, marketing, and operations;
- The industry and industrial revolution 4.0;
- Management accounting, financial accounting, financial reporting systems and corporate communication to external users' decision-making;
- Sustainability accounting and corporate integrated reporting system;
- Corporate finance with the view of investment, financing decision making, and financial management;
- Financial markets and institutions in line with banking, insurance and risk management, and real estate;
- International finance including financial management;
- Strategic management and leadership; and
- Other topics on business management and accounting.

Hospitality Management

- Hospitality and tourism management;
- Hotel and restaurant management;
- Food and beverage servicing;
- Cultural tourism;
- Online commerce in hospitality and tourism;
- Transportation and communication in hospitality services;
- Agriculture linkages to hospitality and tourism;
- Other related hospitality and tourism studies.

Allied Health Management

- Healthcare management and administration;
- Health systems and policy management;
- Hospital and clinical services management;
- Digital health, telemedicine, and health informatics;
- Public health management and community-based health programs;
- Human resource management in health organizations;
- Patient care quality assurance and risk management;
- Health economics, financing, and insurance systems;
- Emergency and disaster health management; and
- Other related allied health management topics.

CONFERENCE POLICIES

Statement of Open Access

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The review of papers submitted to the conference follows the double-blind editorial review process. There are assigned group of five editors headed by the Director of Conferences and Events to evaluate and review all submissions to the conference. The Institute reserves the right to select the members of the editorial team based on their qualification and specialization.

All submitted papers duly accepted for suitability to scope or structural requirements are sent to the reviewers. The conference team reserves the right to choose the appropriate reviewer based on their knowledge of the topic. The journal adheres to the double blind peer-review process. Neither the author nor the reviewers know each other's identity. Invitations are sent to the reviewers.

Any submission goes for two evaluation and review process: a) preliminary evaluation by the conference chair and b) editorial review. The conference chair evaluates the paper based on its fitness to conference scope or structural requirements while the reviewers give detailed ratings and comments on the paper based on the evaluation criteria. The result of the review may be any of the following: accept, resubmit for review or decline. The decision is made after the receipt of two reviews. The decision is communicated to the corresponding author through email.

Conference Attendance Consent

Upon submission of the conference registration form, the author hereby agrees to the following:

- The research work will be presented by the first author or any other author designated by the teach virtually or face to face and abide by the existing protocols/netiquette on the conduct of the event.
- Submission of the electronic copies of the presentation materials and other materials necessary for submission to external parties (i.e. The CPD Certification Services, United Kingdom).
- Consent to the part/full recording of the event and the upload of the photos, videos and other materials to various websites and social media platforms.
- Sharing of personal information and details necessary for the publication (print and online), promotion, indexing and sharing of the article, commercially or non-commercially.

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Presenters are expected to follow the conference presentation guidelines. They are also expected to follow proper etiquette/ network etiquette. Unacceptable behavior includes, but not limited to:

- Discrimnation, harassment, intimidation, or demeaning words during the conference.
- Hateful verbal or written comments related to gender, race, religion, or disability.
- Verbal or physical personal attacks.
- Inappropriate use of pornographic materials.
- Use of photos or videos in the presentation without prior permission.
- Taking photos or videos without approval or permission.

The conference organizers have all the rights to drop any participants from the conference in case of any misbehavior.

For other editorial policies and publication details, you can visit the following:
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The Institute of Industry and Academic Research Incorporated (IIARI) is a non-stock, non-profit organization registered under the Philippine Securities and Exchange Commission (SEC) with company registration number CN202004359. It is also a registered book publisher in the National Book Development Board Philippines and a CPD provider in The CPD Certification Services, United Kingdom.

The organization is anchored on the following strategic pillars:

Research: The value of academic and industry research is at the forefront. The organization upholds quality research through rigorous peer review process.

Education: The landscape of digital quality education in an alternative means is the model the organization embraces. The production of quality educational resources in video, print and online formats gratifies to the needs of every lifelong learners.

Training: The training for professionals is a continuous practice. The organization provides the venue for continuous training through international collaboration that multiplies research conferences, workshops and symposia and sharing of best industry practices.

Community Service: The concept of 'pay it forward' emulates in the organization. It extends a small share in the community development through various forms of outreach programs.

Mission

A premier industry and academic collaborative organization upholding the power of research and education to a more informed and intellectual community of scholars.

Vision

IIARI aims to be at the forefront of research and education transcending post-millennial boundaries through collaborative and dynamic strategies.

Conference Collaborator

STI West Negros University

STI West Negros University is a private university located in Bacolod City, Negros Occidental, Philippines. The university is a second level-accredited school by the Philippine Association of Colleges and Universities - Commission On Accreditation (PACU-COA) and awards degrees in associate, bachelor, master, and doctorate levels. STI West Negros University has an enrollment of about 10,000 students per semester and produces 1,500 graduates every school year.

1948 - STI West Negros University known then as West Negros College was founded on Valentine's day by three Baptist women leaders, Luciana Aritao, Teresa Padilla, and Rosario Remetio, when the city was still fresh from the devastation of the Second World War.

1951 - The school was re-established as a non-sectarian school on its present location along Burgos Street, utilizing a three-storey wooden building that housed different classrooms and administrative offices.

1968 - To enrich the college life of students, a gymnasium was constructed for the school's extra-curricular and sports activities. It also hosted convocations, cultural presentations and graduation activities.

1980 - Responding to the changing times with the advent of computers, the college put up its own Computer Center and expanded its curricular offerings by opening computer courses and short-term or technical programs

2008 - During a meeting of the Commissioners en banc, the Commission on Higher Education has found West Negros College in full compliance of CHED requirements, and granted University status thus called, West Negros University.

2013 - STI Education Systems Holdings Inc. acquired the 65 year old West Negros University. The school then envisions herself as a Higher Educational Institution that provides equal learning opportunities for all.

Message

The new generation of research leaders embodies diverse skill sets and multidimensional competencies that are relevant and responsive to emerging global needs. As such, they require a dynamic and supportive environment that nurtures their growth and broadens their horizons. In this era of digitalization, young researchers and leaders are becoming increasingly innovative, proactive, and globally engaged. Despite their young age, they continue to contribute meaningful research outputs that enrich scholarly literature. With this in mind, the 3rd International Student Research Congress (ISRC) serves as a vital platform for sharing research findings with a broader international audience and fostering a culture of inquiry and excellence.

I warmly congratulate the student authors and presenters for taking the initiative to contribute their work to the global academic community. As this marks an important step in their research journey, I am confident that they will develop into competent and impactful researchers in the years ahead. I am truly proud of their achievements, from conceptualizing their studies to producing valuable research outputs. Their works stand as significant contributions and proud testaments to their respective institutions.

At IIARI, we celebrate this research milestone with great pride and enthusiasm, recognizing the dedication, perseverance, and intellectual rigor that each contribution represents. May this event inspire our young scholars to strive for excellence and produce high-quality studies that address real-world challenges. As they embark on their academic research journey, may they continue to uphold the values of integrity, innovation, and excellence, contributing meaningfully to the advancement of knowledge and the shaping of a more informed and enlightened global community.

We also extend our sincerest gratitude to all participants, speakers, partners, and collaborators whose unwavering support and commitment have made this event a success. Kudos to all the researchers who embraced the challenge of the 3rd International Student Research Congress!

Dr. Rodrigo M. Velasco
Gulf College
IIARI President

Message

On behalf of the organizing committee, it is with great pride and excitement that we welcome you to the 3rd International Student Research Congress 2026, held under the theme "Sustaining an Era of GenZ-fied Research." This congress marks a significant milestone in our collective journey to empower student researchers and foster a culture of innovation, collaboration, and sustainability.

The chosen theme reflects the dynamic role of Generation Z in shaping the future of research. As digital natives, Gen Z scholars bring fresh perspectives, creativity, and inclusivity to the academic community. Their ability to harness technology, embrace diversity, and respond to global challenges ensures that research remains relevant, impactful, and future-ready. This congress serves as a platform to highlight those strengths, encouraging participants to share their work, exchange ideas, and build networks that transcend borders.

Throughout this event, we will witness groundbreaking studies, thought-provoking discussions, and inspiring presentations that embody the GenZ spirit of discovery. More than just an academic gathering, this congress is a celebration of resilience and visional testament to the power of young researchers to sustain knowledge and drive meaningful change.

We invite you to actively engage in every session, to listen, to questions, and to contribute. May this congress ignite your passion for research, strengthen your commitment to sustainability, and inspire you to continue shaping a brighter future. Welcome to this vibrant community of scholars—together, let us sustain the era of GenZ-fied research!

Dr. Ruel F. Ancheta
Gulf College
IIARI Director- Media and Publication

Message

To the disruptors, the digital natives, and the architects of the new intellectual atmosphere—welcome!

We gather here for the 3rd Students Research Congress, not merely to file away abstracts or fulfill academic requirements, but to witness a shift. The "Genzified" researcher has arrived. For too long, older power structures have viewed Gen Z through a lens of superficiality labeling this generation as one that merely "googles" or skims the surface of information. This is a critical misunderstanding. Research is no longer about the quiet hoarding of data in dusty archives; it is about the rapid, radical democratization of knowledge. The Genzified researcher does not just find information, I would argue that they weaponize it for progress.

There is a prevailing myth that digital fluency equates to intellectual laziness. We are here to dismantle that. Our approach to research is inherently global and instinctively sustainable. We do not look at a problem in isolation, we see the interconnected web of climate, equity, and technology. To "empower" and "collaborate" are often used as passive buzzwords to soothe the status quo, but for this generation, they are active mandates. We are no longer confined by geography; our inquiries are designed to scale. We are reshaping the focus from simply doing research to driving impact.

To the researchers, my hat is off to you. Submitting your paper is an act of bravery in an era of hyper-criticism. You have moved beyond the search bar and into the podium of original synthesis. You are proving that being "online" is not a distraction, it is a superpower that allows us to see the world as it truly is: a meaningful entity.

Carie Justine P. Estrellado
Tayabas Western Academy
IIARI Director – Conferences & Events

Message

It is with immense gratitude and excitement that I welcome you to the 3rd International Student Research Congress (ISRC 2026). I am incredibly grateful to be part of this community, and I am genuinely moved by the energy and curiosity that has brought all of us together from so many different corners of the globe.

Our theme this year, "Sustaining an Era of GenZ-fied Research," is more than just a phrase for a banner. To me, it represents a real shift in the way we look at the world. For a long time, research was seen as something rigid, maybe even a little disconnected from everyday life. But this generation is changing the game. By blending academic rigor with digital fluency and a deep sense of social responsibility, you are making the sciences and humanities more accessible, authentic, and most importantly impactful.

I've always believed that the best breakthroughs happen when we stop trying to fit into old boxes and start building our own. This congress is a personal highlight for me because I see that happening in every paper and poster you've submitted. We aren't just here to swap data points; we are sustaining a movement that values "out-of-the-box" questions and unconventional solutions.

I also want to take a moment to extend my warmest congratulations to IIARI. Thank you for another successful year of excellent paper convening and for providing the space where this kind of "GenZ-fied" perspective can truly thrive.

I hope this congress spark not just new data, but new friendships and even bolder ideas.

Welcome to the future of research and let us continue to inspire one another.

Wilfredo O. De La Cruz Jr.
STI West Negros University
3rd ISRC 2026 Chair

Message

On behalf of the Organizing Committee, it is my great pleasure to welcome you to the 3rd International Scientific Research Conference (ISRC 2026). It is both an honor and a privilege to serve as Co-Chair of this distinguished conference, which continues to grow as a vibrant platform for the exchange of knowledge, ideas, and innovations across disciplines.

ISRC 2026 brings together researchers, academicians, industry experts, and practitioners from around the world to share their latest findings, discuss emerging trends, and explore solutions to contemporary scientific and societal challenges. The enthusiastic response to this year's call for abstracts reflects the relevance of the conference and the strong commitment of the global research community to advancing scientific excellence and interdisciplinary collaboration.

The abstracts published in this Book of Abstracts represent a diverse range of high-quality research contributions. They highlight innovative methodologies, novel theoretical insights, and practical applications that address real-world problems. Each submission has undergone a rigorous review process, ensuring that the work presented at ISRC 2026 meets high academic and ethical standards. I sincerely commend all authors for their dedication, scholarly rigor, and valuable contributions.

Beyond the technical sessions, ISRC 2026 serves as a forum for meaningful dialogue, networking, and collaboration. It offers participants the opportunity to engage with experts from different fields, exchange perspectives, and establish partnerships that may lead to future research initiatives and impactful outcomes. We strongly encourage all participants to actively take part in discussions, ask questions, and make the most of the diverse expertise gathered at this conference.

