

## 7<sup>th</sup> International Conference on **Multidisciplinary and Current Educational Research**

# **ICMCER-2025**



24th-25th October, 2025 | Tokyo, Japan



**Organized by: IFERP Academy** 



7th International Conference on Multidisciplinary and Current Educational Research (ICMCER-2025)

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Transformative Learning for Sustainable Development: Insights from Multidisciplinary Research





We cordially invite you to attend the 7th International Conference on Multidisciplinary and Current Educational Research (ICMCER-2025) on 24th-25th October, 2025. The main objective of ICMCER-2025 is to provide a platform for researchers, students, academicians as well as industrial professionals from all over the world to present their research results and development activities in relevant fields of Multidisciplinary and Current Educational Research. This conference will provide opportunities for the delegates to exchange new ideas and experience face to face, to establish business or research relationship and to find global partners for future collaboration.

These proceedings collect the up-to-date, comprehensive and worldwide state-of-art knowledge on cutting edge development of academia as well as industries. All accepted papers were subjected to strict peer-reviewing by a panel of expert referees. The papers have been selected for these proceedings because of their quality and the relevance to the conference. We hope these proceedings will not only provide the readers a broad overview of the latest research results but also will provide the readers a valuable summary and reference in these fields.

The conference is supported by many universities, research institutes and colleges. Many professors played an important role in the successful holding of the conference, so we would like to take this opportunity to express our sincere gratitude and highest respects to them. They have worked very hard in reviewing papers and making valuable suggestions for the authors to improve their work. We also would like to express our gratitude to the external reviewers, for providing extra help in there view process, and to the authors for contributing their research result to the conference.

We would like to extend our appreciation to all participants in the conference for their great contribution to the success of ICMCER-2025 We would like to thank the keynote and individual speakers and all participating authors for their hard work and time. We also sincerely appreciate the work by the technical program committee and all reviewers, whose contributions made this conference possible. We would like to extend our thanks to all the referees for their constructive comments on all papers; especially, we would like to thank to organizing committee for their hard work.





The 7th International Conference on Multidisciplinary and Current Educational Research (ICMCER-2025) stands as a prominent gathering scheduled for October 24th-25th, 2025, in Tokyo, Japan. This conference serves as a nexus for academics, researchers, and educators worldwide, fostering the exchange of pioneering research and innovative methodologies across diverse educational spheres. ICMCER-2025 aims to facilitate collaborative discussions, address contemporary educational challenges, and explore emerging trends to drive transformative changes in education. With an emphasis on practical applications and impactful insights, this event endeavors to shape the future of teaching practices and educational policies on a global scale.

#### **Multidisciplinary Conference**

- The theme "Challenges and Solutions in Education Research: A Cross-Disciplinary Approach" encapsulates the core
  focus of the 7th International Conference on Multidisciplinary and Current Educational Research (ICMCER-2025). Set to
  unfold in Tokyo, Japan, on October 24th-25th, 2025, this conference aims to unite global educators, researchers, and
  scholars in a collaborative pursuit.
- Through a cross-disciplinary lens, the event will delve into pressing challenges facing education today while seeking
  innovative, multifaceted solutions. ICMCER-2025 endeavors to foster insightful discussions and research collaborations
  that transcend traditional boundaries, paving the way for transformative approaches to address complex educational
  issues across diverse disciplines.

#### **Benefits of Conference**

- Currently, multidisciplinary research has become the most viable and efficient way to solve the problem. In this era of rapidly changing society, many kinds of socio-economic problems, related to other disciplines such as politics, anthropology, psychology, have arisen which require a holistic approach to find their solution.
- When we speak of a multidisciplinary, transdisciplinary or interdisciplinary research team, we imply collaboration between people from different disciplines. Thus, the concept of a multidisciplinary research team can be considered as a subset of the concept of collaborative research.

#### Objective of the 7th ICMCER

The primary objective of the 7th International Conference on Multidisciplinary and Current Educational Research (ICMCER-2025) on October 24th - 25th, 2025, in Tokyo, Japan, is to create a vibrant platform for global scholars, researchers, and educators. The conference aims to facilitate the exchange of cutting-edge research across various educational disciplines. ICMCER-2025 seeks to encourage collaboration, foster interdisciplinary discussions, and showcase innovative methodologies, ultimately aiming to advance educational practices worldwide.

In addition to fostering research exchange and interdisciplinary collaboration, ICMCER-2025 aims to address contemporary challenges in education. The conference endeavors to explore emerging trends and innovative approaches that can effectively tackle these challenges. By providing a space for insightful discussions and presentations, ICMCER-2025 seeks to empower attendees with practical insights and solutions, encouraging the implementation of impactful strategies in educational settings globally. Through this, the conference aspires to contribute to the continuous improvement and evolution of educational research and practices.



## **ABOUT IFERP**

The Institute for Educational Research and Publication (IFERP) is a professional association devoted to the advancement of the fields of engineering, science, and technology through the funding of research activities, propagation of the latest research insights, furtherance of industry trends, and other related ventures. IFERP aims to digitalize this entire process of innovation, collaboration, and knowledge-sharing through the fostering of a unified virtual scientific community worldwide. Everything from networking and joint ventures to learning, research assistance, publication, and more, will be carried out as part of this objective.

IFERP has established robust scientific, academic, and industry networks throughout Asia, the Middle East, and Europe. Some of the countries that IFERP has its presence in, include Iraq, Maldives, Thailand, Malaysia, Singapore, Philippines, Indonesia, Taiwan, Vietnam, UAE, Australia, Japan, Sri Lanka, Nepal, Ghana, and Africa.

#### **WHAT IFERP DO**

The commitment of IFERP is the dedication to the professional journey by providing access to a high-quality platform. Here's what they focus on

**Promoting Innovation:** Inspiring creativity and keeping up with the newest developments in engineering, science, and technology.

Collaboration: Actively partnering with institutions, organizations, and associations to build a better future together.

**Publication Opportunities:** Offering opportunities for research papers to be published in respectable journals, hence enhancing recognition and knowledge dissemination.

Academic Resources: Providing access to educational resources and support for researchers in both rural and urban locations.

**Diverse Learning Opportunities:** Conferences, webinars, seminars, guest lectures, training courses, and faculty development programs are among the many learning opportunities offered by IFERP.

#### MISSION & VISION

**IFERP's Mission:** "Upskilling the knowledge hub through technological innovation and excellence for the benefit of humanity." **IFERP's Vision:** "A Digitally equipped robust, dynamic & swift professional community integrating academics & industry for upgraded technical knowledge implementation."

#### WHAT WE DO

IFERP believes that there is always a better way to treat the professionals by providing them a world class stage by organizing conferences. We are committed to doing the following activities:

- We encourage convenient access to academic resources and support for all the aspirants and research scholars in urban and rural areas.
- IFERP organizes public education programmes, Workshops, Conferences, Webinars, Seminars, Guest Lectures, Short Term Training Programme, Faculty Development programme in the field of Engineering, Science & Technology.
- IFERP is dedicated to inquisitiveness, innovations and recent trends and developments in the field of Engineering & Technology.
- IFERP believes in knowledge sharing by collaborating with other Universities, organizations/Associations, to bring a better tomorrow.



