

BOOK OF ABSTRACTS



THE 7TH INTERNATIONAL CONFERENCE ON **FUTURE EDUCATION 2024**

"Using Modern Technologies to Improve Education"

11th – 12th July 2024 | Bangkok, Thailand



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(Future Education 2024)

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MESSAGE FROM THE CONFERENCE CHAIR – FUTURE EDUCATION 2024



I'm delighted to extend my personal welcome to the 7th International Conference on the Future of Education 2024 in Bangkok. You will find the next couple of days to be filled with material that is both interesting and significant for the onward progress of education globally.

Education is the gateway to the future, for individuals and for society as a whole. A postsecondary degree increases an individual's likelihood of higher annual income as well as improved personal well-being – and the prospects of participating in higher education are enhanced by quality instruction during the primary and secondary years. As our world grows ever more complicated, education provides the tools that are needed to fashion solutions to issues that continue to threaten our peaceful coexistence. And if individuals are not adequately equipped with the knowledge and skills to meet contemporary challenges, society as a whole cannot move forward to a brighter future.

This year's conference theme is *Using Modern Technologies to Improve Education*. Like other sectors of our world, education increasingly depends on many forms of technology to offer expanded opportunities to learners. Yet for all of its advantages, technology alone is insufficient to meet the demands of modern challenges. Around the world, teachers leverage technology in creative ways that assist learners with accomplishing their goals. And in all parts of the world, there are people who innovate when technology is not available; these efforts to help learners achieve success with limited resources are also worthy of our attention.

I invite you to engage with the speakers in the conference sessions during the next two days and to form collaborative partnerships that will be of mutual benefit. Most of all, I urge each of you to consider how *you* will contribute to the future of education.

I wish to express my deep appreciation to the wonderful staff at The International Institute of Knowledge Management (TIKM) for organizing this conference, including the myriad logistical details they have so capably overseen. Our gathering this week would be impossible without their talent and support that has brought us together.

Again, welcome! We are glad to have you here in Thailand.

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A1

[01]

BUSINESS SIMULATIONS AS AN EXPERIENTIAL LEARNING APPROACH FOR APPLIED MANAGEMENT IN HIGHER EDUCATION TO MEET LEARNING OUTCOMES FOR UNDERGRADUATE AND POST GRADUATE COURSES

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ABSTRACT

The purpose of this study is to explore how simulation activities support authentic and experiential learning in Applied Management undergraduate and post-graduate qualifications. The research was conducted by using online simulation in-class activities about the identified learning outcomes which the learners were required to meet to successfully pass the course. Case study analysis and classroom activities and discussions are currently used to guide the learners on the concepts which have limitations due to the absence or limited work experience of the learners and hence the need for simulated activities. The online simulation activity is sourced and licensed from the Harvard Business learning platform. The online simulation has 3 gamification levels starting from a basic level to an advanced level. The teams work through each level of the simulation for approximately 90 minutes. The learners (N=105) were asked to provide their understanding of the concepts before and after the simulation and in-class observations by independent observers (Heads of Departments) were used to collect the data on the collaboration and engagement. We asked learners to provide anonymous voluntary feedback to gather learner perceptions on how the simulation activity supported their learning. From the qualitative reflective learner data, our exploratory findings show the learners' perceptions of adopting business simulations enabled them to develop both hard and soft capabilities. The rating on the knowledge of the academic concepts changed from 3.77 to 4.5 after the simulation. The learners reported that the activity of running the coffee shop in the simulation activity offered a "real life" applied context to link the Business Environment conceptual learning to practice. Learners reported the simulation activity created an engaging and involved context for learning as well as added an element of fun and enjoyment. This exploratory study offers directions and the need for educators and institutions to use simulation strategies to support experiential learning and strengthen authentic learning practices in higher education. Short and specific simulations to be identified and need to be course-specific and learning-driven to be effective.

Keywords: simulations, applied management, experiential learning, engagement, collaboration

A2

[02]

VIRTUAL SHOWCASE: ENHANCING INTERCULTURAL COMPETENCE THROUGH SDGS SOLUTIONS

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ABSTRACT

In EFL education, educators must adopt innovative teaching approaches to foster critical thinking, creativity, and intercultural competence in students. Educators can cultivate profound learning experiences beyond mere language proficiency by immersing learners in authentic global issues. The use of virtual reality platforms can serve as an effective means of showcasing student learning and encouraging constructive peer feedback. This study examines the effectiveness of a problem-based learning (PBL) curriculum in fostering intercultural competence (IC) among university-level English as a foreign language (EFL) students. As part of their culminating project, students explored and presented their global problem solutions on a web-based virtual reality platform, Virsody, to showcase creations and facilitate peer feedback. Using repeated measures analysis of variance (ANOVA), the research assesses changes in intercultural competence across three assessment points. Results indicate significant improvements in students' intercultural competence as measured by the Intercultural Competence Scale (ICS), highlighting the central role of an authentic global problem awareness curriculum. Furthermore, peer feedback from the virtual exhibition is instrumental in promoting deep reflection on solutions, reducing stress, and fostering adaptability among EFL students.

Keywords: intercultural competence, virtual exhibition, Problem-based Learning (PBL), peer feedback

A3

[03]

LANGUAGE TEACHERS' PROFICIENCY IN TECHNOLOGY INTEGRATION

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ABSTRACT

In the rapidly evolving educational landscape, integrating technology into instructional processes has become pivotal in enhancing teaching and learning experiences. This study delved into the proficiency of language teachers in incorporating technological tools and resources into their pedagogical practices. A thorough comprehension of this area was achieved through a blend of quantitative and qualitative methodologies. There were 580 teachers in the private and public grade schools and high schools in the Ilocos Region, Philippines, surveyed quantitatively, with an effect size of 0.30 and an achieved power of 95.02%. Meanwhile, the qualitative analysis involved 15 participants randomly selected from the 580, with a saturation point established for the 7th participants and an additional eight participants for confirmatory purposes. Quantitative analysis unveiled that language instructors exhibit a Moderately Proficient level of skill across various facets, encompassing digital resource utilization, technology integration in teaching, student engagement, personalized learning, assessment techniques, communication, collaboration, and data-driven instructional strategies. The findings indicate a need for advancement and enhancement in technology integration approaches among language educators. Qualitative insights highlighted key themes such as re-learning for the future, teacher-learner tandem, and technological divide, offering valuable perspectives on educators' encounters, implementation challenges, and collaborative endeavors to surmount obstacles. The amalgamation of quantitative and qualitative results provides a deeper understanding of the intricate dynamics associated with technology integration. This underscores the significance of continual professional development opportunities for teachers and advocates for collaborative partnerships between educators and students. Moreover, it addresses resource inequalities among institutions to optimize technology-enriched language education programs and foster more effective and engaging learning environments tailored to the demands of the digital era. This underscores the significance of continual professional development opportunities for teachers and advocates for collaborative partnerships between educators and students. Moreover, it addresses resource inequalities among institutions to optimize technology-enriched language education programs to foster more effective and engaging learning environments tailored to the demands of the digital era.

Keywords: technology integration, language teachers, proficiency assessment, educational landscape evolution

A4

[04]

**STUDENTS' PERCEPTIONS OF TECHNOLOGY-ENHANCED LANGUAGE
LEARNING FOR LEARNING INTEGRATED INTENSIVE COURSE**

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ABSTRACT

Technology-Enhanced Language Learning (TELL) is an approach that may be used in combination with a teaching method to enhance education. The development of all language abilities (listening, writing, reading, speaking, grammar, and vocabulary) may be helped by technology. This study explores students' perceptions of TELL for learning Integrated Intensive Course (IIC). A qualitative case study approach was employed, and a purposive sampling procedure was used to select participants who were students experienced in TELL implementation. The total of the students was forty, 25 female and 15 male students. Data collection involved observation, interviews with the students, and the collection of relevant documents. This research used Focus Group Interview (FGI) as the primary research tool. Thematic analysis was applied to analyze the collected data. The findings reveal that students' perceptions were positive towards the use of TELL in IIC learning in terms of motives, experiences, and student expectations. The use of TELL in the context of IIC appears to facilitate and make effective the acquisition and application of various English language skills among students such as including listening, reading, and speaking. For example, implementing measures that simplify the assignment submission process can contribute to increased efficiency for students. However, there were certain limitations associated with this approach, such as network limitations, potential dependence on technology, and diminished self-confidence. The limitation of this research is that the researcher only focuses on student perceptions, further researchers can investigate lecturers' perceptions of TELL.

Keywords: technology-enhanced language learning, integrated intensive course, students' perceptions

A5

[05]

**ASSESSING THE EFFECTIVENESS OF MICROLEARNING VIDEOS IN
ENHANCING LITERATURE EDUCATION: A QUASI-EXPERIMENTAL STUDY**

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ABSTRACT

This quasi-experimental study investigates the impact of integrating microlearning videos in 21st-century literature classes, aiming to enhance student engagement, comprehension, and critical analysis of literary works. Microlearning, characterized by short, targeted learning experiences, has emerged as a promising tool in the digital age. The study employs a quasi-experimental design to compare the outcomes of literature classes with and without the use of microlearning videos. The research involved 60 SHS students enrolled in literature classes at a private school in Balingasag. The experimental group experienced literature classes with integrated microlearning videos, while the control group followed traditional teaching methods without microlearning videos. Data collection methods included pre-test and post-test assessments to measure students' comprehension of literary concepts, surveys to gather student feedback on engagement and motivation, and interviews with literature educators to explore their perspectives on the impact of microlearning videos. Results indicate a significant improvement in comprehension scores among students in the experimental group compared to the control group. FGD responses also highlight higher levels of engagement and motivation among students exposed to microlearning videos. Educators expressed positive views on the effectiveness of microlearning videos in enhancing teaching and student learning. These findings underscore the potential of microlearning videos as an effective tool for enhancing literature education in the 21st century. Integrating curated microlearning videos into literature curriculum can lead to improved student comprehension, increased engagement, and positive perceptions from educators. The study recommends providing professional development for educators on video creation and integration of microlearning videos into lesson plans.