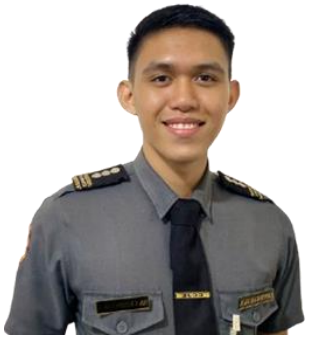
I would like to express my heartfelt appreciation to the members of the Organizing Committee, Scientific Committee, reviewers, session chairs, and volunteers for their tireless efforts and commitment. Their dedication has been instrumental in ensuring the successful organization of ISRC 2026. I also extend my sincere gratitude to our keynote speakers and invited experts for sharing their knowledge and insights, which greatly enrich the academic value of the conference.

Finally, I thank all participants for being part of ISRC 2026. Your presence, contributions, and engagement are what make this conference meaningful and impactful. I am confident that ISRC 2026 will be a rewarding and inspiring experience for all, fostering knowledge exchange, innovation, and long-lasting professional relationships.

I wish you a successful, insightful, and enjoyable conference.

Professor Mufutau Akanmu Popoola, PhD
Federal Polytechnic Ayede
3rd ISRC 2026 Co-Chair

Message



Research is a systematic and evolving process that requires time, perseverance, and adequate resources. In this era of GenZ-fied researchers, it is further strengthened by innovation, collaboration, and a shared commitment to community development. Research serves not only as a tool for knowledge creation but also as a shared advocacy that promotes inclusive growth and advancement of community's sustainable progress.

This Book of Abstracts highlights the efforts, curiosity, and dedication of researchers who continue to push boundaries and embrace lifelong learning. Adaptive, socially aware, and driven to create a meaningful impact beyond academic setting, all of which reflects how dynamic the study's spirit of today's scholar is.

May this collection serve as a valuable reference, encourage meaningful dialogue, and inspire the next generations of scholars to uphold academic excellence and sustained every generational progress.

We extend our heartfelt gratitude to the researchers for their passion and resilience, to the advisers for their invaluable guidance, to the organizers for their unwavering commitment, and to all individuals whose support ensures that this research sustainably shapes present and future generations.

John Arlone S. Gentugao
STI West Negros University
3rd ISRC 2026 Junior Chair

Message

As junior co-chair of the organizing committee of this year's intellectual gathering, it is my great pleasure and honor to extend my warm message to each of you at this 3rd International Student Research Conference 2026, focused on the theme, "Sustaining an Era of GenZ-fied researchers."

This hybrid convention reflects a collective commitment to pushing the boundaries of knowledge and addressing the world's relevant and pressing challenges in the field of research. In an era of rapid change and unprecedented opportunities, the collaboration and innovation of our fresh breed are nothing but vital for the growth of humanity. This conference serves as a dynamic and promising platform for all student-researchers to exchange rigorous discussions, present groundbreaking research, and foster collaborations that will shape the future of not just this discipline, but the next generations.

The success of this event is owed to our organizing committee's tremendous efforts and dedication, the generous support of our sponsors and partners, notably STI West Negros University, which provided us with the on-site venue for this assembly, and the invaluable expertise shared by our distinguished keynote speakers, whose wisdom resonated with the youthful minds.

This event has brought an opportunity for our new generation of researchers to engage in thought-provoking sessions, insightful presentations, and vibrant discussions. Not only has it encouraged every budding researcher to connect with peers but also urged them to embrace the spirit of inquiry and open-mindedness despite their diverse backgrounds. Their active participation has enriched this conference and driven collective successes in each of their academic endeavors.

This intellectual journey together we embarked, inspired new ideas, and built lasting connections that transcend borders. I believe the conference was a triumph, which provided productive, inspiring, and memorable experiences for everyone especially our student-researchers who have shown their ability and commitment to advancing the power of research.

John Marvin D. Renacido
Aklan State University
3rd ISRC 2026 Junior Co-Chair

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Education Track

Harnessing Urdhva-Tiryagbhyam, Nikhilam and Vinculum Sutras in algebraic binomial simplication

[1]Jasheen S. Hawak & [2]Deserie A. Obregina

[1]4th Year - College of Teacher Education Major in Mathematics, hawakjasheen@gmail.com; [2]4th Year - College of Teacher Education Major in Mathematics, obreginadeserie15@gmail.com

ABSTRACT

This study examined the effectiveness of two distinct teaching methods—the procedural method and the Vedic Mathematics technique—on the performance of junior high school students in simplifying algebraic fractions. Utilizing a quasi-experimental design, the research involved two groups: a control group taught using the procedural method and an experimental group taught through Vedic Math. Pre-test and post-test results were analyzed to determine differences in performance, accuracy, and speed. Findings showed no significant difference in the pre-test scores, indicating similar initial proficiency levels. However, both groups demonstrated significant improvement after instruction, confirming the positive impact of the interventions. The Vedic Math group outperformed in problem-solving speed without compromising accuracy, while both achieved the same mastery level under DepEd standards. Regression analysis revealed that pre-test scores and accuracy were the strongest predictors of post-test performance, emphasizing the importance of solid foundational understanding. The study concludes that adopting a hybrid approach, combining the procedural method and Vedic Math, enhances mastery, efficiency, and fluency in mathematical learning. The results provide practical insights for teachers, curriculum developers, and policymakers in improving mathematics instruction.

Keywords: procedural method, vedic mathematics, hybrid approach, simplifying expression, mathematical performance, speed, quasi-experimental design

About the presenters:

Jasheen S. Hawak and **Deserie Obregina**, Filipino citizens residing in Candelaria, Quezon, and currently pursuing the degree of Bachelor of Secondary Education major in Mathematics at Tayabas Western Academy. Jasheen S. Hawak, born on February 1, 2004, completed her Senior High School education under the Accountancy, Business, and Management (ABM) strand at Tayabas Western Academy and her primary education at Kinathian II Elementary School. Deserie Obregina, born on December 15, 2002, completed her Senior High School education under the ABM strand at MSEUFCI and her primary education at Pahinga Norte Elementary School. Both have actively participated in academic seminars and online webinars focused on teaching methodologies, assessment, research, publication, and mathematics-related topics from 2021 to 2024.

Influence of Myers-Briggs Type Indicator (MBTI) personality types on basic accounting problem-solving skills of tertiary business and accountancy students in Lucena City

[1]Mark Paul O. Altarejos, [2]Abhraim L. Ranuda, [3]Nisha Joan M. Veluz & [4]Kiana Nicole M. Llego

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ABSTRACT

This study investigated the influence of Myers-Briggs Type Indicator (MBTI) personality types on the basic accounting problem-solving skills of selected tertiary students under the Business and Accountancy program in Lucena City. Utilizing a quantitative descriptive research design, the study focused on how individual personality traits shape students' approaches to complex financial transactions and accounting principles. The researchers gathered data from a sample of 100 students selected through purposive sampling to ensure representation across the accountancy discipline. Data collection involved a validated Likert-scale questionnaire measuring students' attitudes, confidence levels, and perceived difficulty in solving accounting problems relative to their identified MBTI types. Descriptive statistics were employed to analyze the responses and determine significant patterns between personality types and academic performance. The findings revealed that MBTI types play a crucial role in shaping learning styles and problem-solving strategies within the field of accounting. Specifically, certain personality types demonstrated higher levels of confidence and accuracy in analyzing ledger entries and financial statements. The study concludes that understanding personality profiles can assist educators in tailoring instructional methods to enhance student performance. Recommendations include the integration of personality-based learning strategies and the implementation of targeted support programs for students based on their MBTI results.

Keywords: MBTI, personality types, basic accounting, problem-solving skills, Business and Accountancy students, Lucena City

About the presenter:

Abhraim L. Ranuda is currently pursuing a Bachelor of Science in Business Administration, majoring in Operations Management, at QCRS College Lucena. He effectively bridges the gap between academic theory and global business practice, currently serving as a Virtual Employee for real estate brokerages based in Florida and Las Vegas, USA. With a strong background in leadership, Mr. Ranuda previously served as the Operations Manager for an ESL company, where he managed organizational workflows and cross-cultural communication. His professional experience spans international real estate operations, educational management, and remote workforce optimization. His research interests are centered on management and global business operations, with a focus on enhancing efficiency within diverse organizational structures.

Reading comprehension and learning interest as predictors on scholastic performance in science

[1]Charry Lou T. Enargan & [2]Gina Fe G. Israel

[1]College graduate and MAED student at UM Tagum College, charryenargan@gmail.com

ABSTRACT

This study examines the predictive relationship between reading comprehension and learning interest on students' scholastic performance in science using a descriptive correlation design. Reading comprehension assessments along with Science Interest survey questionnaire, were administered to 622 respondents. The respondents were chosen using random sampling method. Quarterly assessments were used as the basis for the scholastic performance. Pearson correlation and multiple regression analysis were used to validate the data collected. A strong positive correlation between reading comprehension and science performance (r = 0.837) proved that reading comprehension influences scholastic performance. On the other hand, learning interest generated a weak and statistically insignificant relationship (r = 0.122) which reveals that learning interest alone cannot be used as a predictor for scholastic success. Due to the said findings, the development of reading intervention programs that emphasize critical analysis and evaluation is recommended. However, schools must still foster a positive learning environment for the learners.

Keywords: reading comprehension, learning interest, scholastic performance, inferential, critical, re-engagement

About the presenter:

Charry Lou T. Enargan is a BS Biology graduate and has been teaching Grade 10 Science for seven years. She is now taking MAED major in Teaching Science at University of Mindanao-Tagum campus.

Concrete- Representational-Abstract (CRA)-based approach in mitigating math anxiety in mathematics in the modern world

[1]Maria Cassandra P. Ramos, [2]Jian Christopher B. Arriola & [3]Patricia Nicole D. Ramirez

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ABSTRACT

Math anxiety remains a challenge among Filipino students, particularly those in non-math-intensive programs like Bachelor of Arts in Communication. Rooted in negative past experiences and low self-confidence, it impedes learners' ability to solve problems effectively. This study explored the impact of the Concrete-Representational-Abstract (CRA) approach on reducing math anxiety and improving self-efficacy among first-year Bachelor of Arts in Communication students enrolled in Mathematics in the Modern World at Batangas State University – The National Engineering University, Lipa Campus. Recognizing many perceive math as irrelevant and intimidating, the study examined whether step-by-step, hands-on approach in teaching could alleviate anxiety and build confidence. Using a qualitative phenomenological design, the researchers conducted semi-structured interviews with ten students and one instructor after integrating the CRA method in a lesson on mathematical patterns. Thematic analysis of the data revealed that while initially perceived as difficult due to unfamiliarity, the CRA-based approach was exciting, enjoyable, and effective in making lessons more understandable. It increased students' confidence, encouraged persistence in problem-solving, reduced fear, and promoted motivation and engagement. Challenges encountered included diverse learning backgrounds, limited resources, and time constraints. The CRA method proved effective in mitigating math anxiety and enhancing self-efficacy by providing structured, hands-on experiences that helped students transition from tangible to abstract concepts. It fostered a more positive outlook toward mathematics, even among non-math-related courses. Based on the findings, the researchers recommend the development of a CRA-based workbook specifically designed for Mathematics in the Modern World to further support student learning and reduce math-related anxiety.

Keywords: CRA approach, math anxiety, self-efficacy, students' perceptions, instructional strategies

About the presenters:

Maria Cassandra P. Ramos, Jian Christopher B. Arriola and **Patricia Nicole D. Ramirez** are fourth-year college students taking the Bachelor of Secondary Education (BSED) major in Mathematics at Batangas State University, Lipa Campus. As pre-service teachers, they are being trained in advanced mathematical concepts and effective teaching strategies that help prepare them for future classroom instruction and academic work. Throughout their college journey, they have developed skills in educational research, lesson planning, and critical thinking. They were also recognized as Grand Finalists in the International Research Competition 2025, which reflects their effort, teamwork, and commitment to academic excellence. This experience allowed them to conduct meaningful research and present their work at an international level. Through their studies and research exposure, the presenters continue to grow as future educators who aim to contribute to quality mathematics education.

Navigating special education: A deep dive into the lived experience of SPED teachers

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ABSTRACT

Teaching students with special needs presents unique challenges that demand patience, adaptability, and resilience. This qualitative photovoice study explored the lived experiences of SPED teachers, aiming to provide an in-depth understanding of their professional journeys. Seven (7) SPED teachers participated in the study, selected through purposive sampling based on specific criteria. Data were gathered through semi-structured interviews and analyzed using Braun and Clarke's (2022) thematic analysis. The study identified four (4) major themes: (1) Heartstrings and Challenges: The Emotional Demands of SPED Teaching, (2) Bridging the Gap: Strategies for Enhancing Parental Involvement in SPED, (3) Navigating the Unseen: The Rewards of SPED Teaching, and (4) The Steady Hand: Upholding the Values of Consistency and Patience in SPED. These findings emphasized the emotional toll, coping strategies, and fulfillment experienced by SPED teachers. The study highlights the importance of institutional support, professional development programs, and parental collaboration in enhancing special education. Schools and policymakers must implement targeted interventions to support SPED teachers, ensuring that students with disabilities receive quality education in an inclusive learning environment.