# MESSAGE MANAGING DIRECTOR

#### Mr. A. Siddth Kumar Chhajer

Managing Director & Founder, IFERP Technoarete Group, India





On behalf of IFERP & the organizing Committee, I express my hearty gratitude to the Participants, Keynote Speakers, Delegates, Reviewers and Researchers.

The goal of the 7th International Conference on Multidisciplinary and Current Educational Research (ICMCER-2025) is to provide knowledge enrichment and innovative technical exchange between international researchers or scholars and practitioners from the academia and industries in various fields of academics. This conference creates solutions in different ways and to share innovative ideas in the field of Multidisciplinary and Current Educational Research. ICMCER-2025 provides a world class stage to the Researchers, Professionals, Scientists, Academicians, and students to engage in very challenging conversations, assess the current body of research and determine knowledge and capability gaps.

ICMCER-2025 will explore the new horizons of innovations from distinguished researchers, scientists and eminent authors in academia and industry working for the advancements in Multidisciplinary and Current Educational Research from all over the world. ICMCER-2025 hopes to set the perfect platform for participants to establish careers as successful and globally renowned specialists in various fields of Academics.



# MESSAGE CHIEF EXECUTIVE OFFICER

#### Mr. Rudra Bhanu Satpathy



Chief Executive Officer & Founder, IFERP Technoarete Group, India



IFERP is hosting the 7th International Conference on Multidisciplinary and Current Educational Research (ICMCER-2025) this year in month of October. The main objective of ICMCER-2025 is to grant the amazing opportunity to learn about groundbreaking developments in modern industry, talk through difficult workplace scenarios with peers who experience the same pain points, and experience enormous growth and development as a professional. There will be no shortage of continuous networking opportunities and informational sessions. The sessions serve as an excellent opportunity to soak up information from widely respected experts. Connecting with fellow professionals and sharing the success stories of your firm is an excellent way to build relations and become known as a thought leader.

I express my hearty gratitude to all my Colleagues, Staffs, Professors, Reviewers and Members of organizing committee for their hearty and dedicated support to make this conference successful. I am also thankful to all our delegates for their pain staking effort to make this conference successful.



# BIOGRAPHY INVITED KEYNOTE SPEAKER

#### **Dr. Rong Zhang**

Professor
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Dr. Rong Zhang is a professor at Nishinippon Institute of Technology, Fukuoka, Japan. She has a Ph.D. in Educational Engineering, from Graduate School of Information, Production and Systems, Waseda University in Japan and an M.A. in English Education, from Graduate School of Fukuoka, Educational University in Japan. Dr. Rong Zhang has published widely in academic and policy journals such Journal of the Institute of Industrial Applications Engineers, Journal of Intercultural Communication, International Journal of Continuing Engineering Education and Lifelong Learning and has participated in several International Conferences. Dr Rong Zhang is currently the executive editor for Journal of Management and Training for Industries.



# ■ BIOGRAPHY KEYNOTE SPEAKER

#### **Dr. Muhammad Kristiawan**

Associate Professor Department of Education University of Bengkulu, Indonesia



Muhammad Kristiawan is an Associate Professor of Education in University of Bengkulu, Indonesia. He serves as lecturer in Master of Educational Administration, and Doctor of Education. His research area is leadership, supervision, management and administration of education, social science and technology. His Scopus Author Id is 57205367909, and WoS Id is A-7572-2016. His H-Index of Scopus is 11, WoS is 3, and Google Sholar is 45. He has ever performed as international speakers in Thailand, India, Philippines, Vietnam, and Indonesia. He has examined more than 65 Ph.D Thesis in University of Bengkulu, Indonesia, 1 Ph.D Thesis in State University of Gorontalo, Indonesia , 1 Ph.D Thesis in West Visayas State University, Philippines, and 2 Ph.D Thesis in Dr. M.G.R. Educational and Research Institute, India.



# ■ BIOGRAPHY KEYNOTE SPEAKER

#### Dr. P. N. Renjith

Associate Professor
Department of Computer Science and
Engineering
Vellore Institute of Technology, India





Dr. P.N. Renjith is an Associate Professor in the Department of Computer Science and Engineering at Vellore Institute of Technology, Chennai. With over 15 years of academic and research experience, he holds a Ph.D. in Information and Communication Engineering from Anna University. His expertise spans artificial intelligence, IoT, cybersecurity, and software testing, with notable contributions in healthcare systems, autonomous vehicles, and wireless sensor networks. Dr. Renjith has published extensively in reputed journals and conferences, holds multiple patents, and has actively participated in academic collaborations, workshops, and faculty development programs. He is also recognized for his leadership in coordinating academic initiatives and digital transformation efforts at various institutions.



# BIOGRAPHY KEYNOTE SPEAKER

#### Mr. Sujan Sanku

Co-Founder & Chief Operating Officer 99 InfoSystems Inc. NY, US (Tokyo, Japan)





Sujan Sanku launched his first business in 2006, just before turning 18, leveraging changes in the Japanese Company Act. Overcoming the challenges of a young entrepreneur in a foreign, non-English speaking country, he grew my venture successfully. With expertise in accounting, communication, finance, IT, law, and management, He has spent over a decade bridging gaps for multinational organizations worldwide. His multicultural background—Indian heritage and US/UK education—provides a unique perspective, honed through navigating crises like the 2008 and 2014 financial downturns and the COVID-19 pandemic. As a passionate advocate for education, he believes in the transformative power of life experiences for professional and social growth. Sujan Sanku excel in marketing across industries and countries, thriving in challenging situations where problem-solving is key.



# SESSION SPEAKER

#### Dr. Muhamad Firdaus Syahmi Bin Sam-on



Senior Lecturer
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Faculty of Science and Technology
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Muhamad Firdaus Syahmi bin Sam-On is a dedicated and accomplished Senior Lecturer specializing in Microbiology, with a profound passion for research and academic excellence. He obtained his Bachelor of Science in Microbiology in 2020 and subsequently finished a PhD in the same field from Universiti Putra Malaysia in 2023. Additionally, his expertise in farming and biotechnology has equipped him with valuable skills in pests and pathogens management, laboratory protocols, and problem-solving. Throughout his academic journey, Muhamad Firdaus Syahmi has exhibited a keen interest in exploring microbial pathogens and their potential applications in various fields, particularly in aquaculture and food safety. His doctoral research focused on evaluating the efficacy of Bacillus spp. as probiotics against pathogens causing Vibriosis and Aeromonosis, which culminated in several high- impact publications in esteemed journals like Microbial Pathogenesis and Food Bioscience. Serving as a Senior Lecturer at Universiti Kebangsaan Malaysia, Muhamad Firdaus Syahmi continues to improve his passion for teaching and research. His interdisciplinary approach and innovative methodologies have earned him recognition in the field of microbiology, and his target is to make a lasting impact on scientific knowledge and understanding. He is fluent in both Malay and English languages and always eager to learn more from his colleagues and peers in the industry. Please feel free to contact Muhamad Firdaus Syahmi Sam-on on this platform for any comments or questions related to microbiology and biotechnology.