Keywords: microlearning videos, literature education, quasi-experimental

A6

[06]

**UTILIZING THEATRICAL TECHNIQUES FOR TEACHING ENGLISH AS A
SECOND LANGUAGE: A CASE STUDY IN HONG KONG**

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ABSTRACT

This article presents a case study on the application of drama in teaching English to primary school students in Hong Kong. Drama-based pedagogy in second language teaching is a derivative of more interactive and dynamic educational strategies, which can facilitate students in applying their linguistic competencies to more authentic contexts. Numerous studies have indicated that incorporating drama into language learning can significantly boost L2 motivation. This study investigates the perspectives of L2 learners and their instructor within a primary school context in Hong Kong. The results indicate that drama can enhance students' physical expression, attention span, vocal projection, creativity, and most crucially, their communicative proficiency. The study also implies that traditional language instruction methods in an examination-centric educational system, such as that of Hong Kong, may not fully leverage students' ability to apply classroom-acquired knowledge to real-life contexts. Incorporating drama into L2 learning could foster a collaborative learning atmosphere that is advantageous for L2 learners and enables them to apply their language competencies in real-world scenarios.

Keywords: drama education, second language learning, l2 motivation, collaborative learning

A7

[07]

**APPLICATION OF DIFFERENTIAL AND INTEGRAL CONCEPTS BY
MODELING ACTIVATED CARBON ADSORPTION ON ACETIC ACID USING
MAPLE**

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ABSTRACT

The concepts of differential and integral are important topics in chemistry mathematics courses. Based on the number of subtopics, differential and integral concepts are covered on average more than 40% in chemistry mathematics books. Several previous studies reported findings that differential and integral concepts are still difficult for students to understand. This research aims to propose an alternative learning design to help students more easily understand those concepts. In this study, the researcher developed a practicum by using Plomp's model which had been modified. It was done by selecting only some steps to be applied in this study, which were collecting, designing, trying, and revising the product. The practicum design was developed for active carbon adsorption on acetic acid. Those chemicals were chosen because the materials obtained are relatively easy, cheap, and safe, so it is very possible to practice it in the laboratory. The researcher used Maple to model the adsorption phenomenon. The results show that the differential and integral concepts can be applied to model the adsorption phenomenon of activated carbon on acetic acid by using Maple. This research is limited to simulations. Therefore, the suggestion for further research is to conduct field trials to determine the impact of implementing learning design in increasing students' understanding of differential and integral concepts.

Keywords: chemistry mathematics, differential and integral, modeling, Maple

A8

[08]

**ETHNOMATHEMATICS ON THE RICE CULTIVATION PRACTICES IN
SABLAN, BENGUET, PHILIPPINES**

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ABSTRACT

This descriptive-interpretive design study aims to document Ethnomathematics pertaining to rice cultivation practices in Sablan, Benguet. These stemmed from the result of interviews conducted among the identified key informants of the indigenous people of Sablan, Benguet, identified through purposive sampling. Following the NCIP Administrative Order No. 01, s. 2012, otherwise known as Indigenous Knowledge Systems and Practices (IKSPs) and Customary Laws Research Documentation Guidelines of 2012, the Free, Prior and Informed Consent (FPIC) process was strictly followed in the gathering of data. Results show that Accounting for rice harvest involves simple counting, while ciphering includes posting purong in rice fields. Estimation in measuring their rice harvest is documented as a common practice. Sequential steps in cultivation include seedling preparation, land preparation, transplanting, pest control, harvesting, and drying. Harvests are classified by variety and harvest time. Additionally, beliefs related to rice cultivation were also observed by the people of Sablan. They predict the weather based on the arrival of specific birds and the color of rice grains. Further, their planting method exhibits mathematical patterns and the sidewalls of their alang or rice granary display modeling patterns. The rice cultivation practices of Sablan, and Benguet shows the rich culture of the people which are worth documenting. Other indigenous practices may be documented to preserve the local practices. The identified ethnomathematics on rice cultivation practices may be incorporated in teaching math concepts. The community is also encouraged to participate in teaching the practices to the younger generations for the preservation and promotion of culture.

Keywords: ethnomathematics, rice cultivation practices, Indigenous knowledge systems and practices

A9

[09]

SELF-REGULATED INTERACTIVE LEARNING MODULES (SRILMS) IN PHYSICS: IMPROVING STUDENTS' ACADEMIC PERFORMANCE

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ABSTRACT

This action research utilized Self-Regulated Interactive Learning Modules (SRILMs) to enhance the teaching and learning process of Motion in One Dimension, aiming to improve students' academic performance in physics. This study employed a concurrent mixed methods approach following a plan-do-study-act (PDSA) cycle to investigate the effect of SRILMs on student learning outcomes. Thirty-six Grade 7 students from a class participated. During the pre-implementation phase, SRILMs were developed and validated by expert evaluators based on specific criteria. In the implementation phase, the SRILMs were used to teach four topics during asynchronous and face-to-face classes. During the post-implementation phase, the effect of SRILMs on learning and performance was assessed through students' reflections and focus group discussions. Results showed a significant improvement in students' academic performance. Students reported increased awareness of effective learning strategies, including self-discipline and optimism. They learned to analyze situations independently, improve their learning processes, and achieve tasks autonomously. The integration of SRILMs resulted in a statistically significant improvement in test scores (Wilcoxon Signed Ranked Test; $Z=5.0535$, $p<0.001$). Triangulation of data revealed how SRILMs facilitated task completion, and assessment preparation and significantly influenced students' understanding and performance in physics. Thus, SRILMs positively influenced the teaching-learning process, leading to enhanced academic performance and student engagement in self-regulated learning strategies. The findings highlight the effectiveness of SRILMs in improving physics education by fostering independent learning and reflective practices among students. This study recommends for school administrators to conduct micro-training to aid educators in developing SRILMs and for future researchers to develop SRILMs in various disciplines.

Keywords: self-regulation, rectilinear motion, physics, self-regulated learning, academic performance

A10

[10]

**NAVIGATING DIGITAL GAMES AS CARBOHYDRATES LEARNING MEDIA
TOWARDS THE IMPROVEMENT OF ITS UTILIZATION TO EDUCATION**

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ABSTRACT

Digital games manifest the digitalization of games using computer technology due to the rapid development of information and communication technology, including education. Therefore, educators began to utilize digital games to deliver material to students to increase motivation and learning outcomes. Digital games are used as media for materials considered uninteresting and challenging to understand, one of which is carbohydrates. However, not all digital games are developed with good quality. This paper compares the quality of several digital games that contain carbohydrate content. The method used in this research is a comparative study using an evaluation rubric with descriptive qualitative data analysis. The aspects assessed include graphics, gameplay, educational content, interactivity, and platform availability. The number of digital games assessed was seven games. Based on the evaluation results using a rubric, the seven games tested were divided into three categories: exemplary, effective, and baseline. The research results showed that only one game was included in the exemplary category, four games were included in the effective category, and two games were included in the baseline category. The results of this comparative study can provide an overview to users or developers of digital-based educational games for future improvements.

Keywords: digital game, carbohydrates, learning media

A11

[11]

THE SENSE OF POWER OF FIRST-GENERATION COLLEGE STUDENTS IN RURAL PHILIPPINES

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ABSTRACT

Power may be defined as the discretion and means to enforce one's will over another (Sturm & Antonakis, 2015). This may entail control of resources and outcomes. Relating such to research on higher education where completion of a college degree may be determined by resources available to the student, first-generation students (FGS) - students whose both parents have not reached college education – are among those who are at the disadvantaged in terms of resources and are less likely to complete their degree than their continuing-generation counterparts (CGS). It is, then, the aim of this research to explore the sense of power FGS may have in general, over their peers, and over their teachers, while also examining their outcome expectancy towards college completion in a rural state university in the Philippines. Contrary to initial expectation and through simple comparison, FGS tended to have higher sense of power than CGS in all dimensions. While FGS and CGS do not differ in their outcome expectancy, both generational status and outcome expectancy were observed as significant predictor of power, especially over their teachers. Further discussions on whether this sense of power relate to actual degree completion and the differential sense of power towards teachers and peers will be done in the presentation.

Keywords: first-generation students, higher education, sense of power

A12

[12]

**THE MODERATING ROLE OF INFRASTRUCTURE FACILITY ON THE
RELATIONSHIP BETWEEN BUSINESS CAPABILITY AND PERFORMANCE IN
NIGERIA**

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ABSTRACT

The role of Small Businesses (SBs) in the economic development of the country is very significant as the sector is the bedrock of entrepreneurship and innovation which is normally driven by individual creativity that leads to job creation, poverty reduction, wealth creation, income distribution and reduction in income disparity. The low performance and low survival rate of SBs deny their potential contribution to an economy. SBs fail to perform up to the expectation as a result of particular constraints that are related to inadequate and non-functional infrastructure facility to support their operations. A randomly selected sample of 235 SBs in Nigeria were analysed using Partial Least Squares Structured Equation Modelling (PLS-SEM) method. Results supported the hypothesized direct effects of capability on performance of SBs in Nigeria. In addition, infrastructure facility moderated these relationships. There is positive moderating effect of infrastructure facility on the relationship between capability and performance of SBs in Nigeria. Furthermore, infrastructure facility has a significant moderating on the path between CP and SBs performance. In general, these findings supported the view that Capability has positive influence on performance. The results of this study provide an important insight to policy-makers and researchers to understand the effects of Capability on SBs performance. The outcome of the study also provides that Capability and SBs performance depends on the availability of infrastructure facility, this study also presents a methodological contribution to the literature of SBs performance through identifying validity and reliability of the adapted measures in the different context (Nigerian context.). This study contributes theoretically, by empirically testing the moderating role of infrastructure facility on the relationship between Capability and performance.