Keywords: SPED teachers, lived experiences, special education, challenges, resilience, inclusive education

About the presenter:

John Ellie E. Aguila is an 18-year-old graduate of the Science, Technology, Engineering, and Mathematics strand from Calayan Educational Foundation, Inc., and a consistent academic achiever. With a strong foundation in science and research, he has actively competed in Science Investigatory Project presentations, showcasing his dedication to finding innovative solutions to real-world problems. Ellie also explored creative expression through participation in filmmaking and documentary competitions. For about two years, he served as a photojournalist for the school publication, capturing compelling stories through visual media. His strong research skills and commitment to excellence have made him an active and valued member of various school organizations. Ellie is equally committed to academic and extracurricular achievement, continuously striving for personal growth and meaningful contribution. Passionate about scientific inquiry, he remains dedicated to pursuing research that can positively impact his community. As he continues to develop his skills, Ellie stands out as a driven and multifaceted individual with a vision for innovation and service.

Humanities & Social Sciences Track

Screen time and its association to memory retention and concentration among adolescent high school students

Edward Lindon Q. Figarido

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ABSTRACT

This study aims to determine or confirm the presence or absence of a correlation between screen time with memory retention and concentration. A quantitative quasi-experimental research design was utilized to assess the students' memory retention and concentration. Fifty-three students were selected using a non-probability sampling technique known as purposive sampling. The procedure in data collection was through a questionnaire, which was designed to evaluate the amount of screen time of its respondents, as well as performance tasks such as the Rey Auditory Verbal Learning Test to measure memory, and the Stroop Test to measure concentration. The respondents were found to spend 4.5 times longer on screen time than the recommended amount by the American Academy of Pediatrics. The results showed a negative correlation between the use of smartphones and the scores of the Rey Auditory Verbal Learning Test and the Stroop Test, indicating a negative correlation between screen time to memory retention and concentration. Demographic variables such as grade level and gender were also considered during the course of this study, and results suggest that there is no statistical significance between these two variables to memory retention and concentration. This study confirms that as the smartphone use of the respondent increases, their memory retention and concentration decreases.

Keywords: memory, memory retention, concentration, screen time, smartphone use

About the presenter:

Edward Lindon Q. Figarido is a first-year student at Ateneo de Manila University pursuing a Bachelor of Science in Psychology. Driven by a relentless passion for human anatomy and behavioral psychology, he is actively participating in different endeavors that would enrich his skills and talents through his academic journey to be of service to society. He is currently involved in various organizations within his university in fields of science and medicine, which serve as an avenue in which he can demonstrate his capabilities in leadership, critical thinking, and problem-solving. It is through his various involvements and eagerness to grow that enables him to reach his potential in his academic journey, to be able to make a meaningful contribution to the world around him.

Sex education discourse: A corpus linguistic analysis of jargons and terminologies

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ABSTRACT

This study aimed to analyze the jargons and terminologies used in sex education materials, specifically Grade 7 textbooks at Tayabas Western Academy. Using a corpus linguistic approach, the researchers examined the frequency, categorization, and contextual use of terms related to sex education in materials published between 2019 and 2024. The corpus was processed using AntConc and word cloud generators to identify recurring linguistic patterns and key concepts. Findings revealed that the most frequent terms were Reproduction, Sexual Reproduction, Pagbibinata, Pagdadalaga, Fertilization, and Sekswal, emphasizing biological and developmental concepts. Filipino terms reflected the integration of moral and cultural values, particularly in Edukasyon sa Pagpapakatao (ESP) materials. The semantic web analysis grouped the terms into five domains: Core Biological Processes, Human Development and Puberty, Reproductive Anatomy, Sexuality and Relationships, and Sexual Health and Rights. Validator feedback indicated that while students were exposed to sexual terminologies, their understanding remained inconsistent. Teachers emphasized the need for motivation, bilingual explanations, and value integration to improve comprehension. The study concluded that effective sex education requires balancing scientific content with moral and cultural instruction, guided by teachers and supported by parents.

Keywords: corpus linguistics, instructional materials, jargon, sex education, terminology

About the presenter:

Shaira Zaulda Endecio is a pre-service teacher currently pursuing a Bachelor of Secondary Education major in English at Tayabas Western Academy. She is a consistent academic achiever, having graduated as Class Valedictorian in both elementary and senior high school, and has received numerous academic distinctions including With Honors, With High Honors, and multiple subject-based awards. Her academic excellence extends to tertiary education, where she earned 1st Place in the Education Quiz Bee in 2025. She is actively involved in campus journalism, serving as the Head Entertainment Editor of the official school publication, *The Spectrum*, for the academic year 2025–2026. In this role, she engages in journalistic writing, editorial responsibilities, and creative content development. Shaira has also participated in various youth organizations and educational seminars that enhanced her leadership and social awareness. With strong interests in writing, reading, and communication, she aspires to become an effective English educator who inspires learners and fellow pre-service teachers to understand the realities, responsibilities, and meaningful impact of the teaching profession.

Seeing is deceiving: A content analysis of AI-generated political misinformation and its influence on trust in government officials

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ABSTRACT

Artificial Intelligence (AI) has delivered unprecedented opportunities and also spawned new societal hazards in today's rapidly evolving technological context. One of the most concerning threats involves the increasing prevalence of AI-generated political misinformation, which undermines democratic dialogue and public faith. This qualitative content analysis studied how this misinformation is created and shared in TikTok through five purposively selected videos, and audience comments on the videos. A two-cycle coding process, descriptive coding, and thematic analysis were used to conduct the qualitative content analysis. Inter-coder reliability was determined through Cohen's Kappa ($\kappa = .82$), thus showing strong agreement, and reflexivity and anonymizing were used for rigor and ethics-related issues. The study revealed five interrelated themes that illustrate the layered strategies of misinformation: polarized narratives, which reduce politics to moral binaries of heroes and villains; engineered authenticity, which uses realistic visuals and synthetic voices to mimic credibility; linguistic persuasion, which employs rhetorical and emotional cues to foster skepticism; emotional amplification, which manipulates affective responses such as outrage or admiration; and credibility hybridization, which merges real and fabricated elements to blur truth and fiction. Collectively, these layers form a credibility stack, a multimodal structure combining narrative, visual, linguistic, and emotional manipulation to enhance believability. The findings underscore that AI-generated misinformation is more persuasive and difficult to detect than traditional propaganda, calling for strengthened media literacy initiatives and policy safeguards to mitigate its influence on democratic discourse.

Keywords: AI-generated misinformation, TikTok, political communication, content analysis, media literacy

About the presenters:

Justine is a Grade 12 STEM student at Columban College, Inc, with plans to undertake a degree in BSEd Mathematics. Has a strong interest in academic research, particularly in the field of social sciences.

Fem is a Grade 12 STEM student at Columban College, Inc. With plans to undertake a degree in BS Nursing. Has a strong interest in academic research, particularly in the field of social sciences and partly interested in experimental research in the field of engineering and robotics.

Siou-Sian is a Grade 12 STEM student at Columban College, Inc, with plans to undertake a degree in BS Mathematics. Has a strong interest in academic research, particularly in the field of social sciences and psychology.

Princess is a Grade 12 STEM student at Columban College, Inc. With plans to undertake a degree in BS Accountancy. Has a strong interest in academic research, particularly in qualitative research exploring experiences and perspectives.

Annika is a Grade 12 STEM student at Columban College, Inc. With plans to undertake a degree in BS Nursing. Has a strong interest in scientific research, particularly in the fields of health and medicine.

Life after loss: Coping mechanisms among grieving parents

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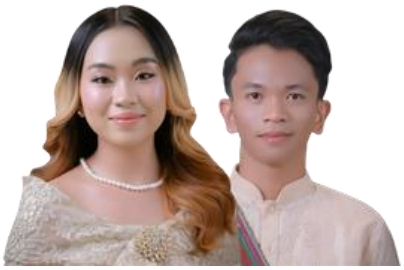
ABSTRACT

This study was developed to highlight significant details of the lived experiences of parents whose child had passed away untimely. This study focused on how parents' journey through the various stages of grief using the Kubler-Ross model, examining how they had managed their sorrow and the strategies they employed to cope with their loss, as well as the difficulties they had faced after their child passed away. To understand participants' lived experiences, the researchers employed Interpretative Phenomenological Analysis. Then, the researchers encapsulated concepts relating to the study, such as coping mechanisms, prevention support, and sense-making. The research attempted to fill a critical gap in understanding the unique grief processes and psychic challenges parents faced upon having experienced the loss of a child due to untimely death, whose issue remained poorly explored even though its prevalence was still on the rise. They employed various ways of coping but have not had the opportunity to consult with mental health professionals, but rather sought their limited support system. This had an impact, making them more aware that maintaining connections with those around them and seeking social support were crucial in times of difficulty. Moreover, maintaining a connection with the dead through memories and symbolic gestures helped them integrate their loss into their lives in a meaningful grieving process.

Keywords: untimely death, grieving, interpretative phenomenological analysis, lived experiences, bereavement, Kubler-Ross Grief Theory

About the presenter:

Angelica Joan C. Daria and **Joshua Thaddius O. Guerrero** are graduates of the Bachelor of Arts in Psychology program at Manuel S. Enverga University Foundation–Candelaria, Inc.



Utang na loob and psychological well-being of those *estudyanteng nakikitira*

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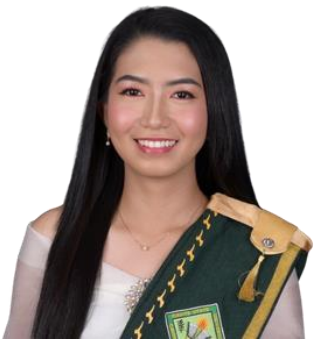
ABSTRACT

This study was conducted from October 2024 to January 2025 in Cavite State University – Silang Campus located at Biga I, Silang, Cavite, to determine the relationship between *utang na loob's* five dimensions and the psychological well-being of those *estudyanteng nakikitira*. Specifically, this study sought to determine the following: (1) *utang na loob* scores, in terms of: (a) respect, (b) satisfaction, (c) reciprocity, (d) obligation, (e) closeness; (2) level of psychological well-being; significant relationship between *utang na loob* as (3) respect, (4) satisfaction, (5) reciprocity, (6) obligation, (7) closeness and psychological well-being. A correlational research design was used, with respondents selected through purposive, snowball sampling. Surveys with 85 *estudyanteng nakikitira* were conducted using the *Utang na Loob* and Psychological Well-being scales. Results showed that the higher the scores, the higher those *estudyanteng nakikitira* in *utang na loob's* five dimensions with moderate psychological well-being. There was a significant relationship between *utang na loob* as respect, satisfaction, reciprocity, closeness, and psychological well-being. Those *estudyanteng nakikitira* with high scores in *utang na loob's* five dimensions were more motivated to reciprocate and express appreciation, fostering positive relationships and personal growth. Limitations of the study suggested improving the *utang na loob* instrument and exploring different aspects of *utang na loob* in future research. Future studies could explore *utang na loob's* relationship with psychological well-being and other Western psychological constructs.

Keywords: utang na loob, gratitude, psychological well-being, estudyanteng nakikitira, kapwa

About the presenter:

Ms. Cristine Jade R. Yordan, , driven by personal experiences, pursued a Bachelor of Science in Psychology at Cavite State University–Silang Campus in September 2021 and earned her degree in August 2025, graduating with the Latin honor of magna cum laude. Her research interests were shaped by the realities of student life, particularly the experiences of those estudyanteng nakikitira. Her work highlighted how cultural values can shape psychological well-being, offering insights into the broader relationship between tradition and mental health. She hopes to continue exploring this area of study in the future, further contributing to meaningful and culturally grounded perspectives in psychology.



The lived experiences of resilience among mothers with histories of abuse

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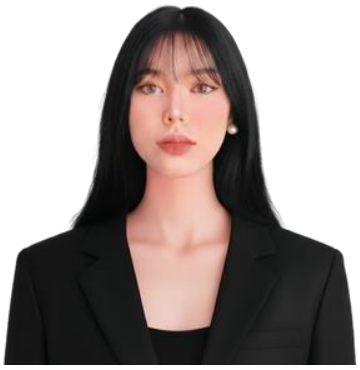
ABSTRACT

This narrative qualitative study investigates how Filipino mothers with histories of abuse develop resilience through motherhood within their everyday realities. The purpose is to explore the psychological mechanisms and cultural factors that enable these mothers to transition from trauma to transformative caregiving. Utilizing a narrative inquiry approach, the researchers conducted semi-structured interviews with five survivor-mothers in Lucena City, selected through snowball sampling, and analyzed the data using thematic narrative interpretation. Findings reveal that motherhood serves as a vital turning point, awakening inner strength and a commitment to breaking intergenerational cycles of violence through gentler, communicative parenting. Despite financial struggles, participants navigated trauma by leaning on informal safety networks - such as siblings, neighbors, and kumares - and drawing courage from faith and their children. The study concludes that parenting functions as a space for identity reconstruction and healing, culminating in the development of the PagHILOM program. Research implications suggest that local government units and social workers should integrate these culturally grounded, informal support systems and spiritual strategies into formal trauma-informed parenting interventions to better support long-term maternal recovery.