# ■ BIOGRAPHY SESSION SPEAKER

#### Prof. Dr. Henderi

Vice Rector for Academic Affairs Professor of Computer Science University of Raharja Banten, Indonesia





Prof. Henderi is the Vice Rector for Academic Affairs at the University of Raharja, Banten Province, Indonesia, and Chair of the Graduate Program in Informatics Engineering. He earned his Doctorate in Computer Science from Universitas Gadjah Mada (UGM), Yogyakarta. Prof. Henderi actively teaches at both undergraduate and postgraduate levels and holds key positions in several national and international professional organizations. His academic contributions include over 40 international publications, 200+ national journal articles, multiple registered copyrights, and more than 10 authored books. He is also a regular speaker, reviewer, and editorial board member for numerous scientific journals and conferences in the fields of Computer Science, Technology, and Education.



# BIOGRAPHY SESSION SPEAKER

#### Dr. Nishita Pruthi

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Dr. Nishita Pruthi is an Assistant Professor at the Asian School of Business, part of the Asian Education Group, Noida. Awarded with Ph.D. at the Institute of Management Studies and Research, Maharshi Dayanand University, Rohtak, Haryana, she exemplifies academic excellence and scholarly dedication. Dr. Pruthi has an impressive portfolio of ten research papers published in prestigious journals, with seven indexed in Scopus, Web of Science, UGC-CARE, and ABDC. Her contributions extend to authoring thirteen chapters in edited volumes published by globally renowned publishers such as Emerald, Bentham Science, and IGI Global. Additionally, she has co-edited three Scopus- indexed books published by IGI Global, USA, reflecting her versatility and scholarly rigor. Her academic journey is further distinguished by her active participation in twelve national and international conferences hosted by premier institutions, including IIM Indore, IIM Jammu, IIM Kozhikode, and Deakin University. She has also served as a resource person in two faculty development programs, sharing her expertise with academic peers. Dedicated to fostering a transformative learning environment, Dr. Pruthi inspires critical thinking and creativity, ensuring her students are well-prepared to excel in dynamic academic and professional landscapes.



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## Unpacking the Dual Roles of Intermediaries in Social Entrepreneurship: The City Wanderer Case

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#### Abstract

Social entrepreneurship is increasingly recognized as a key driver of innovation for sustainable development. Taiwan has promoted this trend through the "Social Innovation Action Plan," fostering social enterprises and generating over NT\$3.1 billion in social innovation product and service purchases. Corporations are engaging in SDG-aligned initiatives but often lack expertise in social issues, relying on intermediaries such as consulting firms, startups, or non-profits.

Drawing on intermediary and stakeholder theories, this study uses a case study approach, combining participant observation, interviews, and secondary data, to examine City Wanderer's intermediary role in assisting Hotai Motor's "Hotai 2024 Dreams for Good" program. The study explores how City Wanderer coordinates diverse stakeholder interests and mediates tensions.

Findings identify three key conflicts: commitment, evaluation, and legitimacy gaps, caused by differing logics among Hotai (instrumental), teams (normative), and mentors (instrumental). Hotai emphasizes short-term tangible results, teams prioritize long-term social impact, and mentors focus on commercialization. City Wanderer bridges these gaps through foresight, brokering, and accreditation, aligning expectations, refining strategies, and translating social missions into structured reports. By guiding teams toward hybrid nonprofit-commercial models, City Wanderer enhances feasibility, resource use, and the balance between social and commercial objectives, underscoring the crucial role of intermediaries in social innovation.



## Reimagining the Higher Education and Trans-Regional Education (TRE) Landscape in Africa: Challenges, Synergies, and Future Trajectories

#### Victor Omoshenni Williams

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#### **Abstract**

This research investigates the transformative potential of Higher Education and Trans-Regional Education (TRE) in Africa, examining their evolving roles in shaping the continent's socio-economic development amidst significant demographic and technological shifts. Africa, home to the world's youngest population and undergoing rapid digitalization, faces an urgent need to recalibrate its higher education systems to meet the demands of knowledge-based and innovation-driven economies. While enrolments have surged, persistent challenges such as underfunding, curricular misalignment, institutional isolation, and limited regional integration continue to undermine the sector's capacity.

Trans-Regional Education—defined as cross-border academic collaborations, joint degree programs, student and faculty exchanges, and harmonized accreditation frameworks—has emerged as a promising model for academic integration and institutional strengthening across Africa. This study aims to provide a comprehensive, data-driven analysis of the TRE ecosystem and its intersections with key emerging sectors such as digital technology, fintech, agritech, artificial intelligence, renewable energy, healthcare, and the creative economy. It will also explore how TRE frameworks contribute to addressing Africa-specific challenges such as youth unemployment, climate change, health inequities, and food insecurity.

Employing a robust mixed-methods approach, the research combines quantitative data analysis from institutions such as the AU, UNESCO, and World Bank with qualitative insights gathered through stakeholder interviews, regional case studies, and comparative policy reviews. The study will assess the implications of outward student mobility on domestic education systems and institutional sustainability, exploring both the threats of brain drain and the opportunities for brain circulation and knowledge transfer.

Furthermore, the research interrogates the extent to which African higher education institutions are producing graduates equipped with future-ready skills and capable of driving homegrown innovation. It will evaluate curriculum relevance, the effectiveness of vocational and technical education, and the role of indigenous knowledge systems in solving African problems.

The ultimate goal is to generate actionable recommendations that inform policy reform, encourage academic-industry partnerships, expand intra-African mobility, and foster inclusive, resilient education ecosystems aligned with the African Continental Free Trade Area (AfCFTA) and AU's Continental Education Strategy. The study's findings aim to guide governments, institutions, development partners, and investors in reimagining a future-oriented, integrated African higher education space that can support sustainable development and global competitiveness.

02



## Participation, Appreciation, and Learning Effectiveness of the University of Antique's Market Day Activity: A Mediation Analysis

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#### **Abstract**

Aim/Purpose: Traditional business education methods are insufficient for developing competent future business leaders and successful entrepreneurs. It has been observed that current academic practices in the business programs emphasize theories more than real-world application. With this, the Commission on Higher Education (CHED), an agency of the Philippine government that regulates and governs higher educational institutions, has instituted many programs and initiatives to improve the quality of marketing education, ensuring that business schools sufficiently equip students for a dynamic and continually changing corporate landscape. In close collaboration with industry partners, CHED formulated a curriculum for the Bachelor of Science in Business Administration major in Marketing Management (BSBA-MM) Program that emphasizes experiential learning activities and encourages business schools to integrate marketing education with other disciplines, promoting a comprehensive grasp of the sector and developing versatile abilities. Because of the need to bridge the gap between theory and practice, the BSBA-MM Program at the University of Antique, Philippines, introduced a Market Day Activity on a simulation platform. The interactions between participation in, appreciation of, and the effectiveness of these learning styles led to the formulation of the study's research questions.