Keywords: Small business, Performance, Capability, Auxiliary services, Nigerian

A13

[13]

**ENVIRONMENTAL LEADERSHIP, ENVIRONMENTAL INNOVATION,
CLIMATE CHANGE AWARENESS AND IMPLEMENTATION OF AN
ENVIRONMENTAL SUSTAINABILITY**

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ABSTRACT

The study focused on Environmental Leadership, Environmental Innovation, Climate Change Awareness, and Implementation of Environmental Sustainability in the Department of Environment and Natural Resources Region X. Also, it would examine the process of environmental sustainability initiative implementation in the said agency. The study utilized a mixed-method design to answer the questions. The main tool to gather data was the survey questionnaire. Data were organized and analyzed using appropriate statistical treatments. The data were processed using percentages, computation of mean and standard deviation, Pearson r correlation, and multiple linear regression. Based on the analysis of the data collected from the Department of Environment and Natural Resources Region 10, the respondents have a very high level in terms of Environmental Leadership (competencies, practices, and development). The respondents also have a high level of Environmental Innovation (Green Innovation, Research and Innovation, and barriers and Drivers). The respondents in the Department of Environment and Natural Resources have a very high awareness of climate change issues. There is a significant relationship between Environmental Sustainability, Environmental Leadership, Innovation, and Climate Change Awareness. Moreover, the variables that best predict environmental sustainability were barriers and drivers followed by research and innovation, climate change awareness, knowledge, development, and competencies

Keywords: green leadership, eco-innovation, climate education, green initiatives, environmental stewardship

A14

[14]

**EXPLORING THE GAP IN IMPLEMENTING THE SDRRM IN THE PUBLIC
ELEMENTARY SCHOOLS**

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ABSTRACT

The three pillars, which serve as the foundation for performing risk assessments, make it possible to incorporate risk assessments into the education development plans of regions, divisions, and schools. The purpose of this research is to ascertain the gap that exists between the three pillars and the School Improvement Plan (SIP), to ascertain the relevance of the relationship that exists between the DRRM Framework Pillars and the SIP, and to enhance the SIP by utilizing the gap analysis as a basis for improvement. An investigation was also conducted into the obstacles associated with implementation. While conducting their study, the researchers used the DepEd Gap Analysis template. The school's annual accomplishment report served as the source for secondary data, which was derived from the individual school plan. According to the findings, there is a high level of compliance with the Three Pillars as the foundation for performing risk assessments in elementary public schools in San Mateo, Isabela, and there have been identified problems that are preventing this from happening and need to be addressed. Eventually, the results of this study will be utilized to improve the school's Special Instruction Program (SIP).

Keywords: basic education framework, risk assessment, risk disaster, school improvement plan, SDRRM framework, three pillars

A15

[15]

ARTIFICIAL INTELLIGENCE AND VIRTUAL REALITY AS TOOLS TO ENHANCE INTERIOR DESIGN EDUCATION

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ABSTRACT

The education of Interior Design (ID) is evolving at a fast pace and in tandem with the advancements in technology – in terms of new materials, techniques, and software tools. Artificial Intelligence (AI) and Virtual Reality (VR) have facilitated new ways of visualising spaces, analysing user interaction and also predicting future design trends. It has pushed boundaries by providing unmatched personalisation and efficiency. However, this paper will only try and explore the crucial role of (AI) and (VR) in changing ID education. This study will also highlight the importance, use, and transformative potential of AI & VR in enriching pedagogical delivery in ID education. In the beginning, the paper will examine the present state of ID education and its dynamic requirements, especially considering a growing demand from students for an interactive and immersive learning experience. It will then explore the role of AI in assisting an individualized learning experience, augmenting the creative process, and simplifying tedious and repetitive tasks. Additionally, the study will also discuss the power and impact of VR in ID education especially in simulating realistic environments thereby offering students unmatched opportunities to explore spaces and test their design concepts in a risk-free virtual setting. Going further, this study will delve into the use of AI in analysing the data to arrive at design solutions for a given situation. The latter part of the paper will attempt to provide insights into practical strategies for incorporating AI and VR into pedagogical delivery with the help of case studies and examples. These will demonstrate how such tools can be seamlessly integrated into design studios and workshops. The paper will conclude by highlighting the immense potential of AI and VR in producing a new generation of interior designers who shall be equipped with advanced skills, a humane design sensibility, and a deep understanding of technology's role in shaping the built environment and also address the potential challenges and pitfalls in incorporating AI and VR in mainstream ID education.

Keywords: interior design education, artificial intelligence, virtual reality, pedagogy, technology

A16

[16]

**THE INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM (IELTS) AND
ACADEMIC PERFORMANCE IN MATHEMATICS PROFICIENCY TOWARDS A
CONCEPT ATTAINMENT APPROACH (CAA)**

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ABSTRACT

Mathematics is a worldwide language, although skill in English may significantly impact pupils' success in mathematics. Proficiency in English is essential for students to be able to comprehend mathematics textbooks, lessons, and problem-solving instructions since they are mostly delivered in English (Durrani, 2016). Inadequate English skills may impede pupils' comprehension of mathematical terminology, symbols, and word problems, (Rubinstein-Avila, 2017). The study shows 10th and 11th graders' IELTS band scores. The mean speaking band score for grade 10 and 11 pupils is showing competence ($\bar{x} = 6.38, sd = 0.304; \bar{x} = 6.35, sd = 0.58$), for writing band score is indicating high proficiency ($\bar{x} = 6.54, sd = 0.292; \bar{x} = 6.6, sd = 0.39$), for listening and reading are both strong proficiency ($\bar{x} = 7.5, sd = 0.59; \bar{x} = 7.0, sd = 0.39; \bar{x} = 7.69, sd = 0.586; \bar{x} = 7.5, sd = 0.722$). Hence overall grade 10 and 11 IELTS mean band score was 7.0 and 7.13 with a standard deviation of 0.39 and 0.397, indicating high proficiency. Across grades 10 and 11, most students scored excellent to very well on IELTS tasks. Moreover, Summative test for grades 11 and 12 are outstanding and very satisfactory in mathematics ($\bar{x} = 85.54; \bar{x} = 78.75$) findings demonstrate a low to moderate association between IELTS band scores and senior high school students' math skills. Grade 10 and Grade 11 students' mean IELTS band scores vary from competent to very excellent across abilities. The IELTS Writing score for Grade 10 has a modest association ($r = 0.519, p = 0.009$) with mathematical competence, whereas the other band scores have extremely low to low correlations. Therefore, for mathematics, Grade 11 students' relatively lower mean performance scores and skill level classification compared to Grade 10 students suggest the need for additional support to maintain outstanding performance levels as students' progress to higher grades. Continued monitoring of students' progress and tailored interventions as needed will be important to maximize learning outcomes for all students.

Keywords: Concept Attainment Approach, IELTS Band Scores, mathematics

B1

[17]

**“NOT ALL HYFLEX CLASSROOMS ARE CREATED EQUAL”: DISPARITIES IN
HYFLEX TEACHING-LEARNING EXPERIENCES**

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ABSTRACT

The rapid adoption of HyFlex (hybrid-flexible) education models post-pandemic in higher education (HE) has introduced a set of complex challenges in achieving effective and equitable learning experiences. This study examines the multifaceted difficulties associated with HyFlex course delivery, emphasizing the balance between in-person and online modalities. The study provides further evidence of pedagogical challenges in managing real-time and asynchronous learning for educators. Through in-depth semi-structured interviews with 11 students and 7 teachers from four higher learning institutions, our findings revealed that varying degrees of access and Hyflex pedagogical competencies can create unequal learning environments. Students' engagement and interaction are impacted, where online participants may experience a sense of isolation and reduced participation compared to their in-class counterparts. We call for institutions to develop more inclusive and effective HyFlex strategies, underlining the need for comprehensive support systems for students and educators to navigate this evolving educational landscape. This study has important implications for teacher development, highlighting the need for professional development programmes to better prepare teachers for diverse teaching situations, particularly concerning the engagement between teachers and learner(s) in Hyflex settings.

Keywords: HyFlex, flexibility, blended learning, hybrid learning, education technology, student engagement

B2

[18]

ADAPTING EDUCATION IN THE 21ST CENTURY: NAVIGATING CHALLENGES, IMPLEMENTING SOLUTIONS

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ABSTRACT

In the continually evolving educational landscape of the 21st century, recent challenges demand proactive measures. The 2020 the COVID-19 pandemic and subsequent lockdown prompted a prompt switch to online teaching – a well-evaluated solution ready for future implementation. However, emerging issues, such as the increasing number of neurodivergent students and the widespread use of generative AI, necessitate a reevaluation of educational approaches. This paper examines how measures were developed within the Computer Science program at the University of Applied Sciences Technikum Wien, enabling educators to effectively handle the ongoing impacts of COVID-19, cater to the diverse needs of neurodivergent students, and navigate the transformative influence of generative AI on teaching practices. The primary goal is to provide educators, administrators, and stakeholders with practical insights and strategies to succeed during these challenges. Curriculum developments prioritize adapting study regulations to align with evolving learning outcomes, while teachers are urged to tailor lessons to address current challenges. The presentation aims to instill a profound understanding of these multifaceted challenges in participants and equip them with actionable approaches to enhance the educational environment. This involves not only adapting regulations but also implementing dynamic teaching methodologies. By the session's end, participants will be armed with practical tools to proactively shape education in response to current and future challenges.

Keywords: educational adaptation, COVID-19, neurodiversity, generative AI

B3

[19]

IMMERSIVE VIRTUAL REALITY INTERVENTION WITH 360° VIDEOS FOR CLINICAL REASONING TRAINING IN PHYSICAL THERAPY STUDENTS: A PILOT EXPERIENCE

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ABSTRACT

Early health professions students lack practical clinical experience. Immersive experiences using virtual reality (VR) are more effective at addressing these deficits than traditional methods. Simulated clinical scenarios support learning of diagnostic processes, clinical reasoning, and treatment selection while introducing standardized clinical conditions. A pilot experience was designed for physical therapy students in 2023 to assess the perceived benefit a novel technique for virtual patient simulation using 360° videos and immersive VR. The goal is to address the need for standardized clinical interactions that include clinical decision making. It was inserted in curriculum's 4th year and included a clinical simulated environment that spanned patient interview, assessment, treatment suggestions, and performance corrections. The simulated environment used immersive VR (Meta(r) Quest 2 headsets) and prerecorded 360° videos presented as a choice tree. Forty-two students (100%) participated and answered the questionnaire. Main results highlighted the similarity with the clinical environment (very similar or something similar n=36, 86%), with clinical cases simulated by peers (Very similar n=38; 90%), and a high perception of benefit for their learning process (n=40; 95%). Qualitatively, the students stated that they felt "more comfortable because of the lack of fear of making a mistake". This pilot experience revealed the learner's perceived value of this tool to their learning process, giving value to its similarity to clinical settings mainly regarding motivation and immersion, which have been studied as key factors to improve the learning process. Future studies should measure this tool's impact on learning.