Keywords: resilience, motherhood, trauma-informed parenting, informal networks, PagHILOM, Filipino survivor-mothers

About the presenter:



Angelina A. Pillone is a graduating Bachelor of Science in Psychology student at CSTC College of Sciences, Technology and Communications, Inc. A dedicated academic achiever, she has maintained her status as a consistent Dean's Lister throughout all her college years, demonstrating a high level of discipline and a deep commitment to the field of behavioral science. Driven by a personal advocacy for mental health awareness and social service, she co-authored the study, "The Lived Experiences of Resilience Among Mothers with Histories of Abuse," which explores the transformative power of trauma-informed care. Her contribution to this research highlights the necessity of culturally grounded support systems in the Philippines. Angelina is committed to a career in professional psychology, aiming to collaborate on the development of practical, community-based programs - such as PagHILOM - designed to empower survivors of trauma and foster long-term emotional healing.

Invisible obstacles: Exploring the resilience and coping strategies during rehabilitation among ischemic stroke survivors

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ABSTRACT

The detrimental effects of stroke may cause disabilities, impairments, and even be paralyzed. Rehabilitation or therapy is one of the many services that is essential for stroke survivors to start as soon as possible to further prevent any complications, this will help in relearning the skills that were lost after the severity of the stroke. This study explores the resiliency and the coping strategies that Ischemic stroke survivors used during therapy. A descriptive phenomenological approach was used in understanding and emphasizing the experiences of the participants. The data collection process was conducted through a semi-structured one-on-one interview with a total of five (5) participants. The narratives of the study were analyzed through the utilization of Braun and Clarke's thematic analysis. The results revealed four (4) major themes: (L) Life-altering Experiences: The Aftermath of Ischemic Stroke Among Its Survivors, (2) A Rough Chapter: Challenging Encounters Met During Therapy. (3) Hanging Loose: Handling Stress and Coping Strategies Used During Therapy, (4) Bright Outlook: Hope and Resilieney Amidst Challenging Times. A further explanation of other factors or contributors of the stress and challenges that the Ischemic stroke survivors faced in terms of financial or work-related aspects as it was mentioned by the respondents of the study were not fully explored and included in the study.

Keywords: ischemic stroke, stroke survivors, rehabilitation, resilience, lived experience, disability

About the presenter:

Allyza Dominique Asnan, an 18-year-old student at Calayan Educational Foundation, Inc. (CEFI), is passionate about rehabilitation and health. Her observations of stroke patients undergoing rehabilitation have sparked her intense interest in learning about the difficulties and healing processes faced by stroke victims. Allyza combines empathy and curiosity in her quest for knowledge, which drives her to learn and make a significant contribution to patient care. Her desire to having a good influence in the healthcare industry is demonstrated by her devotion to watching, learning from, and helping stroke sufferers. Allyza aspires to use her abilities and empathy to help others and encourage hope for healing and resiliency as she develops both academically and personally.

Mag-aruga ay 'di biro: Unveiling the lived experience of OFW caregivers during armed conflict in Israel

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ABSTRACT

The caregiving profession demands unwavering commitment, but for Overseas Filipino Workers (OFW) caregivers in Israel, the challenges multiply when armed conflict disrupts daily life. This qualitative phenomenological study explores the lived experiences of OFW caregivers during the armed conflict in Israel. Data collection was conducted through unstructured interviews with five (5) participants, who were selected using snowball sampling. The narratives were meticulously transcribed and subjected to Braun and Clarke's (2022) reflexive thematic analysis, ensuring a thorough and insightful examination of the participants lived experiences within the context of caregiving during armed conflict. The study revealed four (4) major superordinate themes: (1) Navigating the Psychological Turmoil of War, (2) Anchoring Safety and Psychological Resilience. (3) Oars of Connectivity, and (4) Sailing Through Caregiving. Findings showed that participants experiences highlight the precarious balance between professional caregiving duties and personal safety concerns, emphasizing the necessity of resilience, adaptability, and external support systems. The caregivers reliance on technology played a crucial role in maintaining security and communication with their families. Furthermore, the study highlights the critical need for comprehensive mental health support, strengthened legal safeguards, and well-structured crisis response measures to ensure the safety and well-being of OFW caregivers operating in high-risk environments. The insights gained from the participants can inform policies and support systems that enhance the well-being of caregivers working in conflict zones. This study has implications for labor migration policies, caregiving programs, and mental health initiatives that address the unique needs of OFW caregivers facing crises.

Keywords: OFW, caregivers, armed conflict, lived experience, crisis response

About the presenter:

Hyacinth Ahlie L. Francisco is an 18-year-old student from Calayan Educational Foundation, Inc. (CEFI), driven by a deep passion for understanding human experiences. Inspired by the lived realities of OFW caregivers during the armed conflict in Israel, she seeks to explore the intersection of resilience, caregiving, and social impact. Hyacinth demonstrates a strong commitment to research and meaningful inquiry, aiming to give voice to stories often overlooked. Through her academic pursuits and personal initiatives, she continues to cultivate critical thinking, empathy, and a dedication to community engagement. Her work reflects both intellectual curiosity and a desire to create positive change, marking her as a thoughtful and driven young individual with a vision for social awareness.

Love beyond boundaries: Narratives of individuals in consensual non-monogamous relationships

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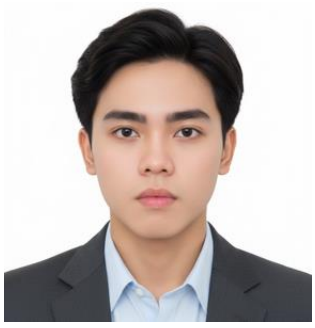
ABSTRACT

The study aimed to explore and describe the lived experiences of individuals engaged in consensual non-monogamous relationships (CNM) within Quezon Province. In a society where monogamy was the predominant cultural norm, CNM relationships were often misunderstood and stigmatized. Through this research, the researchers sought to understand how individuals made meaning of their relational experiences, specifically regarding sexual fulfillment, emotional well-being, and their coping with social stigma. A qualitative, phenomenological design was employed, utilizing narrative inquiry to gather rich and in-depth stories from participants aged 20 years and above who were actively engaged in CNM relationships. Snowball sampling was employed to recruit respondents, and semi-structured interviews were used as the primary data-gathering tool. Results indicated that although participants experienced difficulties such as prejudice, stereotypes, and strained family or social relationships, they also highlighted the importance of honest and open communication, mutual agreement, and consent as primary elements in healthy and satisfying relationships. Many described growth in resilience, strong self-awareness, and meaningful intimacy across multiple relationships. This study concluded that CNM, when engaged unconventionally, could lead to trust and satisfaction comparable to monogamous relationships.

Keywords: consensual non-monogamous, stigma, polyamory, emotional well-being

About the presenter:



Christian C. Leoparte is currently a fourth-year Bachelor of Science in Psychology student at the College of Sciences, Technology and Communications Inc. (CSTC). His academic background includes continuous formal education from elementary through senior high school at Gulang-Gulang National High School, leading to his current tertiary training in psychology with an emphasis on research methods, psychological assessment, and ethical practice. Since 2022, he has served as a Student Assistant in an academic setting, where he has been involved in research- and instruction-related support activities, including the systematic collection, encoding, and organization of academic and administrative data for departmental records and reports. He has assisted in psychological testing procedures through the preparation of assessment materials, support during test administration, and organization of test results, while strictly maintaining confidentiality and adherence to ethical standards. He has also worked closely with faculty members in coordinating seminars, orientations, and academic activities, which enhanced his skills in documentation, procedural accuracy, and collaborative research support. Additionally, he has participated in seminars and training related to mental health, workplace psychology, and professional development, further strengthening his research-related competencies and understanding of applied psychological principles.

From loss to growth: A narrative study of transformational journeys among mothers after miscarriage

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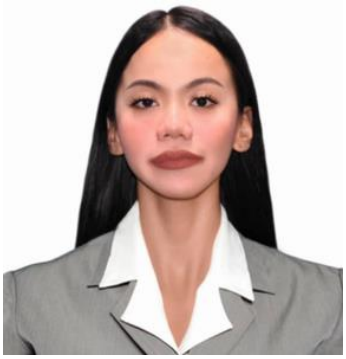
ABSTRACT

This study explores the transformational journeys of mothers after miscarriage, focusing on how they narrate their experiences of loss, coping, and growth. Using a qualitative narrative research design, the study involved five mothers from Lucena City, Quezon Province, who experienced miscarriage within the past three to ten years. Participants were recruited through snowball sampling and interviewed using semi-structured guides, allowing them to share their stories in depth. Data were analyzed thematically, guided by Swanson's Middle Range Caring Theory and the Pagdadala Model of Sikolohiyang Pilipino, which provided frameworks for understanding care, resilience, and cultural burden-bearing. Results revealed themes of career-driven lifestyles during pregnancy, emotional struggles of grief and trauma, reliance on family and faith as coping mechanisms, and the redefinition of self and motherhood after loss. Despite pain and stigma, participants described gradual healing through support systems, meaning-making, and renewed perspectives on motherhood. The findings emphasize miscarriage as both a deeply painful and transformative experience, highlighting the need for compassionate care and culturally grounded support. Based on the results, the study proposed a psychosocial support workshop, to be facilitated with the assistance of professionals, to guide grieving mothers in their healing and growth.

Keywords: miscarriage, transformational journey, resilience, growth, identity reconstruction

About the presenter:



Anne Kimberly B. Panganiban is a 21-year-old student from Lucena City, Quezon Province, currently pursuing her tertiary education at the College of Sciences, Technology and Communications (CSTC). Her academic training has strengthened her interest in psychology, mental health, and human development, particularly in understanding how individuals navigate personal and social challenges. Through her coursework, she has developed essential skills in communication, collaboration, and time management, enabling her to work effectively in both independent and team-based academic settings. She is computer literate and proficient in basic office applications such as Microsoft Word, Excel, and Google Sheets for research documentation and data organization. She values empathy, critical thinking, and ethical practice, which she considers vital in conducting meaningful and responsible research. As a student-researcher, she aspires to contribute to the field of social and behavioral sciences through scholarly engagement and community-oriented initiatives.

The moral distress of nurses executing do-not-resuscitate

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ABSTRACT

Moral distress is commonly encountered by health care workers, specifically nurses, who are at high risk of emotional conflict. Moral distress has been associated with increased stress, workplace fatigue, job burnout, and lack of interest, leading to nurses leaving the workplace or even their profession. This study aims to explore the moral distress experience of nurses both before and during the Do-not-resuscitate protocol at Quezon Medical Center in Lucena City. The data collection procedure was conducted through a semi-structured individual interview with a total of six (6) participants who were willing to share their experiences anc viewpoints. The narratives of the study were analyzed through the utilization of Braun and Clarke's thematic analysis. The results revealed three (4) major themes: (1) The hand that saves, the heart that breaks: the struggles of nurses prior, during, and after executing a Do-not-resuscitatc, (2) Bound by duty, law, and devotion: the role of nurses in DNR. (3) Saving lives through goodbyes: Letting go of patients. (4) 3H: How healers heal: The coping strategies of nurses. Findings showed that the emotiona state of a nurse is under determines how they cope differently against the struggles and difficulties they are facing before, during, and after. While the study provides profound insights into nurses' lived experiences, interpretations were based on self-narrative reports. Additionally, the results provide in- depth insights but restrict generalization or measurement, emphasizing the necessary for future research using broader or mixed-method approaches.

Keywords: do-not-resuscitate, moral distress, coping strategies, nurse

About the presenter:

Paulene Kate Trivinio is a 19-year-old graduate of the Science, Technology, Engineering, and Mathematics strand from Calayan Educational Foundation, Inc. an aspiring pre-med student with a strong inclination toward the field of nursing. She has been significantly influenced by her aunt, a medical doctor, which fostered her early appreciation for healthcare, compassion, and service.This inspiration shaped her academic interests; being a consistent academic achiever since elementary and has sought to understand the realities of the nursing profession beyond mere clinical skills. Driven by curiosity, passionand empathy, she became particularly interested in the ethical and emotional challenges faced by nurses, which led her to conceptualize a research study. Through this work, Paulene demonstrates a growing commitment to understanding the human side of healthcare and advocating for the well-being of medical professionals. As she continues to develop her academic and research skills, she stands out as a purpose-driven individual dedicated to contributing meaningfully to the healthcare community.