Introduction/Background: This study investigated the interplay among Activity Participation (AP), Activity Appreciation (AA), and Learning Effectiveness (LE). It has been observed by some researchers that active student engagement in learning activities promotes better understanding and retention. Furthermore, they have established that active student engagement in their activities leads students to appreciate their learning activities, resulting in enhanced learning outcomes, and some believe that this appreciation of their learning activities influences their motivation (Samad et al., 2021).

**Methodology:** The Bachelor of Science in Business Administration major in Marketing Management (BSBA-MM) Program under the College of Business and Accountancy accommodates approximately 350 students across all academic year levels. Using a quantitative research design and employing simple random sampling, data was gathered from 252 BSBA-MM students who joined the 2023–2024 2nd semester Market Day Activity. A researcher-developed instrument was used in this study. An F-test power analysis indicated that the minimum sample size to yield a statistical power of 95 percent with an alpha of .05 and an effect size of (d=.30) was 252. A mediation analysis approach was employed to measure the interrelationships between student activity appreciation, participation, and learning effectiveness within the context of the BSBA-MM Program's Market Day Activity.

Findings: The results showed that Activity Participation (AP) significantly and positively affected Activity Appreciation (AA) ( $\beta$  = 0.676, t = 11.652, p < .000), while AP had a moderately positive influence on Learning Effectiveness (LE) ( $\beta$  = 0.542, t = 7.749, p < .000). This indicated that respondents with higher levels of participation (AP) showed more appreciation (AA) for Market Day Activity. Participation also had a significant direct and positive influence on learning effectiveness ( $\beta$  = 0.138, t = 0.080, p < .042). Meanwhile, the indirect effect of activity participation (AP) on learning effectiveness (LE) ( $\beta$  = 0.366, t = 6.018, p < .000) was partially mediated. Furthermore, these results revealed that AP has an impact on learning effectiveness, so encouraging students to actively participate in the Market Day Activity can lead to a stronger appreciation of and perceived importance of it that eventually may be converted into positive learning outcomes. This emphasizes the idea that when such activities are embraced by students, one benefit of such active engagement is positive learning experiences.

**Contribution/Impact on Society:** By understanding the interplay among variables, educators and program administrators of the BSBA-MM Program may consider introducing policies that are based on the study's conclusions. It further suggests that in addition to student participation, other factors such as activity appreciation and learning effectiveness can drive positive educational outcomes and contribute to the overall success of the programs. Instructors would be able to implement activities that would encourage active



participation that results to activity appreciation and contribute to their overall academic success. These interplays will eventually translate into creating competent and effective workers, marketers, or entrepreneurs.

**Recommendations:** It is recommended that program administrators, educators and other stakeholders of higher educational institutions develop strategies to foster a supportive climate that encourages student participation and appreciation, as this can in turn enhance overall learning outcomes. By promoting participatory programs and active academic activities, college instructors can foster deeper student appreciation of these activities, thereby producing graduates who are competent and effective business administrators and entrepreneurs. These factors are needed to succeed in marketing industry.

**Research Limitation:** The research was performed within one program, and the findings may not be applicable to other academic programs, either in the university or elsewhere. Follow-up research on the relationships analyzed in this study across various academic programs or institutions would improve the generalizability of the results.

**Future Research:** Future research may integrate objective assessments of learning outcomes to validate these results. If causal inferences methods were employed in future studies, this would enhance the robustness of these findings, as the cross-sectional nature of the data restricts the capacity to establish such relationships.

#### Keywords

Participation, appreciation, learning effectiveness, Market Day Activity.

04



#### Stories of Newly Employed Nurses in Iloilo City

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#### Abstract

**Background:** Nurses play a crucial role in healthcare as caregivers, educators, and advocates. However, newly employed nurses often face significant challenges during their transition into the workforce, including adjusting to new environments, managing workloads, and meeting professional expectations.

Objectives: This study explored the employment experiences of newly employed nurses in Iloilo City.

**Methods:** A descriptive qualitative study using a narrative inquiry approach, guided by Connelly and Clandinin's (1990) four-phase narrative analysis. Six participants were selected through snowball sampling, and data were gathered via in-depth interviews from March to April 2025. The participants' stories were presented chronologically covering the first 30 days, the next 60 days, the delivery of guality care, and future outlooks.

Results: The transition from student to licensed nurse was emotionally and cognitively overwhelming. A clear gap existed between theoretical instruction and real-world clinical practice. Participants reported that clinical realities often differed from textbook expectations. High patient loads, time constraints, and systemic inefficiencies forced them to adapt quickly, compromise ideal procedures, and develop critical thinking and prioritization skills. Clinical competence developed progressively through experience, reflection, and repetition. Quality nursing care was defined by presence, compassion, and accountability.

**Discussion and Conclusion:** It is recommended that newly employed nurses proactively engage in reflective practice and peer support groups to process their transition experiences. Student nurses are encouraged to actively seek opportunities to engage with the real-life experiences of newly employed nurses through seminars, mentorship, or narrative-based learning. The study recommends structured orientation programs, preceptorship, and peer support systems, and strongly advises exposing student nurses to real-world experiences to build readiness and resilience before employment.

#### **Keywords**

Newly employed nurses, Narrative Inquiry, Theory-gap practice, Transition to practive.



# University Students' Use of ChatGPT in Critical Thinking Tasks: Prompts, Performance, and Ethical Implications of Human-Al Collaboration in Higher Education

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#### **Abstract**

As universities increasingly integrate generative AI, its impact on foundational skills such as critical thinking remains contested. This study explored how thirty 18-23-year-old undergraduates at a central Thai university used ChatGPT-40 while completing critical thinking tasks involving analysis, evaluation, inference, decision-making, and metacognition. The primary objective was to identify which task categories elicited the most significant reliance on AI. Results showed that students most often turned to AI for higher-order processes, particularly inference, decision-making, and metacognitive reflective tasks. The study also examined how prompting strategies and the degree of AI use influenced performance. Four prompting strategies were identified, with filtering and paraphrasing of AI outputs linked to stronger outcomes, especially in metacognition, while direct copy-paste correlated with weaker performance. Lastly, the proportion of students who accurately estimated their AI contribution to task output was estimated. Results showed generally accurate self-assessment, though cases of over- and underestimation raised ethical concerns about transparency and academic honesty in human-AI collaboration. Overall, the findings offer empirical insights into students' use of AI in critical thinking, highlighting both opportunities and risks for transformative learning. They highlight the need for pedagogical strategies and ethical guidelines that foster authentic reasoning while positioning AI as a supportive tool for sustainable higher education.



## Trust over Competence? Supervisor-Subordinate Guanxi and Prohibitive Voice in Cross-Strait Chinese Organizations

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#### Abstract

The present study draws from the saying, "honest advice is unpleasant to hear"(忠言逆耳) to explore Supervisor–Subordinate Guanxi (SSG), prohibitive voice and organizational silence in cross-strait Chinese enterprises. According to a first-hand narrative analysis with two authoritarian founders of listed construction firms in the cross-strait context, relational trust, rather than professional competence, determines whether voice is heard or suppressed. It is suggested that employees with strong guanxi and low competence were favored while competent dissenters without guanxi were marginalized. Overall, this type of environment stifles voice and encourages risk-averse behavior. This study shows a trust-competence paradox in Chinese leadership. The study highlights, through frames of relational logics such as trust and reciprocity, how SSG mediates voice receptivity while providing practical insights for managing the trade-off between loyalty and merit within founder-led organizations.