Keywords: virtual reality, clinical reasoning, physical therapy higher education, immersive experience, virtual case studies

B4

[20]

**BRIDGING THE ACHIEVEMENT GAP WITH AN INNOVATIVE BLENDED
LEARNING MODEL**

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ABSTRACT

Traditional public education in America, particularly in underserved communities, utilizes an antiquated factory based, one size fits all, educational delivery model. This rigid approach leaves many students behind in school causing them to become at risk of dropping out of school. Many of these students do not have many educational options to choose from. Fortunately, research has shown that there are options within the public school system that can provide solutions for students at risk of dropping out in underserved communities. Public charter schools can provide students and families living in underserved communities with educational options without charging tuition. Additionally, A small network of public charter schools (ThrivePoint Academy) have been shown to help students in underserved communities to not only catch up with their traditional peers, but to successfully finish with a high school diploma and to become career and college ready. ThrivePoint Academy gives students the opportunity to receive personalized instruction in a smaller microschool setting with online and blended learning tools allowing students more flexibility in their learning. This hybrid learning approach allows students to become more engaged and excited about their future with caring teachers and student success coaches (SSC) who act as mentors to students. Students work with their SSC who helps them to design a student success plan (SSP) that is personalized based on their academic needs, learning styles, and educational and personal goals. This innovative educational model allows students to catch up on their credits, get on track to graduate, and become career and college ready.

Keywords: hybrid innovate learning flexible personalized microschool

B5

[21]

**LEGALLY COMPLIANT TECHNOLOGY-DRIVEN STRATEGIES FOR
ADVANCING EDUCATIONAL INNOVATION**

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ABSTRACT

In the 21st century, technology is changing the way we teach and learn. This research paper will examine how technology can make education more inclusive, engaging, and effective. It focuses on artificial intelligence (AI), virtual and augmented reality (VR/AR), and adaptive learning systems. AI can be used to personalize learning experiences and give real-time feedback. VR/AR can make learning more immersive and engaging. Adaptive learning systems can adjust the difficulty based on the learner's progress. These technologies have the potential to improve educational outcomes. Technology in education not only makes learning student-focused but also gives students the essential skills they need for the digital world. However, the integration of technology in education has challenges like the digital divide, privacy issues, and the need for teacher training. Our exploration of case studies and research shows how successful implementations of technology in education can provide insights for integrating innovative tools and methods into educational systems. In this research paper, our analysis underscores the importance of collaborative efforts among educators, policymakers, technologists, and learners to create a dynamic, technology-enhanced educational ecosystem that is adaptable, equitable, and forward-thinking. Ultimately, this paper points out that the strategic use of technology in education holds the promise of transforming learning experiences, making them more relevant, interactive, and impactful for students across the globe. This outlines technology-driven strategies for crafting transformative educational experiences, encompassing aspects like AI-driven personalized learning, immersive learning technologies, and fostering a culture of lifelong learning.

Keywords: educational technology, artificial intelligence, virtual reality, adaptive learning, digital divide, learner-centered, skills development

B6

[22]

**DEVELOPMENT OF ANDROID-BASED GAMES AS INSTRUCTIONAL
MATERIALS IN TEACHING LOGIC SUBJECTS**

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ABSTRACT

In this digital age which highlights generations like Xennials, Millennials, Gen Z and Gen Alpha, students use technological tools such as computers, tablets and mobile phones very frequently and intensively in their social and academic lives. In order to respond to this trend as well as to provide supplemental teaching and learning modality in the absence of face-to-face classes due to COVID-19 pandemic, the Android-based Games Logic Application was designed specifically for students who are enrolled in Logic Subjects. The limitation brought by the problems on internet connection when using android app was addressed through this Offline Android Application. Moreover, it was designed interactively in-line to Jumbled Words, Guessing Phrase, Puzzle Game, Mole Hunt, Duck Hunt, Ven Diagram and Picture Guessing. With the added features of the application software learning materials, Android-based game [ABG] is a potential tool in the teaching learning process due to the radical change of 21st century learners. Android-based games are likewise a creative learning tool that influences the students' thinking and motivation.

keywords: android-based games, m-learning, mobile learning, logical games, interactive games

B7

[23]

INSTRUCTION BASED ON VIRTUAL REALITY AND ITS INFLUENCE ON STUDENT MOTIVATION

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ABSTRACT

This study acknowledges the lack of empirical evidence on the effects of Virtual Reality-based instruction on Architectural history courses in China. Hence, this action research was conceptualized to describe the level of implementation and determine its effects to student motivation. To achieve the objectives of the study, an adapted survey questionnaire was developed, validated and administered at two different times to obtain the level of student motivation prior to and after the VR-based instruction. Then, the intervention was implemented for one semester with architecture students taking up Architectural History course. After establishing the normal distribution of the data, a t-test was administered to determine if there is a statistical evidence proving that VR-based instruction had significant effect on student motivation. It was gleaned that there is a significant increase in motivation of students when VR-instruction was implemented. It is supported by the calculated t- value of 0.696 and a p-value of 0.001. It implies that VR may cause significant increase in the motivation of students in learning Architectural history course which may improve significantly their performance in the subject since literature proves a positive correlation between the two. The higher the motivation students have in learning a particular subject, the higher the tendency for them to perform excellently in the assessments.

Keywords: virtual reality, architectural history, student motivation, empirical evidence

B8

[24]

EXTENDED REALITY IN ARCHITECTURAL PEDAGOGY: POTENTIAL AND PITFALLS

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ABSTRACT

Extended Reality (XR) has been steadily gaining momentum since the 2010s and with the pandemic and after, the need for digital and virtual have become inseparable from one's day-to-day life. The notion of space is constantly being redefined with Extended Reality in the form of VR (Virtual Reality), AR (Augmented Reality) and MR (Mixed Reality). As the world advances rapidly, the research takes the opportunity to delve deep into its benefits and drawbacks before we adapt this into architectural disciplinary learning. Understandably, the objective is to understand the potential of application of XR in architectural pedagogy, for students' problem-solving skills of real-world issues. The methods for this research would include interviewing practising professionals, present students and teaching faculty for opinion on use of XR, as well as for lessons learnt in actual experience of employing XR methods. These findings will then be validated through triangulation, reinterview and participant validation as also analyzed to understand both positive and negative effects of appropriating Extended Reality in understanding of spaces and their details. Additionally, the explorations will help determine the level at which XR should be introduced in curriculum, for optimum utilization by students aiming to practice successfully in a futuristic world of ever-widening opportunities. A timely analysis of such results would allow the architectural fraternity a conscious and careful introduction of XR in the process of architectural education, thereby taking the best and limiting the pitfalls in students' perception of function, scale, proportion and aesthetics.

Keywords: virtual, problem-solving, explorations, futuristic, perception

B9

[25]

**ARABIC-INDONESIAN TRANSLATION ERRORS: AN ANALYSIS OF GOOGLE
TRANSLATE FOR ARABIC LANGUAGE STUDENTS**

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ABSTRACT

The internalization of machine learning (ML) in Arabic language learning provides many conveniences for students in completing their assignments and achieving maximum results. Arabic language learners have the task of detecting errors in translation results using the Google Translate (GT) engine. Even though many users use ML-GT as a translation tool for Arabic-Indonesian and Indonesian-Arabic, they must be wary of errors. This research used a qualitative approach with a total of 100 informants, in the third (3) semester students from the As-Syifa College of Qur'anic Science Subang, Indonesia. The results of this research explain that the use of ML-GT gives rise to several linguistic errors, such as errors in grammar, word order, phonetics, morphology, syntax, and semantics. These errors have the effect of changing meaning. Therefore, Arabic teachers can utilize ML in various ways in learning as an adaptive response to current developments. At the same time, teachers must be alert to errors that arise from the use of ML in Arabic language learning. From the data obtained, it is indicated that artificial intelligence (AI) is not in a position to optimally produce the quality of translation of true Arabic words or sentences according to Arabic grammar so that it is easy to understand the interlocutor. Students are not helped in choosing the correct vocabulary and sentences with context; reasoning is not developed; and eventually, the oral language is not aligned with the written language.

Keywords: Arabic language learning, Google Translate, technology learning, machine learning, society 5.0 era

B10

[26]

**EXPLORING THE USE OF LARGE LANGUAGE MODELS IN ELT
ASSIGNMENTS: A DESCRIPTIVE STUDY OF HIGH SCHOOL ENGLISH
TEXTBOOKS OF THE INDONESIA NATIONAL CURRICULUM**

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ABSTRACT

Through the utilization of a large corpus of text data, Large Language Models (LLMs) can create responses that closely resemble human-like outputs, enabling them to interact with users naturally and conversationally. ChatGPT stands out as an example of such a platform. In the context of English Language Teaching (ELT) assessment, ChatGPT has taken an important role in how High School (HS) English Language Learners (ELLs) in Indonesia utilize this AI to do their English assignments. Nonetheless, the use of ChatGPT and ELT assessment is unexplored. Therefore, this study aims to explore the potential impact of ChatGPT on ELT assessment in English textbooks and investigate how ChatGPT has significant impacts on ELT English assignments if it is administered as take-home assignments. Throughout the qualitative approach, observation is conducted by investigating four English textbooks of Indonesia National Curriculum at grade XI and document analysis of related literature, such as books and journals. The results of this study show that ChatGPT presents dual faces in ELT assessment. It enriches learning experiences, fostering a constructivist journey with immediate feedback, yet diminishes the value of take-home assignments by facilitating cheating. Therefore, this study reveals some suggestions in optimizing ChatGPT's role without compromising integrity by incorporating in-class activities aligned with the Indonesia National Curriculum and utilizing HOTS assignments as take-home assignments.