Science and Technology Track

Evaluating the efficiency of 'Waterwise': A smart automated irrigation system for sustainable water management

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ABSTRACT

Efficient irrigation is essential especially in the areas with limited water resources. However, cost-effective and the availability of automated solutions remain limited, especially for smallscale farmers. This study assesses Waterwise, an Arduino-based irrigation system aimed at optimizing water utilization, improved soil moisture management, and minimizing energy consumption. A true experimental design was employed and conducted in six (6) barangays in Malinao, Aklan with thirty (30) farmers selected through accidental sampling. Key performance metrics included Water Use Efficiency (WUE), Soil Moisture Management, and Energy Use Efficiency with findings showing high effectiveness across all areas. WUE recorded a mean score of 4.51, classified as Very Highly Efficient, while Soil Moisture Management obtained an average score of 4.38 and Energy Efficiency obtained 4.37 average score, both classified as Highly Efficient. These findings demonstrate the potential of low-cost, automated systems in improving agricultural sustainability. For further implementation, it should include structured user training to support scalability and renewable energy integration in agriculture.

Keywords: efficient irrigation, arduino, water efficiency, sustainability, cost-effective, energy efficiency

About the presenters:

Kylla Guia Nahil Zabala graduated senior high school at Aklan Catholic College. She is a consistent honor student from her junior high school and senior high school.

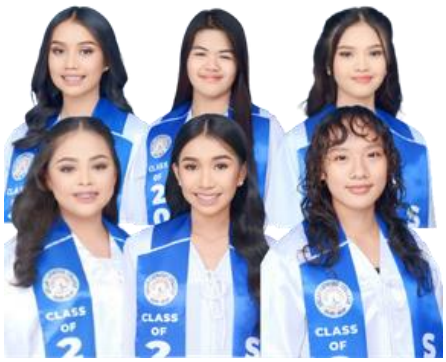
Liane Luce Cervatos Zapanta completed her both junior and senior high school at Aklan Catholic College. She is also a consistent honor student.

Arianney Labvien Jimeno Dangautan graduated senior high school at Aklan Catholic College. She completed junior and senior high school with honors.

Joanna Yerro Remes graduated senior high school at Aklan Catholic College. She completed junior and senior high school with high honors.

Yuan Ashley Ocampo Tonio graduated senior high school at Aklan Catholic College. She completed junior and senior high school with high honors.

Precylle C. Galido graduated senior high school at Aklan Catholic College. Together, this exceptional team earned recognition for producing the best research paper, demonstrating their collective academic excellence and commitment to innovative agricultural technology research.



Sabanana wax: Saba banana (*Musa acuminata* × *balbisiana*) peel as an alternative to floor wax

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ABSTRACT

Floor wax is widely used to preserve and enhance the shine of floors, yet commercial products often contain hazardous chemicals that pose risks to health and the environment. This quasi-experimental study addressed the gap by testing the efficacy and acceptability of banana peel (Musa acuminata × balbisiana) as an eco-friendly alternative to commercial floor wax among 48 teachers at Libertad National Vocational School in Antique, Philippines, during 2024–2025. Two banana peel-based treatments were formulated and compared with commercial wax through observation, survey questionnaires, and the tilted plane method. Validated instruments and ethical considerations were applied. Statistical tools such as mean, mean rank, Kruskal-Wallis H test, and Mann-Whitney U test were used for data analysis. Results showed that Treatment 2 maintained high performance in terms of shine and friction resistance, surpassing both Treatment 1 and the commercial wax, which quickly declined in quality. Both banana peel-based treatments exhibited moderately resistant friction levels, exceeding the baseline standard. Teachers rated the products as moderately acceptable in shine and ease of application, and acceptable in odor. A significant difference was found between treatments in shine, while no significant differences emerged in odor and ease of application. The study suggests that banana peel-based wax, particularly Treatment 2, is a sustainable and effective alternative for floor maintenance. It is recommended that students, teachers, and communities pursue further refinements to improve formulation, explore livelihood opportunities, and promote sustainability by repurposing agricultural waste into eco-friendly household products.

Keywords: banana peel, floor wax, eco-friendly products, sustainability, acceptability, quasi-experimental design

About the presenters:

Irish Faye D. Betong, Khryz John Ree E. Esierjose, and **Cirene Joy S. Tinifrancia** are among the nine Senior High School STEM student authors from Libertad National Vocational School of the study entitled "Sabanana Wax: Saba Banana (Musa acuminata × balbisiana) Peel as an Alternative to Floor Wax." They are the designated presenters of the paper at the conference and played significant roles in the conceptualization of the research, experimental design, data gathering, analysis, and interpretation of results. Their academic interests focus on applied science, environmental sustainability, and the development of eco-friendly products using locally available materials. Through their involvement in this research, they developed competencies in scientific inquiry, critical thinking, collaboration, and academic presentation, reflecting their commitment to innovation and sustainable scientific solutions.

Plattera: An online catering reservation management system

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ABSTRACT

The manual reservation process for the catering services of Auxiliary Services Program at Nueva Vizcaya State University presents several challenges. It depends heavily on manual procedures such as paper-based forms, personal communication, and multiple layers of verification and approval. To address these issues, the researchers developed an Online Catering Reservation Management System using the Rapid Application Development (RAD) model, which supports iterative design, rapid prototyping, and continuous user feedback. The study is significant for the clients which are the students, employees, and guests, the ASP staff and Catering Industry, the future researchers, and the researchers. Data collection involved interviews with the ASP Director, surveys of 52 students, 93 employees, 22 guests, and on-site observations. The system integrates essential features such as menu browsing, reservation submission, scheduling, approval tracking, email and SMS notifications, cancellation request and approval, admin dashboard for monitoring sales, clients, and reservation. The system's limitations include requiring clients to still visit the university for payment. To assess the system's quality and performance, the researchers employed the USE (Usability, Satisfaction and Ease of Use) Tool Questionnaire, gathering evaluations from a diverse set of respondents including students, employees, guests, IT professionals, the Food Catering Supervisor, and the Director of ASP. The overall average mean of 6.67 demonstrated consistently high ratings in usefulness, ease of use, and overall satisfaction, indicating strong reliability and user acceptance.

Keywords: online reservation system, manual reservation process, auxiliary service program, catering services

About the presenter:

Richelle Kim V. Chua is an undergraduate Bachelor of Science in Information Technology (BSIT) student at Nueva Vizcaya State University. She completed her secondary education at Nueva Vizcaya General Comprehensive High School and her primary education at Bayombong Central School. The presenter is a motivated and detail-oriented with a strong interest in technology and system development. She represented the university in both regional and national pitching competitions for technology innovation. The presenter has strong leadership along with abilities in multitasking, process improvement and design work.

UTRACE: University Tracking and Response for Accidents, Crises, and Emergencies

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ABSTRACT

The primary objective of this study was to develop UTRACE: University Tracking and Response for Accidents, Crises, and Emergencies for the University Disaster Risk Reduction Management Team (UDRRMT). Currently, Nueva Vizcaya State University relies on fragmented manual methods, such as phone calls and messaging apps, to report incidents. The study found that 65.32% of respondents struggled to identify the exact location of incidents, while others did not know who to contact during emergencies, which led to slow response times. To address these challenges, the researchers developed a web-based system with GPS mapping capabilities. The system featured real-time location tracking, SMS notifications for responders, and suggestion chips for faster reporting. It allowed administrators to monitor incidents through a dashboard and verify the authenticity of reports using location data. The researchers utilized the Rapid Application Development (RAD) methodology. The system was developed using PHP and MySQL for data management, with JavaScript and Bootstrap used for the user interface. The system was evaluated by 127 respondents, including third-year BSIT students, IT experts, and UERT officers, using the USE Tool (Usability, Satisfaction, and Ease of Use). The evaluation showed a Grand Mean of 4.42, interpreted as Strongly Agree. Notably, the categories for Ease of Learning and Satisfaction received the highest ratings of 4.45, proving the system was intuitive and user-friendly. The study concluded that UTRACE was an effective solution for centralizing incident reporting and improving response coordination. It was recommended for implementation to enhance safety and security within the university.

Keywords: emergency response, web-based real-time location tracking, SMS notification, USE tool

About the presenter:

Patrick D. Nava is an Information Technology student at Nueva Vizcaya State University served as a lead researcher for the capstone project "UTRACE."

Development and evaluation of an IoT-based wearable heart rate monitoring system

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ABSTRACT

This study aims to develop and evaluate a cost-effective Internet of Things (IoT)-based heart rate monitoring armband that addresses the limitations of existing devices lacking wireless connectivity for real-time data transmission in dynamic and remote monitoring contexts. A mixed-methods approach was employed to assess device functionality, usability, and effectiveness. The armband utilized ESP32 NodeMCU microcontroller and Blynk mobile application platform for wireless transmission. Purposive sampling recruited volleyball players (n = 30) from Aklan Catholic College, Philippines. Following cardiologist validation, data were collected through structured surveys and semi-structured interviews across multiple activity levels (rest, walking, running). Quantitative analysis revealed excellent functionality (M = 3.41), usability (M = 3.43), and effectiveness (M = 3.43) on a 4-point Likert scale. The armband demonstrated reliable real-time heart rate detection across varying intensities: rest (M = 3.29), walking (M = 3.27), and running (M = 3.29). Qualitative feedback identified enhancement opportunities including strap comfort, battery longevity, sensor precision, and water resistance. The study was limited to a single institution and specific user demographic. The IoT-enabled armband represents a reliable, user-friendly, and economically viable solution for cardiovascular monitoring, with significant potential for remote patient monitoring systems and broader healthcare applications.

Keywords: Internet of Things, wearable technology, real-time monitoring, cardiovascular health, mobile health applications, ESP32 microcontroller

About the presenters:

Saira P. Agustin is a graduate of Aklan Catholic College, a consistent honor student, and an active Campus Ministry member.

Gian T. Delgado is also an Aklan Catholic College graduate and consistent honor student.

Jein Eliz D. Franco, another consistent honor student from Aklan Catholic College, placed third in the Western Visayas Literary Contest in 2018, third in the Essay Writing Contest, and fifth in Word Craft - Journalism & Creative Writing.

Jose Joshua M. Yerro is an honor student and product of Aklan Catholic College.

Yataki: Yielding Active Tread-based Alternative Kinetic Interface with IoT monitoring system

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ABSTRACT

The growing figure of Internet of things (IoT) devices is faced with a critical problem of ensuring a reliable and sustainable power supply especially in resource constrained environments. The sustainable solution discussed in this capstone project, YATAKI: Yielding Active Tread-based Alternative Kinetic Interface with IoT Monitoring System, is based on the human kinetic energy harvesting. The system makes use of an active tread-based platform that is loaded with piezoelectric sensors, which detect human movement, e.g., walking or stepping, and transform mechanical stress into electrical power. Such sensors produce high voltage output when stepping on them, which is in line with the current kinetic energy harvesting technology.

Keywords: kinetic energy harvesting, piezoelectric sensors, IoT monitoring system, tread-based interface, sustainable energy, ESP32 microcontroller

About the presenter:

Keith Zacharrie Espinosa is a student majoring in Robotics Engineering with practical experience in embedded systems, Arduino-based Internet of Things applications, and basic electronics. He also has experience in developing full-stack web and mobile applications, with growing expertise in integrating hardware and software systems. He is passionate about creating smart, connected systems and developing real-world engineering solutions.

Timelyfy: A web-based automatic scheduling system

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ABSTRACT

TIMELYFY is a web-based automatic scheduling system developed to address the inefficiencies of manual class scheduling at MSEUF-CI. Traditional scheduling at the university involves department heads manually entering data into collaborative spreadsheets, a process that is time-consuming, error-prone, and requires extensive communication to resolve conflicts over teacher, room, and faculty availability. To streamline this process, the researchers designed a system that automates subject allocation and detects conflicts. The project utilizes a client-server architecture with a microservice design, separating the user interface from the algorithmic backend. The front end is built with React, Tailwind CSS, and Zustand, while the back end uses Node.js for UI functionality and Python with FastAPI to handle core scheduling logic. The system's primary mechanism is a greedy search algorithm that provides rapid, conflict-free auto-scheduling for teachers, rooms, and student blocks. The resulting application features an intuitive, user-friendly interface tailored specifically for department heads. It includes quality-of-life features such as manual overrides, schedule predictions through MySQL transactions, and a visual timetable grid. By automating these tasks, TIMELYFY significantly reduces manual workload, maximizes resource utilization, and ensures a smoother pre-enrollment phase. The researchers concluded that the system is both performant and scalable, offering a modern solution to the complex constraints of university timetabling.

Keywords: automatic scheduling system, greedy search algorithm, conflict detection, web-based application, university timetabling

About the presenter:

Marc Joel Baldoz and **Emmanuel Genaro Jr. Ona** are fourth-year Bachelor of Science in Computer Science students at Manuel S. Enverga University Foundation–Candelaria, Inc.