## Associating Level of Oral Language Proficiency and Demographic Factors: Basis for Grade 10 Supplemental Material

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#### Abstract

Due to the demand for a higher level of communicative skills in this globalization era, students nowadays must be equipped with the essential language skills, such as but not limited to, oral language proficiency in the English language. This study aimed to determine the level of oral language proficiency of the Grade 10 students in Bascaran High School (BHS) and San Vicente Grande High School (SVGHS) in terms of word stress, pronunciation of critical vowel and critical consonant sounds, and intonation. The level of students' oral language proficiency was analyzed in terms of associating the demographic factors of the students to create a learning material that will help improve the students' level of oral language proficiency. The study employed a mixed qualitative-quantitative research design and descriptive-developmental and correlational research methods. Descriptive-qualitative research method was used to analyze and describe the level of oral language proficiency of the students. The correlational analytical method was used as a statistical treatment in analyzing the association that exists between the demographic factors and the oral language proficiency level of the students. Thus, the developmental research method was used in the preparation of the language material, which is a workbook that will serve as a supplemental material in enhancing the oral language proficiency level of the Grade 10 students.

The study revealed that the level of oral language proficiency of the students in terms of word stress and intonation is high, with which the majority of the students belonged to the Independent Level of Proficiency. This implies that the computed value of the respondents' proficiency level is 90% and above. However, the oral language proficiency level of the students in terms of pronunciation of critical vowel and critical consonant sounds is low, which means the majority of the students belong to the Frustration Level of Proficiency. Thus, quantitatively, the computed value of the students' proficiency level falls under 74% and below. After analyzing the association that exists between the level of oral language proficiency of the students and their demographic factors, only two variables, firstly, under family and community factors which is the mother as the first teacher had a modest association, and the second factor, which is under school-related factors is having a speech lesson in class, had a perceptible association with the level of oral language proficiency of the students. Therefore, this means that their association is significant in developing the oral language proficiency of the students. Furthermore, the rest of the factors were slightly associated, some other factors have an almost nil association, and a few factors have a nil or no association at all. These findings have impacted the way the students develop their oral language proficiency. First, in terms of how they were nurtured at home, specifically their mother's role of teaching them, which started even during their pre-formal schooling, had a great influence on their oral language proficiency and literacy in the English language. Secondly, these findings impact the curriculum, specifically the teachers' strategies inside the classroom on how the curriculum's learning competencies are achieved inside the classroom through the lessons being discussed. The researcher's proposed oral language skills enrichment workbook, a supplemental material, aims to enhance the development of oral language proficiency of the students, and eventually, this will lead to improving the communicative competencies and skills of the Grade 10 students in preparation for a higher level of education and for them to become more competent globally.

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## Diffusion of Innovation in the Digital Age: Trends, Hotspots, and Research Frontiers (1990–2025)

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#### **Abstract**

This study presents a bibliometric review of Diffusion of Innovation (DOI) research in the digital age, based on 404 publications indexed in Scopus from 1990 to 2025. Using performance indicators, co-authorship analysis, and keyword co-occurrence mapping, the study identifies trends, influential contributors, thematic clusters, and research frontiers. Results show a significant rise in DOI-related publications after 2010, reaching a peak in 2024, with the United States as the leading contributor, while Malaysia, India, and China emerge as important regional hubs. Thematic evolution highlights a transition from early concerns with ICT adoption and the digital divide to organizational adoption models (TAM, TOE, UTAUT), and more recently, to emerging frontiers including artificial intelligence, generative AI, ChatGPT, and blockchain.

This study offers the first large-scale synthesis of DOI research across three decades, demonstrating its adaptability to digital transformation contexts. The findings provide insights for scholars in theory development, for policymakers in shaping digital innovation strategies, and for practitioners managing technology adoption in increasingly complex ecosystems, while pointing to future opportunities in generative and immersive technologies.



## Transformative Learning in Digital Commerce: The Influence of Live Streaming Marketing on Perceived Value and Trust in Home Fitness Equipment

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#### Abstract

Livestreaming commerce is rapidly transforming digital retail and consumer behaviour in China, particularly within the growing home fitness sector. This study examines the impact of livestreaming marketing factors, including streamer credibility and streamer interactivity on perceived value and trust, and how these factors subsequently influence purchase intention for durable home fitness equipment. Guided by the Stimulus-Organism-Response (S-O-R) framework, Data were collected from 554 fitness enthusiasts in China and analyzed using Structural Equation Modeling (SEM). The results indicate that streamer credibility and interactivity are significant predictors of perceived value, trust and purchase intention. Moreover, perceived value and trust play mediating roles in the relationships between streamer credibility and interactivity and consumer purchase intention. These findings address the issue, which type of streamer is suitable for high-involvement and durable home fitness equipent in livestream commerce, highlighting that credibility and interactivity are critical for building consumer confidence. Theoretically, this study advances the integration of the S-O-R framework with perspectives on source credibility. Practically, it provides actionable insights for marketers, platforms and policymakers to enhance trust-building and perveived value, thereby aligning livestreaming strategies with sustainable consumption and long-term investments in health-oriented products.

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# Transformational Leadership, Organizational Resilience and Engagement Among Employees of Local Universities and Colleges (LUCS): A Response to SDG4 Quality Education Using Structural Equation Modeling

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#### **Abstract**

The study describes transformational leadership, organizational resilience and engagement among employees of LUCs: a response to SDG4 quality education using structural equation modeling. The PLS-SEM results show that transformational leadership strongly predicts organizational resilience ( $\beta$  = 0.81) and that resilience, in turn, positively predicts employee engagement ( $\beta$  = 0.30), while transformational leadership retains a significant direct effect on engagement ( $\beta$  = 0.53); together these coefficients explain substantial variance in resilience ( $\Omega$  = 0.65) and engagement ( $\Omega$  = 0.54). The empirical framework positions Organizational Resilience ( $\Omega$  as a mediating mechanism through which Transformational Leadership (TFL) influences Employee Engagement (EE). The pattern observed—strong TFL  $\to$  OR and significant OR  $\to$  EE alongside a remaining direct TFL  $\to$  EE—indicates partial mediation: leaders both directly energize and inspire employees and indirectly foster engagement by building organizational capacities (readiness, slack, problem-solving, flexibility, connectedness, adaptiveness, proactiveness). Methodologically, the framework's mediation claim is robust when (a) measurement validity is established, (b) indirect effects are bootstrapped or estimated within PLS-SEM rather than via separate regression steps, and (c) conditional factors are tested. Practically, the model implies dual interventions for LUCs seeking SDG-4 outcomes: develop transformational leadership competencies and institutionalize resilience-building practices (e.g., learning systems, slack resources, connectedness). Finally, because environmental uncertainty and organizational supports often moderate mediated effects, future tests should include moderated-mediation specifications to determine when OR most strongly transmits TFL's benefits to engagement (Hollands et al., 2023; Yu & Xiang, 2024).