Keywords: LLMs, ChatGPT, ELT assessment, take-home assignments

B11

[27]

THE EFFECT OF INSTRUCTION DELIVERY AND ADMINISTRATOR'S SEX ON EXAM PERFORMANCE

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ABSTRACT

The Philippines ranks among the lowest-performing countries in math, reading, and science according to recent PISA findings. With the country's shift to hybrid learning due to COVID-19, understanding the impact of instruction delivery modes and administrator sex on test-taker's exam scores is crucial. Additionally, considering test-taker's sex as a moderating factor may reveal disparities in academic outcomes. To address this, a study using a 30-item test questionnaire in Science, English, and Math was conducted. It aimed to scrutinize the effect of instruction delivery modes and administrator sex on test-taker's exam scores, with test-taker's sex as a moderator. A quantitative 2x2 quasi-experimental independent-groups factorial design (IV1: online vs. in-person instruction delivery mode; IV2: administrator's sex) was employed. The study also investigated the role of test-taker's sex as a potential moderator. With a sample size of 58 (n=58) the ANCOVA statistical analyses revealed non-significant main effects for IV1 ($p=0.698$), IV2 ($p=0.504$), and test-taker's sex ($p=0.090$) on exam scores. However, significant interaction effects were observed between Instruction Delivery Modes and Test-taker's Sex ($p=0.047$), and Instruction Delivery Modes and Administrator's Sex ($p=0.041$). Specifically, the performance difference between males and females is more pronounced in the in-person setting than in the online setting with males outperforming females, while the effect of administrator's sex on test scores varies depending on whether the test is conducted in-person or online. The results suggest a bias towards the in-person mode of instruction delivery. This bias may be an impact of student-teacher interaction, as students reported challenges with limited face-to-face interaction in blended learning (Eslit, 2023). These findings emphasize the importance of considering instructional modalities and gender dynamics to address disparities in academic performance in the Philippines. Understanding and mitigating these biases can contribute to enhancing learning outcomes in education..

Keywords: instruction delivery modes, administrator sex, test-taker's sex, interaction effects, exam scores

B12

[28]

**TEACHERS' CLASSROOM MANAGEMENT STRATEGIES IN ONLINE
LEARNING**

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ABSTRACT

This study investigates the interactions between online classroom management practices and performance in a group of 41 faculty members at Isabela State University-San Mateo Campus. Educational institutions globally experienced major disruptions during the COVID-19 epidemic, leading to a rapid shift to online learning platforms. Therefore, efficient control of the classroom environment in the online setting became crucial. The study used a descriptive-correlational research method to examine how faculty traits, online classroom management strategies, and classroom performance are related. The results show a connection between the level of education and the effectiveness of classroom management techniques, suggesting that greater educational credentials improve skills in managing a classroom. There is a strong correlation between the level of education achieved and academic achievement in the classroom, highlighting the value of advanced degrees in promoting successful teaching methods. The report also highlights other hurdles faced in online education, such as inadequate internet connection, time management problems, and issues with student involvement. Institutional assistance and faculty development programs are necessary to overcome technological obstacles and improve teaching skills in online education. The study suggests that future research should focus on increasing sample sizes and including student viewpoints to better understand online education problems. Educational institutions need to prioritize digital literacy training and instructional assistance for faculty to provide the best learning results during and after COVID-19.

Keywords: Classroom management, face-to-face learning, academic engagement, online learning, performance

B13

[29]

**UNPACKING THE PERSPECTIVES OF RURAL ENGLISH TEACHERS ON
DIGITAL LEARNING TOOLS**

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ABSTRACT

Transforming education in rural areas poses several challenges. However, these obstacles can be overcome if teachers, as the main actors, play a crucial role in the learning process using available learning resources. One relevant resource for the new curriculum in Indonesia is using digital learning tools, which can significantly impact the learning process. This study explores the perspectives of using digital learning tools among English teachers in rural contexts, identifying barriers, opportunities, and implications for enhancing teaching practices, TPACK, and student learning in rural settings. Through qualitative analysis, this study collected the data by interviewing rural English teachers in different rural areas. This research explored rural English teachers' experiences, perceptions, and challenges in adopting and implementing digital learning tools within their teaching methodologies. Major findings in this study show that first, there are several suitable digital learning tools for rural schools. Second, teachers' use of digital learning tools positively and effectively impacts teaching strategies specifically enhanced TPACK. In addition, there is student engagement specifically shifting from a teacher-centered to a student-centered approach. Additionally, this research contributes valuable insights into how digital learning tools effectively address and overcome obstacles in rural areas, providing a pathway to improved learning opportunities in schools with limited resources.

Keywords: digital learning tools, perspectives, rural English teachers

B14

[30]

**IMPACT OF DIGITAL TRANSFORMATION ON BUSINESS EDUCATION: A
COMPARATIVE STUDY OF TRADITIONAL AND ONLINE LEARNING
APPROACHES**

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ABSTRACT

The purpose of this study is to investigate the impact of digital transformation on business education and specifically compares traditional and online learning approaches. Based on an analysis of relevant literature, business education is undergoing significant transition due to digital transformation, which is resulting in new approaches to teaching, learning, and evaluation. The shift to digital has implications for the effectiveness and cost of both traditional and online learning approaches, with online learning being more cost-effective and providing better results. Thus, evidence shows that the shift to digital has implications for the effectiveness and cost of both traditional and online learning approaches, with online learning being more cost-effective and providing better results. However, post COVID-19 studies on related theme revealed that online learning is affected by epileptic internet access and connectivity in Nigeria and many developing countries in Africa, Asia and Latin America. Hence there is significant move towards online learning method in the study area (Kano, Nigeria). The study will use a survey-based approach to analyze the impact of digital transformation on business education and to compare traditional and online learning approaches. Survey data of business educators would be collected from a sample to be determined by the target population in the study area. Similarly, the study area is Kano state and three tertiary institutions will be used for the data collection. The study will use PLS-SEM for the data analysis. Although the study is at a preliminary stage, the emergent findings will provide an evidence-based result to students particularly those studying business education and related courses in understanding the influence of digital transformation on business education. More importantly, to compare the online learning and traditional methodologies. That will make the education managers and other stakeholders in education enterprise on how best to focus on the best method of learning business education to achieve greater performance.

Keywords: business education, digital transformation, online learning, traditional learning

B15

[31]

**TRANSLANGUAGING, SELF-REGULATION, LEARNING ENVIRONMENT,
ONLINE TEACHING-LEARNING METHODS, AND ENGAGEMENT:
UNLEASHING TEACHERS' SUPERPOWERS**

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ABSTRACT

This quantitative study investigates the relationship between translanguaging, self-regulation, learning environment, online teaching-learning methods, and student engagement, addressing a gap in the literature, particularly in the Filipino context. Conducted at Liceo de Cagayan University School of Business, Management, and Accountancy, the study employed a descriptive correlational research design with 162 respondents selected through proportionate stratified random sampling. Statistical analysis utilized Pearson Product Moment Correlation and Multiple Regression. Results reveal significant positive correlations between engagement and key variables, indicating that improving translanguaging, self-regulation, online learning environment, and teaching methods can enhance engagement. Regression analysis underscores the influential role of self-regulation, online learning environment quality, and teaching effectiveness on engagement levels, emphasizing the importance of fostering self-regulation skills, providing conducive digital learning spaces, and employing effective teaching strategies. These findings offer valuable insights for educators to enhance engagement and facilitate effective learning experiences in digital environments, potentially driving positive social change in higher education teaching and learning methodologies.

Keywords: translanguaging in the Philippines, self-regulation among graduate students, online learning environment in graduate school

B16

[32]

**INNOVATIVE TOOLS FOR STEM EDUCATION: LEVERAGING ARDUINO-UNO
TECHNOLOGY FOR KNOWLEDGE, SKILLS AND ATTITUDES IN
ELECTRICITY INSTRUCTION**

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ABSTRACT

This study addresses the pressing need to enhance STEM education by integrating innovative teaching tools, particularly the Arduino-Uno technology, into electricity instruction. The primary objective is to investigate the effectiveness of utilizing Arduino-Uno technology in improving students' understanding of electrical concepts and principles, honing students' 21st-century skills, and fostering positive attitudes toward STEM subjects specifically General Physics. Experts validated the Arduino-Uno-based Instruction (AubI) in electricity. During the blended set-up of classes, 37 STEM students were exposed to AubI. Then, a comprehensive mixed-methods approach was employed to achieve this, combining rigorous quantitative assessments of learning outcomes with in-depth qualitative analyses of student experiences. Results indicate significant improvements in conceptual understanding and practical application of electricity concepts among students exposed to AubI. Additionally, qualitative data reveal heightened engagement and enthusiasm for learning electricity, suggesting a positive impact on student attitudes and 21st century skills just like creativity, computational thinking and problem solving skills. These findings underscore the potential of leveraging Arduino-Uno technology to enhance STEM education, specifically electricity instruction. The implications of this study are extensive, suggesting significant improvements in curriculum development, instructional practices, and the broader integration of emerging technologies in educational settings. By providing hands-on, interactive learning experiences, this research demonstrates innovative educational tools' vital role in the evolving technological landscape. Ultimately, this research contributes to advancing STEM education and cultivating future STEM professionals, highlighting the importance of adopting new teaching methodologies to keep pace with technological advancements.