G-WASTE: A smart waste collection system with GPS technology for real-time tracking

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ABSTRACT

This study presents the development and evaluation of G-WASTE, a real-time garbage scheduling and collection system designed to address inefficiencies in traditional waste management in Bogo City. Findings from surveys conducted among the LGU, garbage collectors, and residents reveal a lack of real-time communication between residents and collectors, an inefficient waste collection process, improper waste categorization, and delayed reporting of waste issues. The system aimed to improve by providing features such as real-time location and notification, waste categorization guide, waste generation prediction to recommend admin where and when garbage tends to overflow, and an AI chatbot for reporting and help. Using a mixed-method approach, the study focused on stakeholder experiences and system performance under real-world conditions through User Acceptance Testing based on ISO 25010 standards. The findings indicate overall weighted means of 4.3 (Strongly Agree) it means the app feature meets the needs of the residents, 3.7 (Agree) indicates how collectors find the app difficult to use which is due to the majority of the garbage collectors not having mobile phones or not using it regularly, 4.3 (Strongly Agree) it means LGU satisfied and support operation needs, and 4.5 (Strongly Agree) it means IT experts indicate the strong technical approval, demonstrating that G-WASTE effectively enhances communication, optimizes collections schedules, and support proper waste management practices. However, the system has limitations, the system dependent on the internet connectivity being stable to operate. These results have practical implications for local governments and communities seeking to implement data-driven, sustainable, and citizen-friendly waste collection.

Keywords: waste management, smart collection, real-time monitoring, collection scheduling, waste generation prediction, sustainability

About the presenter:

Kaye Chloe M. Malait is a Bachelor of Science in Information Technology (BSIT) student at Cebu Roosevelt Memorial Colleges. She serves as the front-end developer of the G-WASTE system, where she is responsible for designing and implementing the user interface to ensure a functional, intuitive, and user-friendly experience.

KALINGA: Katalyst Application with Localized Interactive Guided-Relief Map

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ABSTRACT

The Philippines experiences natural and man-made disasters, yet preparedness and response to disaster victims is still low due to fragmented communication, misinformation, and lack of a common platform for coordination. To address these gaps, the researchers developed KALINGA, a mobile disaster-response application that would help and provide citizens with timely access to relief distribution schedules, offline access to emergency hotlines, evacuation centers location, and shelter information. The application aims to improve the accessibility, transparency, and organization of disaster-related information and resources. The Agile Methodology was utilized for the study, which enabled iterative development and continuous refinement based on user feedback. The app was improved and evaluated through ISO 25010–based User Acceptance Testing involving fifty (50) citizens from different barangay within Bogo City, two (2) LGU representatives specifically from the CSWD, three (3) barangay level responders, three (3) city level responders, and one (1) IT expert. The UAT questionnaire included various software characteristics based on a 5-point Likert scale. Therefore, the results provided an overall weighted mean of 4.23, showing that KALINGA is functional, user-friendly, reliable, and it was able to effectively assist and coordinate communication and coordination during disasters. However, the study has found limitations such as network instability, varying levels of users' technological knowledge, and the use of a token-based AI chatbot which would restrict access by all individuals in circumstances of actual disaster situations. Despite these limitations, the findings indicate that KALINGA can greatly contribute to the improved and efficient disaster response efforts and support communities more effectively.

Keywords: disaster response, mobile application, location-based, relief operation, local government unit, information management

About the presenter:

Ma. Dannah T. Amores is a Bachelor of Science in Information Technology (BSIT) student at Cebu Roosevelt Memorial Colleges. She serves as the front-end developer of the KALINGA app, where she is responsible for designing and implementing the user interface to ensure a functional, intuitive, and user-friendly experience.

Developing a piezoelectric doormat for renewable energy generation

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ABSTRACT

Energy from footsteps into electrical Energy, examining power generation under typical foot traffic, material efficiency regarding sustainability, durability, and energy conversion, and feasibility for continuous operation considering development costs and long-term functionality. A mixed-methods quasi-experimental design was employed at Aklan Catholic College, Philippines. The system utilized 35 piezoelectric ceramic discs (PZT, 27mm) in a 5×7 matrix (50cm×70cm mat) with a bridge rectifier (1N4007 diodes), a 4700 µF capacitor, an MT3608 boost converter, and 18650 lithium-ion batteries with BMS. Performance was monitored over 12 weeks using a Fluke 87V multimeter, a Tektronix oscilloscope, and a data acquisition system under varying loads (40-100kg, 30-120 steps/minute). Grade 11 STEM students (N=33) completed validated questionnaires assessing perceptions of efficiency, sustainability, and durability. Analysis included descriptive statistics, ANOVA, regression, and efficiency calculations. The doormat generated a mean power of 6.8±2.1W (range: 4.2-10.3W), accumulating 268.8 kWh over 12 weeks with 3.2±0.8% conversion efficiency. Students rated sustainability highly (M=4.65) and efficiency positively (M=4.57), but expressed durability concerns (M=4.55) as performance declined 18.1% over 12 weeks. Development cost was $408.57 ($60.08/watt) with a 2.12-year payback period. ANOVA confirmed significant weight ($F(3,396)=24.7$, $p<0.001$) and frequency effects ($F(2,297)=18.3$, $p<0.001$). Material degradation, moderate conversion efficiency, and high costs limit large-scale deployment. Future research requires material optimization, improved circuits, cost-reduction strategies, and extended durability testing for practical, continuous operation in high-traffic settings.

Keywords: piezoelectric energy harvesting, kinetic energy conversion, energy conversion efficiency, footfall power generation, PZT ceramic materials

About the presenters:

Shania Therese T. Abolucion is a consistent honor student of Aklan Catholic College skilled in collaboration, testing and measuring, and circuit building.

Rhea Belle T. Campos, also a graduate of Aklan Catholic College, possesses skills in adaptability and flexibility, time management, and communication.

Shayne Ashly I. Impreso, a consistent honor student of Aklan Catholic College, excels in analytical decision-making and solution design, visionary initiative, flexibility and growth mindset, strategic planning and execution, and scientific rigor and ethical responsibility.

Ma. Viera Celine C. Tabulod specializes in literature review, research and data collection, technical writing, and critical thinking.

NoteBuddy: An artificial intelligence powered notepad

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ABSTRACT

NoteBuddy has been developed as a way of countering the increasing problems that learners face in terms of how they organize their learning resources, how they memorize learning information and how they use learning aids that meet the different learning attitudes. The platform combines traditional digital note-taking with advanced AI-powered features, such as automatic summarization, question-generation, voice-to-text and image-input, and intelligent reminder services, to provide a more productive and supportive academic environment that helps students to refine their academic work and process the information in a more effective manner. The design approach followed is user-centred paradigm, so that every functionality is compatible with the real requirements of students and is integrated into the normal study procedures of students. The system allows students to organize the notes systematically, study teaching material with increased efficiency, study materials in various modalities and thus develop a better understanding and memory of the chosen material. Overall, NoteBuddy enhances the ability of students to plan, track and perform their learning tasks, thus encouraging effective, well-structured and adaptive learning approaches due to the integrated and smart digital application.

Keywords: digital note-taking, AI-based learning, adaptive learning, customized learning support, optimization of the academic workflow

About the presenter:

Pascual Sebastian T. Acosta is a graduating college student with a strong interest in information technology and system development. Alongside academic studies, the presenter has served as a working scholar and HR assistant, an experience that fostered discipline, time management, and professional maturity. These roles provided valuable exposure to administrative processes, teamwork, and effective communication within an organizational setting. Academically, the presenter has been engaged in the development of system-based projects that focus on improving efficiency and user experience, particularly in the area of digital note-taking and information management. Through these projects, the presenter has gained practical skills in application development, system analysis, and problem-solving. The presenter is committed to continuous learning and strives to apply theoretical knowledge to real-world scenarios. With a balanced foundation of academic training and professional experience, the presenter aims to contribute meaningfully to discussions, system demonstrations, and collaborative environments in a clear, responsible, and professional manner.

SIRENAS: A smart inundation response and early notification Arduino-based system

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ABSTRACT

Flooding has always been one of the major problems faced in the Philippines. Though flood warning systems exist, they are often costly, sophisticated, and limited. This study proposes SIRENAS: A Smart Inundation Response and Early Notification Arduino-based System, a scalable, cost-efficient prototype that sends early flood warnings for local risk reduction. SIRENAS integrated an Arduino microcontroller, Red Rainwater Level Sensor, and a SIM800L GSM Module to detect rising water levels and send alerts through text messages. Three parameters were tested: Notification Delivery Time in varying distances — 0m, 300m, and 500m; Sensor Accuracy in detecting low, medium, and high-water levels; and Sensor Sensitivity under weak and heavy rain. Results showed that distance affected notification delivery time, where significant differences were seen between 0m and 300m, 0m and 500m, while 300m and 500m did not significantly differ. The sensor accuracy test demonstrated 100% accuracy as the water levels were correctly indicated in all trials. The sensor sensitivity test exhibited no false alarms under weak rain but had an average of 3.7% false alarms under the heavy rain intensity. These findings suggest that SIRENAS is a viable and low-cost option for localized risk reduction; with further scaling and refinements for sensor sensitivity, it may be integrated into localized flood preparedness initiatives in flood-prone areas.

Keywords: disaster risk reduction, flood warning system, Arduino, GSM module, red rainwater level sensor

About the presenters:

Jewel Caryl E. Arellano and **Jan Micah R. Rivera** are student-researchers from City of San Jose del Monte National Science High School, currently in the 12th grade level. Jewel Caryl E. Arellano, aged 17, and Jan Micah R. Rivera, aged 17, both reside in San Jose del Monte, Bulacan. They have actively participated in academic research activities and demonstrate strong skills in scientific investigation, data analysis, critical thinking, and collaborative work. This study was conducted as part of their research competency requirements, reflecting their commitment to academic excellence and ethical research practices. Through this research, they aim to contribute meaningful insights to the academic community and provide a foundation for future research endeavors.

Enhancement of Recurrent Neural Networks (RNN) applied in hand gesture recognition for American Sign Language (ASL) alphabet

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ABSTRACT

This study focuses on improving Recurrent Neural Networks (RNNs) utilized for ASL alphabet recognition system. RNNs are particularly effective in capturing sequential patterns and temporal dependencies in gesture data, allowing them to effectively process video frame sequences and classify hand gestures with high accuracy. However, RNN-based systems face a fundamental problem wherein they struggle to distinguish letters with nearly identical hand shapes, such as 'i' and 'j', 'u' and 'v', or 'a', 'e', 'm', 'n', 's', and 't', which can appear nearly identical in 2D representations. Implementing enhanced feature extraction mechanisms with 3D spatial encoding and specialized fist/thumb discrimination features captures subtle finger articulation differences and palm positioning, improving the system ability to distinguish between visually similar ASL alphabet signs through higher-resolution features and attention-based mechanisms. Using a dataset of 1,300 video samples (50 per letter), results demonstrated a dramatic improvement in distinguishing similar letters, with the enhanced model achieving 98% accuracy for fist-based letters (A, E, M, N, S, T) compared to the existing model's 45% accuracy, representing a 97% improvement. These findings demonstrate that enhanced RNN, applied to ASL alphabet recognition, effectively boosts the performance and robustness of hand gesture recognition and classification tasks, offering a reliable solution for ensuring accuracy and reducing misclassification in sign language interpretation systems.

Keywords: American Sign Language (ASL), hand gesture recognition, Recurrent Neural Networks (RNN), feature extraction, 3D spatial encoding

About the presenters:

Jenny R. Jimenez is a results-driven Computer Science student at Pamantasan ng Lungsod ng Maynila with demonstrated leadership experience as President of the Computer Science Society and hands-on IT exposure gained through industry training. She has shown the ability to deliver measurable outcomes, including achieving an 18% reduction in event costs through strategic budget management. She is proficient in Python, Java, HTML, and C, and has a strong track record of integrating technical skills with creative problem-solving across software development, financial management, and digital design. She actively participates in advanced technology seminars focusing on artificial intelligence, cybersecurity, and data analytics, and seeks opportunities to apply her technical expertise and collaborative leadership to drive innovation in software development or IT-related roles.

Augustin Brain C. Sabordio is a technology-focused Computer Science student at Pamantasan ng Lungsod ng Maynila specializing in full-stack mobile and web application development. He is a versatile programmer with proficiency in Python, Java, JavaScript, C, and C++, allowing him to adapt effectively to diverse project requirements and technology stacks. He demonstrates strong analytical thinking and attention to detail in developing scalable and efficient applications, with a commitment to writing maintainable code and applying best practices in software development. He seeks opportunities to leverage his programming expertise and problem-solving abilities in challenging software development projects.