#### **Keywords**

Transformational leadership, organizational resilience, engagement, LUCs, SDG4 quality education, structural equation modeling.

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#### The Integration of Semiotic Representations in Learning Multiple Integrals

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#### Abstract

In teaching multivariable calculus, the transition from symbolic expressions of multiple integrals to geometric understanding of the bounded region or solid is crucial for student comprehension. However, most instructional materials focus solely on symbolic manipulation, omitting intermediate visual and spatial representations essential for developing conceptual understanding. Drawing from Duval's theory of semiotic representation, this study investigates how integrating dynamic visualization using CalcPlot3D supports students' ability to coordinate between symbolic and geometric registers. A quasi-experimental design was implemented with two cohorts of engineering undergraduates from a private Malaysian university. The control group received traditional lecture-based instruction, while the treatment group engaged with CalcPlot3D across four weeks of instruction. Three assessments were administered to both groups: a pre-test, an immediate post-test, and a delayed post-test. Results indicate statistically significant improvement in the treatment group's performance in both symbolic-to-geometric and geometric-to-symbolic conversions (p < .05), with greater sketching accuracy and representational fluency. Sketch analysis further revealed emerging semiotic synergy among treatment group students. These findings underscore the importance of explicit visual scaffolding in supporting representational transitions and deeper understanding of multivariable integrals.

#### Keywords

CalcPlot3D, double integrals, mathematics education, multivariable calculus, triple integrals, visualization.

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## Enhancing Employability and Career Sustainability of University Student-Athletes in China: An Integrated SCCT and CareerEDGE Approach

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#### **Abstract**

University student-athletes pursuing dual career pathways often face challenges in balancing sports and academics, hindering their career readiness and long-term employability. In China, recent sport-education integration policies emphasise support for dual careers, yet student-athlete employment outcomes remain uneven, with many graduates achieving only moderate job quality and career sustainability. Guided by Social Cognitive Career Theory (SCCT) and the CareerEDGE model of graduate employability, this study investigates how institutional support, academic flexibility, career services, sport-education coordination, and faculty support affect the employability and career sustainability (e.g., career readiness, employment quality, retention) of university studentathletes in Henan Province. A quantitative survey of approximately 400 student-athletes was conducted, and data were analyzed using SPSS and structural equation modeling (SEM) to test the hypothesized model, including the mediating roles of career selfefficacy and career adaptability. The SEM results support the conceptual model, indicating that key support factors (e.g., institutional support, academic flexibility, career services) have significant positive effects on student-athletes' perceived employability and career readiness. Career adaptability and self-efficacy emerged as significant mediators, strengthening the links between support factors and improved employment quality and retention. These findings underscore the importance of comprehensive dual career support in higher education to enhance student-athlete employability. By integrating SCCT and CareerEDGE within China's sporteducation integration context, this study bridges international career development frameworks with the Chinese dual career system. This cross-cultural approach extends the applicability of those frameworks and contributes to the global discourse on dual career development, offering theoretical and practical insights for universities and policymakers to design targeted initiatives that improve the employability and sustainable career development of student-athletes.

#### Keywords

Dual career, Student-athlete, Employability, Career adaptability, Sport-education integration.



## The Effectiveness of Integrated Core and Unstable Surface Plyometric Training Aerobic Gymnastic Performance in China

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#### Abstract

**Objective:** This study aimed to apply Integrated Core and Unstable Surface Plyometric Training (IC-USPT) to elite Chinese Aerobic Gymnastics (AG) athletes and examine its effects on optimizing Aerobic Gymnastics performance.

**Methods:** National team athletes preparing for the 12th World Games were randomly assigned to three groups: conventional strength training, Unstable Surface Plyometric Training, and Integrated Core and Unstable Surface Plyometric Training. The intervention lasted for 8 weeks. Tests were conducted at pre-, mid-, and post-intervention stages. Assessment indicators included muscle activation sequence, integrated EMG, muscle contribution rate, temporal features, joint angles, longitudinal rotational angles, and stride length. A paired T-test was used to analyze differences, and effect sizes between groups were calculated.

**Results:** Compared with conventional strength training and unstable surface plyometric training, The IC-USPT group demonstrated significant improvements in muscle activation sequence, integrated EMG, muscle contribution rate, temporal characteristics, joint angles, vertical rotation angles, and stride length during the take-off and flight phases ( $p \le 0.05$ ), whereas no significant changes were observed during the landing phase.

**Conclusion:** Integrated Core and Unstable Surface Plyometric Training is more effective than conventional training methods in enhancing the airborne performance of elite Chinese AG athletes. It helps reduce technical deductions and improves competitive scoring potential.

#### **Keywords**

Aerobic Gymnastics, Integrated Training, Core Strength, Plyometric Training, Performance Optimization.

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# Effects of Integrated Core and Unstable Surface Plyometric Training on Skill-Related Physical Fitness in Chinese Aerobic Gymnasts

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#### Abstract

**Purpose:** This study examined the effects of Integrated Core and Unstable Surface Plyometric Training (IC-USPT) on Skill-Related Physical Fitness (SRPF) in elite Chinese aerobic gymnasts.

**Methods:** Thirty national team athletes preparing for the 12th World Games were randomly assigned to three groups: Conventional Strength Training (CST), Unstable Surface Plyometric Training (USPT), and IC-USPT. Training lasted eight weeks, with tests conducted at baseline, mid-point, and post-intervention. Indicators included power, rotational explosive power, agility, speed, and balance. Paired t-tests and effect sizes were used for analysis.

**Results:** Compared with CST and USPT, the IC-USPT group showed significantly greater improvements in all SRPF indicators ( $p \le 0.05$ ).

**Conclusion:** IC-USPT is more effective than conventional or single-method training in enhancing SRPF, offering practical strategies to optimize performance in elite aerobic gymnasts.

# **Keywords**

Integrated training, core stability, plyometrics, skill-related fitness, aerobic gymnastics.



# **Balancing Ethics and Safety in Food Production**

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#### **Abstract**

Food safety has become one of the most pressing issues of our time, especially as food systems expand to meet the needs of a growing population. While laws and regulations set the foundation for safe practices, ethics adds another vital layer by asking how producers, workers, and decision-makers can act responsibly beyond minimum standards. This paper reflects on the ethical aspects of food safety and the shared duty of all stakeholders to protect public health and earn consumer trust.

Ethical concerns in food production go further than simply following rules. They involve honesty in labeling, care in handling and storage, fairness toward workers, and transparency in supply chains. In many cases, pressures such as reducing costs or meeting high demand may tempt organizations to cut corners, raising serious risks for consumers. Upholding ethical responsibility means resisting these pressures and recognizing food safety as a moral obligation, not just a legal one.

Education plays an essential role in shaping this ethical mindset. Training programs for industry professionals, policymakers, and even consumers can help cultivate awareness and accountability. By embedding ethics into everyday practices, the food system can better prevent contamination, encourage sustainable methods, and maintain public confidence. Addressing these challenges requires input from multiple disciplines—including public health, management, engineering, and the social sciences—to create lasting solutions.