Keywords: arduino-uno technology, STEM education, electricity instruction, physics, innovative tools

C1

[33]

**TRACKING THE COMPETENCIES OF ECONOMICS GRADUATES: THE LABOR
MARKET PERSPECTIVE**

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ABSTRACT

The paper advances on tracking the competencies of Economics graduates in line with the various skills that they possess which are useful in the workplace. Similarly, it also identifies the common threats they encounter as they enter the world of work. There are one hundred thirty-one participants involved in the study within the province of Bukidnon, Philippines. The self-made questionnaire and the in-depth interviews served as the data source, while frequency count, rank, and percentage are utilized to treat the gathered data. The findings of the study indicated that the participants have a moderate level of competence in the transferable/functional skills domain, personal attributes, and knowledge-based components. The majority of the graduates possessed good communication skills and displayed high creativity, innovativeness, and self-confidence in the workplace. High competition, mismatch of jobs and skills, and the accessibility of the workplace from home posed as some of the threats they experienced when searching for jobs. This paper then offers recommendations for academic institutions to revisit the curriculum offerings to match the needed knowledge and skills of its graduates to compete in the labor market domestically and globally as well.

Keywords: competencies, economics graduates, knowledge-based skills, labor market, transferable/functional skills, personal traits

C2

[34]

**DEVELOPMENT AND ACCEPTABILITY OF WORKTEXT IN DIFFERENTIAL
CALCULUS AMONG STUDENTS OF UNIVERSITY OF RIZAL SYSTEM**

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ABSTRACT

There has been an increased emphasis on students to recognize significance of Calculus in many areas of life. Hence, the demand of instructional materials like worktext despite rapid development of new technologies continues. This research is focused on developing a worktext that enhance students' solving ability, improving academic performance and creative thinking towards teaching material for this course. It is based on the outline prescribed by the Commission on Higher Education Memorandum Order (CMO) No. 12, series of 2008 (CHED, 2008). Developmental method of research was employed, and it utilized the ADDIE model (Analysis, Design, Develop, Implement, and Evaluate) to develop the instrument of instruction. Mathematics experts determined its acceptability using a validated evaluation instrument. Results showed that the worktext is acceptable in terms of content, relevance' style and presentation, usefulness, and clarity using weighted mean. Furthermore, the performance of students using the worktext reflected a significant difference compared to those who did not use. Thus, it validates the successful development and integration of the worktext into the course. Mathematics teachers and professors are hereby recommended to develop and design their supplementary materials for their students develop and enhance their mathematics performance.

Keywords: acceptability, development, differential calculus, worktext

C3

[35]

**THE INFLUENCE OF PSYCHO-SOCIAL FACTORS ON CONSUMERS'
ADOPTION OF A PLANT-BASED DIET**

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ABSTRACT

The intricate interplay of psychosocial factors, encompassing elements such as attitude, perceived norms, and self-efficacy, holds a significant sway over an individual's behaviors and attitudes. With a focus on consumers' intentions to adopt a plant-based diet, the research employed a correlational research design involving 396 participants in Cagayan de Oro City, Philippines. A snowball sampling approach was used to collect data through a survey questionnaire. The findings of the study revealed that participants held predominantly positive psychosocial factors, with high ratings in attitude, perceived norms, and self-efficacy regarding the adoption of a plant-based diet which indicates their favorable disposition and confidence in making this dietary choice. Additionally, participants displayed a high level of adaptability, which implies their flexibility and willingness to embrace a plant-based diet. Such findings affirm the researcher's hypothesis that psychosocial factors play a significant role in influencing individuals' intentions to adopt a plant-based diet. These findings underscore the significance of considering these factors when promoting dietary choices that align with principles of sustainability and health-consciousness. This study points to the need to further investigate the specific factors that influence individuals' attitudes, perceived norms, and self-efficacy in relation to their adaptability to plant-based diets through more comprehensive studies.

Keywords: attitude, perceived behavioral control, plant-based diet, self-efficacy, psychosocial factors

C4

[36]

**STUDENTS' INFORMATION AND COMMUNICATION TECHNOLOGY
INTERACTIONS AND ACADEMIC PERFORMANCE IN MATHEMATICS:
STRUCTURAL EQUATION MODELING ANALYSIS**

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ABSTRACT

In recent years, there has been growing interest in studying how students' interactions with information and communication technology (ICT) impact their academic performance, particularly in subjects like mathematics. The purpose of this study is to examine the relationship between ICT use and students' performance in mathematics in Türkiye, using data from the Programme for International Student Assessment (PISA) 2018 assessment. Since ICT is widely used in our digital world, it is important to understand its impact on students' math skills. To analyse this relationship, the study utilized structural equation modeling (SEM) on PISA 2018 data from Türkiye, involving 6890 students and 186 schools. The results show that mathematics performance was found to be statistically significantly correlated with both outside and inside school ICT use. Additionally, a statistically significant relationship between students' attitudes toward ICT and mathematics ability was found in the current study. Through a mediator of students' attitudes about ICT, there is an indirect relationship between ICT use both within and outside of school and mathematical performance. The results of this study contribute to our understanding of students' mathematical performance and technological use in terms of theory, practice, and policy.

Keywords: ICT, ICT interaction, Mathematics, PISA 2018, SEM

C5

[37]

THE RURAL EDUCATION MODEL IN COLOMBIA

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ABSTRACT

Developed collaboratively by the Caldas Coffee Growers' Committee, the Government of Caldas, university institutions, government agencies and public and private companies, the Rural Education with New School Model is a pedagogical proposal that has brought formal education from pre-school to higher education to rural inhabitants of the department of Caldas, Colombia. The model aims to be flexible and adaptable to the circumstances of children, adolescents and young people in this region of the Eje Cafetero, stimulating the construction of life projects that facilitate and promote their permanence in rural territories. This chapter aims to provide an overview of the scope and limitations of the Escuela Nueva (EN) Rural Education Model in Caldas by describing the general characteristics of the EN, identifying particularities of its implementation and examining the testimonies of graduates of the University in the field. The primary information that feeds the study comes from interviews with young people in various rural localities in the Department of Caldas. The results of the study analyse the possibilities for educational inclusion that the Universidad en el Campo has opened up for young people, as well as the achievements and challenges faced by this model, which has sought to be replicated in other Colombian departments and even in other countries. This chapter's findings highlight the importance of examining educational experiences developed at the departmental level and the fact that the Rural Education with New School Model offers continuity from pre-school to university level to rural children, adolescents and young people, following certain pedagogical principles. This is uncommon in urban and rural regions of Latin America.

Keywords: rural education, rural youth, upper secondary education, educational models, Colombia

C6

[38]

THE INFLUENCE OF SLEEP QUALITY ON THE PERFORMANCE LEVELS AND PERCEIVED STRESS LEVELS IN ADULTS AND ADOLESCENTS

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ABSTRACT

Sleep plays an essential role in human life. When we sleep, our body undergoes natural processes that benefit us. However, in a time where barely anyone gets the proper amount of sleep quality, it has become a major health concern all over the world, affecting several people on their perceived stress levels and performance in their academics or occupations. The main objective of this study is to know more about what and how sleep quality influences both adults and adolescents in their level of performance (physically and psychologically) and perceived stress levels, and to recommend the best practices for effective sleep quality to achieve optimal performance and maintain manageable stress levels. Majority of the participants comprised Filipinos with 82.8%, while 16.3% were foreigners from China, U.K., Singapore, USA, France, and India among others. Snowball sampling technique was used in gathering data wherein the participants recruited other respondents by sending g-forms containing the questionnaire to their acquaintances in other countries. This research follows a quantitative survey research design, using a survey questionnaire as our primary method of gathering data. The data collected from over 200 participants (86 adults with different professions and 117 students from different schools) from 14 different countries including the Philippines, were analyzed using descriptive statistics such as frequency, weighted mean, and percentage to answer our research questions. The results of the study showed that there is a definitive influence of sleep quality on several categories of performance levels and perceived stress levels among adults and adolescents, with poor sleep quality causing lower levels of performance and unstable stress levels. This research study provides a valuable insight for teachers, parents and students to give importance to sleep quality to improve the quality and efficiency of performance among learners and professionals. Furthermore, the business sector can use this study as a framework for possible products or services that can better improve sleep quality.

Keywords: sleep quality, performance levels, stress levels, sleep deprivation, oversleeping

C7

[39]

**ARTIFICIAL INTELLIGENCE IN EDUCATION: MASTERING AI AS BOTH
MEDIUM AND SUBJECT IN BUSINESS EDUCATION**

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ABSTRACT

Artificial Intelligence (AI) is rapidly transforming the way we work with information, raising two critical questions: which skills will be most in demand after technology reshapes the information landscape, and how can we efficiently learn these skills using AI? This study examines AI's role as both the medium and subject of learning, accelerating skill acquisition and emphasizing the ethical considerations of AI applications. Employing a mixed-method approach, this research analyzes the impact of AI on educational outcomes and the evolving role of human judgment in business contexts. Key focus areas include personalized learning paths and ethical considerations in AI applications. The findings underscore the necessity for educational frameworks that prioritize decision-making skills, human-centric capabilities, and understanding the value of learned and implemented skills. In conclusion, the research advocates for the strategic integration of AI in business education, emphasizing the enhancement of human-centric skills. By focusing on decision-making, empathetic leadership, creativity, and the importance of educational marketing, AI can support the development of a more adaptive and innovative business education landscape, while ensuring ethical practices and personalized learning experiences.

Keywords: artificial intelligence, education, business education, innovation, product marketing

C8

[40]

**KNOWLEDGE, IMPLEMENTATION, AND EVALUATION OF TRIAGE SYSTEM
AMONG NURSES: ON THE QUALITY HEALTHCARE DELIVERY**

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ABSTRACT

This study identifies the knowledge, implementation, and evaluation of triage system among healthcare providers on quality healthcare delivery. Particularly, it answers the relationship between knowledge, implementation, evaluation, and quality healthcare delivery among nurses in triage system. The descriptive-correlational and causal comparative research design were employed in the study. The study was conducted in Polymedic Medical Plaza, Madonna and Child Hospital, Maria Reyna Xavier University Hospital, Capitol University Medical Center, and JR Borja General Hospital. Likewise, the Nursing Need Theory, Environmental Theory, Deliberative Nursing Process Theory, and Theory of Interpersonal Relations were utilized as the basis of the study. A questionnaire was used as the leading tool in gathering data of the 260 participants. The study identified the participants who are nurses that have a background understanding and experience about triage system. There is a significant relationship between knowledge, implementation, evaluation, and quality healthcare delivery of triage system. Knowledge is the best predictor of quality healthcare delivery among nurses.