CRAWL: Compact Rescue Assistant with Wide-Range Locomotion for post-earthquake victim detection via ESP32-CAM and mmWave vital sign sensing

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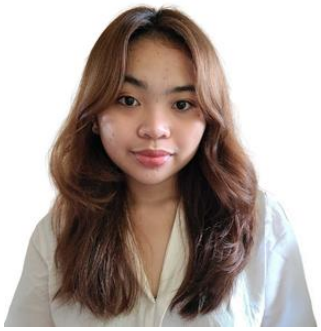
ABSTRACT

The Philippines, located on the Pacific Ring of Fire, frequently experiences earthquakes that can trap people under collapsed buildings. Rescuers often face difficulties reaching survivors quickly and safely. While existing search and rescue (SAR) robots provide assistance, many are too large for confined spaces, lack real-time detection capabilities, or are too expensive. This study aims to develop an affordable and compact robot capable of detecting human presence and monitoring vital signs in post-earthquake environments. CRAWL is a multifunctional robot equipped with an ESP32-CAM for real-time video streaming and a C1001 mmWave sensor for respiration and heart rate detection, and is controlled via a mobile application. Tests demonstrated Wi-Fi connectivity of up to 20.2 meters, human detection of up to 10.95 meters, and vital sign monitoring of up to 1.4 meters, with accurate readings within 0.6 meters and clear video transmission up to 20 meters. Navigation across simulated debris was consistent, suggesting that the differences in traversal time were not statistically significant ($p = 0.0637 > 0.05$) and the robot's performance remained steady. With a speed of 0.1 m/s and a battery life of approximately 1.57 hours. The findings highlight CRAWL's potential as a compact, reliable, and cost-effective tool for enhancing disaster response and reducing human risk in post-earthquake search and rescue operations.

Keywords: search and rescue robot, earthquake response, human detection, vital sign monitoring, mmWave sensor, ESP32-CAM

About the presenter:



Cyrene Samaria D. Bautista is a 17-year-old Grade 12 STEM student from City of San Jose del Monte National Science High School with a strong academic interest in science, mathematics, and research. She currently serves as the President of the CYNTRAS-CSTEM Club, where she leads initiatives focused on promoting scientific literacy and innovation within the school community. In addition, she holds the position of Assistant Editor of The Radikal, the official school publication, where she contributes to upholding integrity and responsible journalism through academic writing. Cyrene has actively participated in international mathematics competitions, earning gold medals for her achievements. Her research study entitled CRAWL has been presented in various science research fairs. In 2025, she achieved second place at the Division Science and Technology Fair. Furthermore, her project at the School Science and Technology Fair 2025 received multiple distinctions, including Best Research Project (Division Round Qualifier), Visitor's Choice Award, CSANSCI Choice Award, and Best Display Board. Through her research and presentations, Cyrene aims to contribute to the advancement of science education and inspire innovation within the academic community.

DECAP: Efficient integer multiplication in software through delayed carry parallelization

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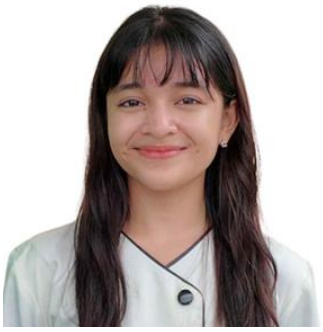
ABSTRACT

Big integer arithmetic is vital in cryptography, high-performance computing (HPC), and secure communications, yet traditional ripple-carry multiplication is limited by sequential carry propagation. This study evaluates delayed-carry parallelization for large integer multiplication on a consumer-grade AMD Athlon Silver 3050U CPU using AVX2 instructions and multithreading. Performance was compared against a custom ripple-carry baseline and parallel delayed-carry implementations across operands from 128 to 16,384 bits. Over 50 independent trials, Welch's ANOVA confirmed that the delayed-carry method resulted in statistically significant reductions in execution time ($p < .001$ for all operand sizes). At 16,384 bits, it reduced the mean computation time from 18.52 µs (ripple-carry) to 7.64 µs (4 threads), achieving a 2.43× speedup. The method demonstrated excellent parallel efficiency, reaching superlinear speedup (>1.0) with two threads. The single-threaded delayed-carry implementation performed comparably to, and at larger operands surpassed, the performance of established libraries like GMP and OpenSSL. The approach demonstrates that delayed-carry parallelization effectively utilizes SIMD-enabled CPUs to accelerate big-integer computations, offering significant potential for cryptographic and HPC applications.

Keywords: ripple-carry multiplication, delayed-carry parallelization, SIMD (AVX2), multithreading, high-performance computing

About the presenter:



Cristelle E. Abaño is a 17-year-old student from City of San Jose del Monte National Science High School with a strong interest in research, computers, and hands-on science experimentation. She enjoys exploring ideas through scientific inquiry and practical applications, often combining technology and experimentation in her work. She currently serves as the Editor-in-Chief of The Radical, the school publication, where she leads the team in producing content that promotes critical thinking and informed discussion. Beyond journalism, she is the Treasurer of the BEEP Robotics Club and the Co-Head of the Layout and Graphics Division of the Creative Team, roles that reflect her involvement in both technical and creative fields. Cristelle has actively participated in science research fairs under DECAP and has earned several recognitions. She placed 1st at the Division Science and Technology Fair 2025 and represented her division at the Regional Science and Technology Fair 2025. At the School Science and Technology Fair 2025, her project received multiple awards, including Best Research Project (Division Round Qualifier), Visitor's Choice Award, CSANSCI Choice Award, and Best Display Board.

Project AQUADROP: Advancing Quality Utilization of Aquatic Droplets Vibration for Renewable Optimization of Power

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ABSTRACT

Project AQUADROP explores an innovative method for converting water vibrations into electrical energy, presenting a potential solution for sustainable power generation. The study examines the system's efficiency in vibration frequency and output voltage, as well as its adaptability to varying rainfall conditions. Results demonstrate a positive correlation between vibration frequency and average output voltage, increasing from 0.66 V at 10 Hz to 5.38 V at 100 Hz, with peak efficiency achieved at 100 Hz. This suggests that optimizing operational frequencies could significantly enhance energy conversion. The system's performance across different rainfall intensities also shows a direct relationship between rainfall and energy output, with average voltage rising from 0.35 V in light rain to 0.64 V in heavy rain. While ANOVA analysis indicated that differences in output voltage across rainfall conditions were not statistically significant (p-value = 0.641), the dataset offers a foundation for future research on factors influencing energy capture. Additionally, the system's capability to power small electronic devices highlights its practical viability. These findings underscore Project AQUADROP's potential as a renewable energy solution, especially under conditions of higher vibration frequencies and varying rainfall. Further research is essential to refine the system's design and expand its applications in real-world scenarios.

Keywords: aquatic, vibrations, renewable, power, frequency

About the presenter:

Jeynird Iriz M. Aritmetica is a Grade 12 STEM student at Calayan Educational Foundation, Inc. and a consistent high-honor student. He has experience presenting research at the national level, with academic interests centered on renewable energy and sustainable power systems. He is one of the author of Project AQUADROP: Advancing Quality Utilization of Aquatic Droplets Vibration for Renewable Optimization of Power, a research initiative that aims to explore alternative methods of energy generation through the utilization of aquatic droplet vibrations. His work is driven by the goal of addressing challenges in renewable energy efficiency and accessibility through innovative, low-impact solutions. He currently serves as the Vice President of the Supreme Student Government (SSG) of the Senior High School Department, reflecting his involvement in academic leadership. In 2024, he graduated as the Valedictorian of his junior high school class.

Management Track

Public and active transportation in Garosu-gil

Alex Seyun Wang

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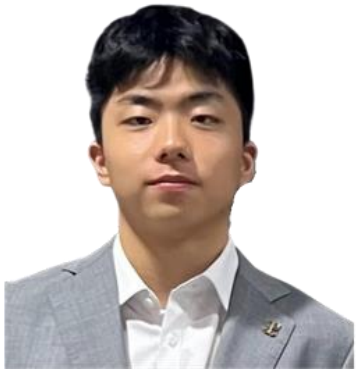
ABSTRACT

Garosu-gil is a commercial and residential district located in Seoul, South Korea. Despite its rich visitors in the past, it has faced a significant decline within the last several years due to commercial gentrification. To clarify the role of public and active transportation regarding displacement, I investigated the street design for pedestrians and bikers by web-based resources, policy review, and site inspection. I measured the multimodal connectivity between walking and public transportation based on the distance between bus stations and the frequency of bus trips. I also quantified the number of shared bikes and bike storages. Additionally, I identified the national and local regulations supporting walkability and bikeability. As a result, the maximum distance from a point to the nearest bus station along walkable streets was 441.8 meters. The distance between 9 different bus stops was 435.4 meters on average. The number of the bus routes were 24 with diverse destinations across Seoul and adjacent regions. The frequency of bus trips was 13 minutes on weekdays and 15.6 minutes on weekends on average. The ratio between bike lane and total street length was 4.5 percent. The ratio of bikes and bike storages was 1.02. The street design of the region optimized walking and public transportation whereas its bike-friendliness has a potential to improve in the future. Enhanced active transportation will result in transit equity and community engagement, leading to revitalization of Garosu-gil.

Keywords: walkability, bikeability, public transit, gentrification, Garosu-gil

About the presenter:

Alex Seyun Wang is a passionate student from Kents Hill School who has genuine interests in urban planning. He believes that our built environment shapes our lives both physically and mentally. He hopes to encourage people to build sustainable, healthy, and equitable communities.



Bookkeeping awareness and practices among micro-enterprises

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ABSTRACT

This study investigated the level of bookkeeping awareness and the extent to which bookkeeping practices are applied among micro-enterprises in Poblacion, Candelaria, Quezon. Specifically, it evaluated how the demographic profile of the respondents, such as educational attainment, nature of business, years in operation, and source of bookkeeping knowledge, relates to their awareness and application of bookkeeping practices, which both included recording transactions, classifying recorded transactions, and data provision for the preparation of financial statements. This study employed a descriptive quantitative design to assess 153 micro-enterprise owners or managers selected through purposive sampling, using a validated, self-constructed survey questionnaire. Data gathered were analyzed using frequency and percentage distribution, median test, Goodman-Kruskal Gamma test, and Spearman's rho correlation. Results revealed that both educational attainment and source of bookkeeping knowledge of the respondents have a significant relationship with all the bookkeeping components. At the same time, years in operation did not show any significant relationship with bookkeeping awareness in all aspects. The nature of business showed a significant relationship only with awareness of transaction recording. The application of bookkeeping practices showed varying relationships with the demographic profile of the respondents, with 'classifying recorded transactions not being correlated with any of the demographic profiles. The level of bookkeeping awareness among micro-enterprise owners or managers was significantly associated with the extent to which they applied bookkeeping practices. The results underscore the need for continuous capacity-building initiatives. They are expected to assist educators and local government units in formulating targeted interventions that promote financial literacy and sustainable enterprise growth.

Keywords: bookkeeping awareness, bookkeeping practices, micro-enterprise

About the presenter:

Frank Denzell P. Kaibigan, Hazel Ann N. Pelare and **Ella Mae Q. Vergara** are fourth-year Bachelor of Science in Accountancy students at Manuel S. Enverga University Foundation–Candelaria, Inc.

The application of AI and warehouse management in logistics industry: Bibliometric and thematic analysis

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ABSTRACT

Artificial Intelligence (AI) is rapidly transforming warehouse management by enabling automation, enhancing inventory accuracy, and supporting data-driven decision-making. This study provides a comprehensive systematic review of AI applications in warehouse management through a dual approach combining bibliometric and thematic analyses. Utilizing 178 peer-reviewed publications sourced from the Scopus database, bibliometric methods including co-citation, co-occurrence, and co-country analyses were conducted with VOSviewer and Tableau to map research trends, influential authors, and global collaboration networks. Subsequently, a focused thematic analysis was performed on a subset of 61 highly relevant articles to identify emerging themes and research gaps, supported by keyword co-occurrence mapping and qualitative coding. Findings reveal growing scholarly interest in dynamic publication patterns, concentrated contributions from leading countries such as the United States and China, and prominent research clusters centered on AI-driven automation, human-AI collaboration, data integration, and infrastructural challenges. The study highlights significant disparities in AI adoption between developed and emerging economies and underscores the need for localized solutions tailored to infrastructure and workforce contexts. This integrated analysis not only charts the intellectual landscape but also offers actionable insights to guide future research and practical implementation of AI in warehouse management, particularly within emerging markets.

Keywords: artificial intelligence, warehouse management, logistics, AI in warehouse management

About the presenter:

Đào Quỳnh Lê is a Vietnamese student majoring in Digital Marketing at FPT University. She has a strong interest in branding and integrated marketing communications, particularly in how digital platforms can be used to tell meaningful stories and build long-term relationships with audiences. She is especially passionate about social media strategy, content creation, and community-based marketing, with a focus on projects that generate positive social impact. In her free time, she enjoys researching brand campaigns, designing simple visual content, and experimenting with creative ideas for online engagement. She is known for her proactive learning attitude, teamwork skills, and curiosity about how marketing can connect businesses with authentic human values. Through both academic study and practical projects, she aims to develop into a well-rounded digital marketer who effectively combines creativity, strategy, and ethical thinking in her future career.