This paper argues that ethics in food safety is not an optional extra but a necessary commitment. Building stronger ethical frameworks will ensure safer food, fairer workplaces, and a more sustainable future. In doing so, the food sector can strengthen its social contract with the public and guarantee that safety remains at the heart of production.

# **Keywords**

Food Safety, Ethics, Responsibility, Public Health, Sustainability.



# A Systematic Literature Review on Blood Flow Restriction Training and Its Effects on Lower Limb Strength and Balance in Latin Dance Students: An Interdisciplinary Perspective

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## Abstract

This study employed a systematic literature review (SLR) to examine the effects of blood flow restriction resistance training (BFR-RT) on lower-limb strength and balance among Latin dance students. Literature was retrieved from Web of Science, Scopus, PubMed, and CNKI databases covering the period from 2020 to 2025, and studies meeting strict inclusion criteria were analyzed. The findings indicate that BFR-RT, under low-load conditions, significantly enhances lower-limb strength and balance performance, outperforming traditional training approaches. Through an interdisciplinary lens, the review highlights four key pathways: integration of biomechanics and motion control, synergy between neuroscience and cognitive development, application of data science in training monitoring, and the incorporation of educational psychology and ethical considerations. These results not only demonstrate the potential of BFR-RT in dance education but also provide theoretical implications for sustainable development and interdisciplinary innovation in physical education and sports training.



# Transforming Digital Consumption via Live streaming Commerce: Product Information Quality and Platform Service Quality, Perceived Value, Trust and Purchase Intention in China's Home Fitness Equipment Sector

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#### **Abstract**

Livestreaming commerce is reshaping digital consumption in China and has become especially salient in the fast-growing home fitness equipment sector. Focusing on home fitness equipment, this study investigates how product information quality and platform service quality drive purchase intention through the mediating roles of perceived value and trust. Grounded in the Stimulus-Organism-Response (S-O-R) framework and informed by Media Richness Theory and the Engel-Kollat-Blackwell (EKB) consumer decision model, we analyze cross-sectional survey data from 554 Chinese fitness enthusiasts using structural equation modeling (SEM). Results show that both product information quality and platform service quality significantly enhance trust and purchase intention, while product information quality also exerts a strong positive effect on perceived value. Moreover, perceived value and trust serve as significant pathways linking these livestreaming factors to purchase intention, supporting their mediating roles. The study advances theory by integrating S-O-R with media richness and EKB perspectives in a durable-goods livestreaming context, and it highlights how richer information and dependable services foster more informed, responsible, and sustainable consumer choices. Managerially, the findings recommend investing in rich, accurate, and clear product demonstrations and in reliable, responsive platform services to build trust, enhance perceived value and convert viewers into buyers.

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# High-Intensity Interval Training for College Students: A Systematic Review on Its Role in Weight Loss, Body Composition, and Metabolic Health

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#### **Abstract**

This systematic review explores the impact of High-Intensity Interval Training (HIIT) on weight loss, body composition, and metabolic health among college students. The college years are often marked by weight gain and reduced physical activity, heightening the need for effective exercise interventions. HIIT, characterized by alternating short bursts of intense exercise with brief recovery periods, offers a time-efficient approach to improving various health outcomes. This review synthesized 18 peer-reviewed studies published between 2019 and 2024 to assess the effectiveness of HIIT in this demographic. Findings indicate that HIIT significantly enhances weight loss and fat reduction, increases lean muscle mass, and improves metabolic markers such as insulin sensitivity and lipid profiles. Although the results are promising, variability in HIIT protocols across studies highlights the need for standardized interventions to better compare outcomes. Furthermore, the review calls for more extensive research on the long-term sustainability and mental health benefits of HIIT in college students. Given its efficiency, HIIT could serve as a practical exercise solution for college students, addressing both time constraints and health needs. Future studies should aim to standardize protocols and investigate HIIT's broader applications in college wellness programs.

# Keywords

High-Intensity Interval Training, College Students, Weight Loss, Body Composition, Metabolic Health.



# **Role of Machine Learning for Leukemia Detection**

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#### Abstract

Leukemia is one of the most prevalent types of cancer worldwide. Early detection can be highly beneficial for reducing mortality, improving survival rates and for accurate and timely treatment planning. Traditional approaches for Leukemia detection such as microscopic analysis of blood smears, flow cytometry, and molecular tests need expert for interpretation, are time consuming and error-prone. Machine learning (ML) has emerged as a powerful approach that significantly enhances the speed, accuracy, and reproducibility of leukemia detection. This paper reviews the role of machine learning in Leukemia detection, with a focus on data modalities, algorithms employed, clinical applications, challenges, and future research directions.

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# Online and Blended Learning in Chinese Language Education: A Systematic Literature Review of Language Proficiency, Self-Regulated Learning, and Motivation (2015–2025)

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#### **Abstract**

This systematic review synthesizes a decade of empirical research (2015-2025) on the impact of Online and Blended Learning (OBL) on Chinese language education in higher and vocational education contexts, with a specific focus on three critical learning dimensions: language proficiency, self-regulated learning (SRL), and motivation. Adhering to the PRISMA guidelines, a comprehensive literature search was conducted across major academic databases, including Web of Science, Scopus, and ScienceDirect, leading to the inclusion and analysis of 18 relevant studies. The findings indicate that OBL models, particularly blended approaches, generally yield positive outcomes in enhancing Chinese language achievement and fostering certain aspects of learner autonomy by offering flexible, resource-rich learning environments. Evidence also suggests that well-designed OBL experiences can positively influence student motivation, primarily by increasing engagement and a sense of autonomy. However, the review identifies significant gaps in the current research landscape, most notably the lack of investigation into the optimal proportion of online to face-to-face instruction and a pronounced scarcity of studies in vocational education settings. The conclusion underscores that while OBL holds considerable promise, its effectiveness is highly dependent on pedagogical design. The review calls for more targeted research on specific blending strategies and expansion into understudied contexts to inform the development of effective, evidence-based Chinese language curricula. These insights are intended to guide educators, instructional designers, and policymakers in making informed decisions to sustainably integrate technology into Chinese language teaching and learning.

# Keywords

Online learning, blended learning, Chinese language education, language proficiency, self-regulated learning, motivation, higher education, vocational education.



# Perceived Social Support and Burnout in Special Education Teachers: The Mediating Roles of Professional Competence and Work Stress

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#### **Abstract**

Burnout among special education teachers is a significant occupational hazard. Although perceived social support (PSSS) is a known protective factor, the specific mechanisms through which it mitigates burnout remain underexplored. This study investigated the mediating roles of professional competence (PCS) and work stress (WSS) in the relationship between PSSS and teacher burnout (TBS). A cross-sectional survey was administered to 605 special education teachers, and a dual-mediation model was evaluated using structural equation modeling (SEM) with the bootstrap method. Results indicated an excellent model fit (CMIN/df=1.725, GFI=0.921, CFI=0.966, RMSEA=0.035). PSSS exerted a significant direct negative effect on TBS ( $\beta$  = -0.328, p<0.001). Moreover, two significant indirect pathways were identified: PSSS indirectly reduced burnout by enhancing PCS (indirect effect= -0.114, 95%CI [-0.164, -0.076]) and by alleviating WSS (indirect effect= -0.101, 95%CI [-0.147, -0.064]). Both PCS and WSS functioned as partial mediators. This study demonstrates that PSSS combats teacher burnout not only directly but also indirectly by strengthening professional competence and reducing work-related stress. These findings highlight that interventions aimed at building supportive networks, enhancing teacher competency, and implementing stress management strategies are crucial for preventing burnout in this population.