Keywords: knowledge, implementation, evaluation, triage system, and quality healthcare delivery

C9

[41]

**FORECASTING ACTUAL BLEPT RESULTS THROUGH LET REVIEW
PREBOARD EXAMINATION: INPUTS FOR SUSTAINABLE FREE REVIEW
PROGRAM**

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ABSTRACT

Free review help teacher graduates identify areas needing improvement before board exam, the free review of an institution may help the graduates to focus on the review itself rather than diverging the thoughts of the review fees, hence, with the assumption that prediction of pre-board score might help on how actual result help graduates to pass licensure exam, this is why the study was conducted. The study wants to create models on takers decision whether to pursue taking the licensure examination for teachers (LET) based on the preboard results during the free review offered by the College. The study utilized a linear regression analysis in creating a model from forty-nine (49) takers of LET who availed the free review of the College. Results revealed that 37.8% of the General Education (GE) actual LET result (mean=81.39; sd=3.95;p-value=0.000) is from the variation of performance based on the Preboard exam (mean=56.77;sd=7.23; p-value=0.000). Similarly, 27.4% of the Professional Education (ProfEd) actual LET result (mean=82.24; sd=3.01;p-value=0.000) is from the variation of performance based on the Preboard exam (mean=45.98;sd=5.81; p-value=0.000). Also, the 58.3% of the overall LET actual result (mean=81.95; sd=3.27;p-value=0.000) is from the variation of performance based on the Preboard exam (mean=50.03;sd=5.4; p-value=0.000). It can be concluded that the models created maybe utilized to predict the actual LET performance in each examination area and utilized them to recommend whether to take the board exam or not. Also, since the r-squared values are less than 50% fo the variation as the predicting factor, future researches may look for other factor to predict the board result especially look the measures of takers' four years performances in the GE courses, and ProfEd courses.

Keyword: LET result, general education, professional education, preboard exam, let review

C10

[42]

**CAUSAL MODEL OF WORK EFFICACY, PSYCHO-SOCIAL
ATTRIBUTES, COPING MECHANISM TO QUALITY HEALTHCARE SERVICES
OF NEWLY HIRED NURSES**

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ABSTRACT

This study explored the work efficacy, psycho-social attributes, and coping mechanisms among newly hired nurses in various hospitals in Iligan City and Cagayan de Oro City, Philippines. The research design employed was descriptive-correlational causal comparative research designs to analyze the influence and relationship between the dependent and independent variables establishing causality. Stratified random sampling was used to select 274 newly hired nurses from different hospitals, ensuring a representative sample. Data were collected through survey questionnaires utilizing a 5-point Likert scale to measure variables such as work efficacy, psycho-social attributes, coping mechanisms, and quality of healthcare services provided. There are positive perceptions among nurses regarding their work efficacy, emphasizing the importance of continuous training and support programs. Nurses acknowledge the pivotal role of their healthcare experiences in delivering quality services and exhibit personality traits like conscientiousness, compassion, and confidence. Effective coping mechanisms, social support, and adequate resources are identified as crucial for service quality and patient satisfaction. The best fit model on quality health care services is anchored on experience as in the health care field, personality traits, emotion focused, and social support among the newly hired nurses. This model is called Dello's Model on Quality Health Care Services Among the Newly Hired Nurses. Overall, the study contributes valuable insights into factors shaping nurses' abilities to provide high-quality care, informing strategies for improving patient outcomes and healthcare delivery.

Keywords: causal model, work efficacy, psychosocial attributes, coping mechanism, newly hired nurses

C11

[43]

**ANALYZING THE MOTHER-TONGUE-BASED INSTRUCTION IN SCIENCE
ACADEMIC ACHIEVEMENT**

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ABSTRACT

This study aims to explore the use of the mother tongue in science academic achievement of Grade 3 pupils at Punta and Calamba Elementary School. The researchers employed a quantitative approach, particularly a descriptive correlational that delves into the use of mother-tongue-based instruction in science academic achievement. The researchers utilized the ANOVA test and the IV-DV Model, wherein Mother-tongue instruction is the independent variable (IV), the science academic achievement is the dependent variable (DV), likewise, the moderating variable is the demographical profile of the Grade 3 pupils at Punta and Calamba Elementary School including; place of origin, length of stay in Calamba, and first dialect learned. Respondents were selected using a purposive sampling technique as the researchers looked for non-tagalog native speakers to answer the aim of this study. Self-administered questionnaires were used to assess the level of difficulties of the pupils in terms of using their mother tongue as a medium of instruction, and a test examination to measure the level of academic achievement of the pupils specifically in science subject areas. The research highlighted that most students struggle with Tagalog instruction, leading to decreased interest and understanding due to unfamiliar vocabulary. Science academic performance varied, with 43% achieving "Outstanding Performance," while 23% "Did Not Meet Expectations." Statistical measures indicated notable variability in achievement, attributed partly to language barriers. Hence, "No significant relationship" was found between language difficulties and science achievement, suggesting other factors influence academic performance. The findings underscore the need for improved teaching strategies that accommodate linguistic diversity and enhance comprehension. This study emphasizes the importance of adaptive teaching strategies and inclusive educational environments to support diverse linguistic backgrounds, fostering better academic outcomes in science for Grade 3 students at Punta and Calamba Elementary Schools.

Keywords: Non-Tagalog speakers, science academic achievement, L1, MTBI

C12

[44]

**SYMBIOSIS IN THE PRE-SERVICE TEACHING OF MATHEMATICS:
EXAMINING THE INTERPLAY BETWEEN THE OCCURRENCE OF DIDACTIC
SITUATIONS AND INTEGRATION OF REALISTIC MATHEMATICS
EDUCATION IN A TRIGONOMETRY CLASS**

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ABSTRACT

This study investigates the interplay between Theory of Didactic Situations (TDS) and Realistic Mathematics Education (RME) in the context of teaching trigonometry to high school students by pre-service teachers. The primary aim is to assess how effectively pre-service teachers incorporate TDS and RME principles, as evaluated by expert observers and student perceptions. The study also explores the correlation between these teaching strategies and student performance in trigonometry. Data were collected through class observations and checklists, with pre-service teachers' practices evaluated by a panel and students' feedback gathered via surveys. The results revealed varying degrees of TDS and RME implementation. In terms of DS, the Topaze Effect showed a composite mean of 3.32 while other DS phenomena ranged from 2.71 to 2.99. For RME, principles such as Understanding Daily Problems/Context achieved a composite mean of 3 while Explaining and Solving Contextual Problems also scored high. Statistical analysis using Pearson Correlation Coefficient indicated significant positive relationships between certain DS effects and cognitive processes related to RME. Performance analysis showed a general improvement in student grades post-intervention, with a majority achieving "Very Satisfactory" ratings. However, regression analysis indicated that neither TDS nor RME individually had a significant impact on mathematics performance, suggesting that other factors may be at play. These findings highlight the importance of integrating DS and RME in teaching practices and provide insights for enhancing pre-service teacher training programs to improve student learning outcomes in mathematics.

Keywords: Theory of Didactic Situations (TDS), Realistic Mathematics Education (RME), trigonometry teaching, pre-service teachers

C13

[45]

**ASSESSMENT OF THE ARCHITECTURAL HERITAGE IN THE RURAL
VILLAGES OF THE RATNAGIRI DISTRICT OF THE KONKAN REGION OF
MAHARASHTRA**

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ABSTRACT

The Konkan region includes the states of Maharashtra, Goa, and Karnataka and is located along India's western coast. The Konkan region of Maharashtra has a diverse array of traditional architectural features in its rural areas, creating a rich cultural landscape. It also stands out for its unique vernacular architecture, which embodies the region's social, historical, and environmental characteristics. The cultural ethos and geographical characteristics of the Konkan region are fundamental to the vernacular architecture of the area. The purpose of this study is to examine the value of traditional architecture in rural Konkan, with a particular emphasis on the district of Ratnagiri, Maharashtra, and its applicability to current problems. In today's scenario, most of the studies focus on the aspect of future related issues and design solutions, but a study of vernacular homes and their reference in today's context is also part of environmental educational study which can aid in learning from the past and its relevant application for not only today's answer to the problems but also for the future. This study aims to assess the cultural landscape in rural villages such as Malgund and Hedvi located in the district of Ratnagiri about the vernacular architectural features found in homes. Utilizing a qualitative research approach, data was gathered through field observations, interviews with residents, and analysis of historical and geographical documents. It was made sure to include the study of houses from these villages to fully represent the variety of vernacular architecture seen in the Konkan region. To showcase the diversity of vernacular architecture, communities with a mix of architectural types, including traditional Wadas, and residential buildings were chosen. To protect cultural heritage, researchers gave priority to settlements of historical significance, such as those buildings with distinctive architectural elements. Sample selection may have been influenced by financial or resource limitations, favoring settlements that are easier to reach or need fewer logistical resources. This research presents the case studies of two houses which signifies the importance of social fabric in architectural planning and its importance. With its use of locally available materials like clay, wood, and laterite stone, it reflects the principles of sustainable design. These case studies highlight those architectural elements that represent climate-responsive architecture and its influence derived from the cultural landscape of the region. The research seeks to identify and document traditional building techniques, architectural styles, and materials used in the construction of homes, reflecting the region's cultural heritage and environmental adaptation strategies. The research results demonstrate how the social order of a community's dwellings influences planning and how important daily routines are to the occupants. In areas like the Konkan, promoting vernacular architecture as a component of cultural tourism efforts can boost economic development while protecting regional history and encouraging community involvement. Such dwellings need to be more often visited by the design and tourism schools as part of their curriculum to make students explore the rich history, culture, social connection, and climate-responsive design. These houses are promoted by the host as homestays which can empower them financially, inhabitate cultural exchange and at the same time preserve the legacy of the region. This study signifies the importance of vernacular dwellings and their importance in the discipline of education in the context of environmental and sustainable education.