Leadership styles and job satisfaction among real estate agents in Candelaria, Quezon: Basis for employees' job satisfaction manual

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ABSTRACT

This study examined the effect of perceived leadership styles on job satisfaction among employees in selected real estate offices in Candelaria, Quezon. A quantitative descriptive-correlational design was employed with 21 respondents from various real estate agencies. Data were collected using a structured survey questionnaire distributed via Google Forms, comprising three sections: demographic profile (age, gender, educational attainment, job role), assessment of leadership styles (transformational, transactional, laissez-faire), and measurement of job satisfaction across nine dimensions (pay, promotion, supervision, fringe benefits, recognition, operating procedures, co-worker relationships, nature of the work, and communication). A four-point Likert scale was utilized, and data were analyzed using frequency counts, percentage distributions, weighted mean, Pearson correlation coefficient, independent samples t-test, and one-way ANOVA. Results revealed that all leadership styles were perceived as satisfactory, with transformational leadership rated highest, followed by transactional leadership and laissez-faire leadership. All nine dimensions of job satisfaction were rated as "Highly Satisfied," with promotion (3.65), supervision (3.57), and nature of work (3.56) ranking highest. Age was the only demographic factor significantly related to job satisfaction, with employees aged 46-55 reporting notably lower satisfaction. Transformational leadership showed a strong significant association with communication ($r = 0.967$, $p = 0.007$). The study concluded that transformational leadership, characterized by vision-sharing, innovation, and supportive supervision, is the key driver of employee satisfaction in real estate settings. Promotion opportunities, effective supervision, and meaningful work are critical factors influencing satisfaction. The findings emphasize the importance of age-sensitive management strategies and transformational leadership practices that prioritize clear communication and employee development to enhance organizational performance and employee retention.

Keywords: transformational leadership, transactional leadership, laissez-faire leadership, employee motivation

About the presenter:

Nerie G. Bukid is a dedicated student currently pursuing a Bachelor of Science in Office Administration at Tayabas Western Academy, where she also completed her Associate in Office Administration. She has gained practical experience through her internship at Jewellz Realty Marketing and Development Corporation in Calamba, Laguna, where she developed skills in client relationship management, inventory handling, and safety compliance. Nerie is building a strong foundation in sales strategy and marketing, preparing herself for a career in office administration and business management. Her academic background, combined with hands-on training, reflects her commitment to professional growth and her readiness to contribute effectively in organizational settings.

Community support and participation in the development of newly renovated port

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ABSTRACT

The development of newly renovated port plays a significant role in enhancing tourism by improving accessibility, visitor experience, and local economic opportunities. Anchored on Social Exchange Theory and Empowerment Theory, the study focused on community support dimensions such as economic benefits, social benefits, and tourism potential. And community participation dimensions such as interpersonal, interactional, and behavioral. A quantitative descriptive-correlational research design was employed, with data collected from 351 community respondents using an adapted-modified survey questionnaire. Statistical tools, included frequency distribution, percentage, mean, standard deviation, t-test, one-way ANOVA, and Pearson correlation analysis. Findings revealed that the community generally viewed the development positively, demonstrating high level of both support and participation. Tourism potential emerged as the highest-rated dimension of community support across demographics, indicating strong recognition of the port's role in tourism enhancement. with strong support and participation across various groups. The port's development is widely perceived as beneficial to the respondents, making it a valuable asset for local progress. Meanwhile, behavioral participation was the most prominent dimension, reflecting community willingness to actively engage in port-related initiatives. Significant differences in community support and participation were observed only when respondents were grouped by classification, while no significant differences were found across age, sex, proximity, and length of stay. Furthermore, no significant relationship was found between community support and participation. Overall, the newly renovated port is regarded as valuable asset that contributes to tourism development and encourages active community involvement, supporting local progress and sustainable development.

Keywords: tourism management, level of community support and participation, transportation tourism, descriptive quantitative-correlational, port, Bacolod City, Philippines

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Institutional Partners & Members

Universiti Teknologi Mara is the largest public university in Malaysia with more than 200 thousand students all over the country. It has branches in all 14 the states and each state has multiple city campuses. Programs offered are in all area from Diploma to PhD. The areas are accountancy, administration & law, business & management, architecture, engineering, science & technology, computer science, hotel & catering, geomatic & planning, mathematic & actuarial science, office management and TESL. The latest programs are pharmacy and medical programs.

The **College of ICT & Engineering of Western Leyte College** aims to provide quality education and latest developments in computing solutions to meet the demands of the society and industry. The goal is to produce competent professionals in the fields of specialization through programs and trainings responsive to industry; supportive and qualified faculty; appropriate facilities; molding the students with the trinity of virtues, wisdom, leadership and commitment; as well as equally opportunity for all. It offers Bachelor of Science in Computer Engineering, Bachelor of Science in Computer Science, Bachelor of Science in Information Technology and 2 Years Associate in Computer Technology.

Northwestern University is dedicated to develop individuals, to become Highly Competent, Socially Responsible and Ethically Upright Leaders. It is one of the BIGGEST Private Higher Education Institutions in Northern Philippines. With ISO 9001:2015 Certification, CHED Deregulated Status and PACUCOA Accreditations, NWU guarantees quality education that prepares you to become a global professional. It's where champions are made.

Santo Tomas College of Agriculture Sciences and Technology (STCAST) is a locally governed college. An institution being run and managed by the Local Government Unit. The college is a Commission on Higher Education Institutionally Recognized and eligible for the benefits of Republic Act 10931 otherwise known as the Universal Access to Quality Tertiary Education Act. Today, STCAST is now living on its belief that education must be in the state of internationalization and borderless in nature.

The **San Pablo Colleges** is an educational institution with a Christian outlook committed to the complete development of global Filipino learners for the service of God, country and fellowmen. It envisions itself as a leading educational institution nurtures relevant responsive and value-laden lifelong learning. It is committed to uphold the holistic development of learners making them globally competitive through outcomes-based and technology-driven instruction, quality research and proactive community engagement, thereby creating sustainability for all.

The **College of Teacher Education (CTE) of the Aklan State University** strives to lead in the transformation of future educators imbued with positive values for the global village. It is guided by the four T's mantra – "Training Tomorrow's Teachers Today!" It offers accredited doctorate, masters, and baccalaureate programs in an encouraging environment steered by faculty researchers in highly specialized areas. Its evolution from a mere field of specialization in agriculture in 1975 to be a full degree program in 1987, and ultimately as a leading college in 2006, has carved a niche of graduates with sterling performances in the regional and international arena. Today, CTE is the preferred source of skilled and competent educationists for the basic, technical, and higher education institutions in and outside of the province.

The is a school conceived in freedom and democracy, dedicated to the ideals of love, which affirms its commitment to the cause of truth, and imparts the arts of the sciences, culture, and all related studies. This non-sectarian institution of higher learning is guided by its purpose of contributing to the formation of a progressive and humane society, as well as responsible citizenry.

Founded in 1993 as the Southern Mindanao Institute of Technology (SMIT), **Aces Colleges System** has grown from offering short-term technical courses to becoming a prominent educational institution with multiple campuses. Initially focusing on computer science, hotel and restaurant management, office management, and seaman courses, SMIT was renamed Aces Polytechnic College, Inc. in 2006, expanding to degree programs. The system includes Aces Tagum College and ACES Polytechnic College, Inc. in Panabo City, each recognized for their entrepreneurial-focused curricula and strong industry linkages. With

modern facilities, including interactive speech labs and incubation centers, Aces Colleges maintain their commitment to quality education, adapting to the evolving needs of the academe and industries.

Dr. Carlos S. Lanting College was established in 1979 by Dr. Romeo B. Casaul and Dr. Ruby Lanting-Casaul, starting as a small Lying-in Clinic along Quirino Highway. In 1983, it expanded into a paramedical school, and by 1984, it produced its first Midwifery graduates. Over the years, DCLC has grown into a reputable institution offering a variety of programs, including Nursing, Radiologic Technology, Medical Laboratory Science, and Physical Therapy. It has consistently produced topnotchers in board exams, establishing its academic excellence. The school has also broadened its reach by introducing programs in Business Administration, Education, Psychology, Hospitality Management, and more, while complying with international standards as an ISO 9001:2015 certified institution. DCLC has further gained recognition with several programs accredited by PACUCOA. Committed to quality education, DCLC continuously enhances its facilities and curriculum, ensuring a holistic and transformative learning experience for its students. The institution remains a beacon of excellence, fostering academic and professional growth.

Department of Business Administration – University of Technology and Applied Sciences-Shinas The Department of Business Administration at the University of Technology and Applied Sciences-Shinas (UTAS-Shinas) plays a vital role in shaping the future business leaders of Oman. Established in the Academic Year 2007-2008, the department began with a certificate program and an initial batch of 66 students and 3 faculty members. Over the years, it has grown significantly and now serves more than 500 students across various business disciplines, supported by a dedicated team of 32 faculty members from diverse academic and professional backgrounds. The department offers three key specializations aligned with the needs of the economy: Accounting (Bachelor of Technology) Human Resource Management (Bachelor of Technology) Marketing (Diploma) Committed to experiential learning, the department emphasizes practical application, critical thinking, and leadership development. The department fosters a strong research culture, with student and faculty research projects receiving funding from the Ministry of

Higher Education, Research, and Innovation (MOHERI) and the university.

Saint Gabriel College (SGC) in Kalibo, Aklan, Philippines, was established in 1970 as the Saint Gabriel School of Nursing. It was the first paramedical school in Aklan. After offering its first bachelor's degree program in Nursing in 1979, the school earned college status. In 2014 the Saint Gabriel College School of Pharmacy (SGCSOP) was established, and the Commission on Higher Education (CHED) granted full recognition in 2018. The college offers other curricular programs, including Bachelor of Science in Pharmacy, Bachelor of Science in Radiologic Technology, and Bachelor of Science in Medical Technology. In addition, it has also a high school department. Saint Gabriel College is the only private school in Region VI ranked as a TWO STAR AWARDEE under the System for TVET Accreditation and Recognition (STAR) Program for Emergency Medical Services NC II and awarded as a Level 2 Center of Technical Proficiency for achieving significant progress in developing and implementing sound processes and procedures in its quality assurance system.

Aklan Catholic College is a private non-sectarian Catholic institution. It was founded in 1945 with basic education and higher education programs. Basic Education is complete with Elementary, Junior and Senior High School (with PAASCU Candidate Status). In the Higher Education level, it offers Teacher Education, Liberal Arts, Business Education (with PAASCU Level II Re-Accreditation), Information Technology, Nursing, Criminology, Juris Doctor, Master of Arts in Education and Master in Business Management. It also offers TESDA short-term and Diploma programs as training and assessment centers for this program. It has a population of about 3,500 plus students and with about 250 teaching and non-teaching personnel, headed by Rector-President assisted with 2 Vice Presidents, 5 Deans and 1 High School Principal. It has 2 campuses, main and annex.

Calayan Educational Foundation Incorporated (CEFI) has long stood as a pillar of quality education in Lucena City, offering hope and opportunity to learners of all ages. Guided by the mission to develop holistic, self-fulfilling, and productive citizens, CEFI is deeply rooted in the core values of HONOR, SCHOLARSHIP, and SERVICE. What began as a shared dream by two visionaries has grown into an institution that not only educates minds but also shapes character, contributing meaningfully to both local and global development. Despite facing trials—including extreme weather and two devastating fires—CEFI has remained steadfast and resilient. Its humble yet enduring campus reflects the perseverance of generations of Cefizens who walked its halls with dignity and pride. Today, CEFI continues to shine brightly, upholding its legacy while looking ahead with hope and determination to create a lasting impact on future generations.

Colegio de Santo Cristo de Burgos, a Catholic institution catering to both men and women in Quezon Province, was established in the year 2008. The genesis of the school can be traced back to the visionary Juanito Manigbas, the former Mayor of Sariaya, Quezon and a devout follower of Santo Cristo de Burgos, who envisioned a school dedicated to molding the youth in accordance with the principles of the Catholic faith. The institution was founded with the aim of providing a local college for students in Sariaya, alleviating the financial burden on parents seeking higher education for their children.

Training Partners

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Kidsland Learning and Development Center of Manila
Manila, Philippines

Kidsland is a DepEd recognized learning center that caters preschoolers to actively engage in teaching and learning activities and prepare them for the next level of their educational journey. It offers nursery, kinder 1 and 2. Its pre-school program has been recognized by the government in 2009 with recognition n. P-016 S. 2010. It believes the child's attitudinal development of his acquisition of knowledge, skills, and values and his uniqueness to perceive and understand the outside world is different from that of the adult. It is committed to provide students with basic knowledge, skills and competencies to improve their cognitive, affective, and motor skills in a loving, safe and positive learning environment. It aims to develop learner's multiple intelligences using various instructional materials suited for children to prepare them in a complex world of learning in intermediate level.