# **Keywords**

Teacher burnout, social support, professional competence, work stress, mediation, special education.

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# Translanguaging in Rural Vietnamese High Schools: A Pilot Study of Beliefs, Practices, and Instrument Refinement for Participatory Action Research

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#### **Abstract**

Translanguaging is widely recognized for boosting comprehension, participation, identity affirmation, and inclusion, yet English-only policies and exam-driven teaching still shape classroom practice in rural Vietnam. This qualitative pilot study examined teachers' and students' beliefs and classroom enactments of translanguaging in an ethnolinguistically diverse high school in Lam Dong Province while refining instruments for a forthcoming Participatory Action Research (PAR) intervention. Data comprised non-participant classroom observations, semi-structured teacher interviews (n = 2), and student focus groups (n = 20; 30% ethnic minority). Thematic analysis combined deductive coding with inductive expansion. Findings show translanguaging is both valued and constrained. Teachers used Vietnamese and local languages as pragmatic scaffolds for grammar, vocabulary, task management, and lesson flow, yet often framed such moves as remedial under policy pressure. Students, especially lower-proficiency and ethnic minority learners, reported cognitive gains (clearer comprehension), affective benefits (reduced anxiety, affirmed identity, increased confidence), and more equitable participation. Observations confirmed strategic use for comprehension, participation, and exam preparation, alongside tensions generated by English-only ideologies and high-stakes assessment. Methodologically, the pilot sharpened study tools: the observation checklist now records initiators and functions of language shifts and student responses; interview protocols were streamlined into concise, scenario-based prompts; and focus-group guides were shortened to improve engagement. The study delivers dual contributions: empirical insight from an underrepresented rural multilingual context and practical guidance on piloting in applied linguistics. It argues for sustained teacher professional development, policy alignment, and assessment reform to reposition translanguaging from incidental translation to intentional, equity-oriented pedagogy.

# **Keywords**

Translanguaging, rural education, Vietnam, beliefs and practices, Participatory Action Research, pilot study.



# Production of Dimethyl Ether (DME) Direct Synthesis from Syngas (H<sub>2</sub>, CO<sub>2</sub>) Conversion by using Cu-Ga/Al<sub>2</sub>O<sub>3</sub> Catalysts

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#### **Abstract**

The consecutive sol-gel method was used to create a series of  ${\rm Cu-Ga/Al_2O_3}$  nano catalysts, and the Fourier Transform Infrared (FTIR) technique was used to characterize their activity. The texture, structure, and surface of the catalyst affect its catalytic performance, reactant activation conditions, limiting steps, and product production. Technologies for capturing  ${\rm CO_2}$  to create valuable chemicals and fuel can address enough environmental problems caused by fossil fuels. One of the factors influencing the creation of DME is the rate at which methanol is synthesized at the metal-oxide interface, followed by the quick transfer of methanol to  ${\rm Al_2O_3}$  close to acid sites. The texture, structure, and surface all have a significant impact on the intermediate's synthesis, according to an in-situ/operando Fourier Transform Infrared (FTIR) spectroscopy analysis conducted under reaction circumstances (0.9 MPaG, 220-260°C). The formation of formate species during the methanol synthesis process depends on the conditions of the reaction. Technologically, the ideal conditions for converting  ${\rm CO_2}$  and producing DME yield are a reaction temperature of less than 260°C and a reaction pressure of 0.9 MPaG.

# **Keywords**

Hydrogenation, CO<sub>2</sub> Conversion, sol-gel method, dimethyl-ether (DME), IR analysis.

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# Blockchain and Ethics in Pharmaceutical Supply Chains: An Analytical Essay on the Moroccan Context

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#### **Abstract**

Pharmaceutical supply chains are increasingly challenged by issues of traceability, transparency, and ethical compliance. These challenges are particularly critical in the context of emerging economies such as Morocco, where access to safe and authentic medicines remains a public health priority. Blockchain technology has recently emerged as a promising solution to address these concerns. This study aims to analyze how blockchain could be applied in the Moroccan pharmaceutical sector to improve drug traceability, combat counterfeit products, and reinforce ethical standards in supply chain management.

This research adopts a qualitative approach based on semi-structured interviews conducted with healthcare professionals, logistics managers, and stakeholders in the Moroccan pharmaceutical industry. The study seeks to explore their expectations, experiences, and perceptions regarding blockchain technology. Special attention is given to its potential for promoting equitable access to medicines, enhancing patient safety, and increasing accountability among actors involved in the supply chain.

Preliminary findings suggest that blockchain can play a key role in securing pharmaceutical information and ensuring greater transparency in drug distribution flows. Participants highlighted benefits such as improved monitoring, prevention of counterfeits, and ethical compliance. Nevertheless, significant barriers remain, including the lack of digital infrastructure, weak legal frameworks, and limited adoption readiness among professionals.

Blockchain holds considerable potential for transforming pharmaceutical logistics in Morocco, particularly by strengthening ethical governance and transparency. However, its successful integration requires addressing structural and organizational challenges. These findings emphasize the importance of a coordinated national strategy and open up new avenues for future research on ethical innovation in healthcare supply chains in emerging economies.

# **Keywords**

Blockchain, Digitalization, Ethics, Morocco, Pharmaceutical supply chain, Traceability, Transparency, Smart contracts.



# A Quantitative Study on the Influence of Education on College Students' Investment and Financial Management Behaviors in Hunan Province

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## **Abstract**

This study investigates the financial literacy, behavior, and educational experiences of university students in Hunan, China, focusing on how institutional, psychological, and social factors influence financial decision-making. Using quantitative data from 300 respondents and applying descriptive, correlation, and regression analyses, the research identifies that structured university training—particularly experiential and embedded learning—has a stronger impact on financial behavior than traditional coursework or seminars. Psychological factors such as self-efficacy and peer influence also moderately affect investment and money management behaviors, while financial knowledge alone proves insufficient without practical application. The findings highlight significant disparities across institution types, emphasizing the need for standardized and equitable financial education frameworks. Policy and institutional recommendations include integrating digital tools, peer mentoring, and behavioral reinforcement into financial curricula. Overall, the study calls for a multidimensional approach to financial literacy—one that goes beyond knowledge to include motivation, digital fluency, and supportive learning environments for lasting behavioral change.

# **Keywords**

Financial literacy, experiential learning, investment behavior, financial self-efficacy, peer influence, education exposure, digital finance, budgeting, risk attitude, financial management.

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