Keywords: cultural landscape, vernacular architecture, Konkan, climate-responsive architecture

C14

[46]

LEARNING LINEAR EQUATIONS AND STUDENTS' ACADEMIC ACHIEVEMENT TOWARD A LEARNING GUIDE

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ABSTRACT

The reality often falls short of from some expectations such as introducing mathematics concepts, teachers find it necessary to revisit topics from prior math courses especially linear functions, which leads to frustration for both students and teachers if it is not mastered, hence this study delves into three key aspects of students' learning and performance in mathematics during the academic year 2023-2024: the extent of learning linear equations, students' performance in mathematics, and the relationship between linear equation learning and academic performance in Grade 10 Mathematics. Hence, this study a correlational-descriptive method with all twenty-eight respondents from the entire Grade 10 class of the research locale. The findings of the survey about students' knowledge of linear equations in mathematics are analyzed, and the results reveal that there are variances in the students' comprehension of many parts of this mathematical concept at a weighted mean of 4.41 (n=28, sd=0.373) means of very high extent of learning linear equations. Also, the study found the described academic level of the Grade 10 students in Mathematics at an average of 84.39 (sd=7.10, n=28) with an excellent level in the school context. Moreover, it is evident that salient combined values from the regression output especially the R-value which is 0.248 which indicates a fairly linear relationship between the predictor extent of learning linear equations and the response variable students' academic achievement. However, the overall model is not statistically significant, as evidenced by the F value of 0.818 and p-value of 0.453. It implies that, in improving academic achievement of the current grade, mastering previous topics are not sufficient but rather to have a long-term understanding of all the basic standards of mathematics not the linear equations alone. Therefore, the study created a Learning Guide in Teaching and Learning Linear Equations for a comprehensive plan to store a long-term understanding for this one important and great portion of topics in Grade 10 China curriculum.

Keywords: academic achievement, linear equation, extent of learning, regression analysis

D1

[47]

**INTERNATIONAL STUDENTS' ATTITUDE TOWARD HUNGARIAN CULTURE
AND CULTURE SHOCK**

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ABSTRACT

Globally, the number of higher education students studying in other countries is increasing, and much research is focused on their troubles learning and adapting. Our presentation is focused on these international students. Our research is based on the first questionnaire survey of the International Learning and Teaching Experience research group. The aim was to explore the learning methods, language skills, cultural adaptation and satisfaction of foreign students studying at the University of Debrecen. Herein, we introduce the results of the question blocks measuring culture shock and openness to certain elements of Hungarian culture. The questionnaires were sent out between December 2021 and June 2022, and were based on Google Form. The data were recorded and analyzed in SPSS. After data cleaning, the sample size was 434. Cluster analysis, factor analysis, cross-tabulation (chi-square test), and analysis of variance (ANOVA) were used for the empirical analyses. In our main results, four clusters emerged based on receptivity to Hungarian culture: introverted tasters, extroverted omnivores, local-meeting xenophiles, and cultural dieters. They differed demographically, but regarding culture shock at different stages of their studies in Hungary correlation was also found among them. From the set of culture shock questions, five factors were isolated on the basis of factor analysis (Maximum-Likelihood, Varimax rotation). The first factor included positive elements of learning abroad, the second related to homesickness and appreciation of one's own culture, the third, a sense of loneliness and isolation, the fourth factor, seeking out relationships, and, the fifth, host culture rejection. There was a significant correlation to cluster groups in the latter two cases.

Keywords: higher education, students, mobility, international activity

D2

[48]

**INTERNATIONAL MOBILITY AND ITS IMPEDIMENTS OF INSTRUCTORS IN
CENTRAL- AND EASTERN-EUROPEAN HIGHER EDUCATIONAL
INSTITUTIONS**

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ABSTRACT

In recent days, the examination of the international mobility and activity of teachers has been at the center of researcher attention. In our study, we focused on the international mobility activities of instructors in higher education. We examined what effects of restrictive factors can be seen, which make participation in teaching and researching programs abroad more difficult. For this, we used the Central and Eastern European Teachers in Higher Education (CEETHE 2023, N=821) database. First, we were curious as to the differences between fields of study, second, the effects of various demographic factors (e.g.- age, family status, children, financial standing, country of origin). Beyond these, we attempted to detect the effects of restrictive factors discovered in previous studies, specifically, foreign language knowledge, embeddedness in workplace community, institutional support, the effect of support from direct colleagues, workplace burnout, and the balance between private life and work. In our sample Hungarian, Romanian, Serbian, Slovakian, and Ukrainian university and college teachers were used, specifically 821. Like student mobility, instructor mobility showed significant differences regarding field of study: fewer medical and healthcare instructors were involved in endeavors abroad. Demographics, age, gender, and country of origin heavily affected whether or not the instructor had been internationally active. To measure foreign language knowledge, we used a special index containing international publishing and conference attendance. Here we confirmed that mobile instructors had higher values than immobile. Being embedded into the institutional climate and the relationship with colleagues is of major help in getting hold of information.

Keywords: mobility, international activity, higher education, instructors

D3

[49]

**ONLINE REVIEW: INFLUENCE ON CUSTOMERS INTENTION TO VISIT
RESTAURANTS**

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ABSTRACT

The transition from traditional print marketing to digital media, particularly online reviews, holds promise; however, there is a limited body of research exploring the influence of online reviews on dining decisions from a Filipino perspective. Thus, this study explored an empirical analysis of the potential influence between internet reviews and restaurant visit intentions, with a specific focus on a subset of restaurants in Cagayan de Oro City, Philippines. The study employed a descriptive-correlational research design, utilizing an adopted questionnaire as a data-gathering tool. It involved 385 diners from selected homegrown restaurants in Cagayan de Oro City, Philippines, using convenience sampling for participant selection based on accessibility and relevance to the study's objectives. Participants in the study held a predominantly positive perception of online reviews, emphasizing the importance of businesses cultivating authentic and relatable positive reviews, as indicated by high Valence and Relevance scores, along with a strong reliance on the Accuracy of online reviews. Furthermore, participants displayed a notably high intention to visit a restaurant, indicating a strong inclination toward dining out. The regression analysis revealed that participants' assessments of online reviews significantly influence their intention to visit a restaurant, taken singly Relevance and Accuracy showed significant influence while Valence did not demonstrate a significant effect. The results point to Businesses, particularly in the restaurant industry, to prioritize the cultivation of authentic and relatable positive online reviews that accurately reflect the customer experience, as these factors significantly influence consumers' intentions to visit a restaurant, with a particular emphasis on relevance and accuracy.

Keywords: accuracy, online review, relevance, valence

D4

[50]

**INCREASING EMPLOYEE'S SATISFACTION THROUGH CRISIS
MANAGEMENT PREPAREDNESS**

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ABSTRACT

In the dynamic landscape of the hotel industry, marked by operational and reputational threats from various crises, understanding the direct impact of crisis management procedures on employee satisfaction becomes crucial for effectively mitigating negative consequences. Despite experiencing major terrorist attacks, organizations in the Philippines often prioritize events perceived as having high probabilities, such as fire evacuations or providing first aid, influenced by a cultural mindset among senior executives. Recognizing the necessity for a comprehensive analysis of crisis management implementation, this study investigates into the influence of crisis management preparedness on employee satisfaction in a selected hotel in Cagayan de Oro City. The research adopts a descriptive-correlational research design and utilizes a survey questionnaire derived from studies by Burhan et al. (2021), Jin, DiPietro, and Fan (2020), Janssen and Van der Voort (2020) as the primary data-gathering method. The study employs a random sampling technique, involving 90 participants. In analyzing the gathered data for Problems 1 and 2, descriptive statistics such as mean, frequency, percentages, and standard deviation are utilized to describe the participants' assessment of Crisis Management Preparedness and employee satisfaction. For Problem 3, Multiple Linear Regression was applied to derive findings and insights. The results demonstrate that overall crisis management preparedness significantly influences employees' satisfaction. Specifically, the findings highlight that communication systems, guest safety protocols, and the emergency response plan dimensions exert a significant influence on employee satisfaction, with the emergency response plan being the most impactful factor among the dimensions under study.

Keywords: crises management preparedness, communication systems, customer satisfaction, employee satisfaction, emergency response plan, safety protocols

D5

[51]

**PARENTAL INVOLVEMENT IN APPLIED BEHAVIOUR ANALYSIS (ABA) IN
AUTISM THERAPY. A FOCUS ON CHALLENGES**

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ABSTRACT

This research niche explores the role of ABA in the context of autism therapy, emphasizing the crucial contribution of parental involvement to the effectiveness of interventions. A study by Schwartz and Kelly (2021) shows that ABA therapy strongly emphasizes teaching clients how to apply newly acquired skills in various contexts and settings to enhance their independence and adaptability. The theoretical framework for ABA in autism therapy is rooted in behaviorism, a psychological approach that focuses on observable behaviors and the environmental factors that influence them. ABA is based on the principles of behaviorism, and its theoretical foundation can be traced back to the work of B.F. Skinner. Parents of children diagnosed with ASD who are currently receiving ABA therapy will represent a diverse sample of participants in the research. Eight parents from Malaysia have participated in interviews through Whatsapp or Zoom. Data was gathered by allowing parents to share their unique perspectives, experiences, and challenges while receiving ABA therapy. For ethical considerations, parents must participate voluntarily with informed consent, and all data provided guarantees the confidentiality of the participants. The study's findings indicate that several primary concerns were mentioned by the majority of the parents interviewed including lack of training and education, financial burden, resistance or skepticism, and time constraints. This research's implications are to inform practitioners, policymakers, and future researchers about the nuanced challenges faced by parents in the context of ABA therapy for ASD. Recommendations for enhancing parental support, refining ABA practices, and developing targeted interventions to address parental concerns will be discussed.

Keywords: applied behavior analysis, autism, challenges, parental involvement, therapy

D6

[52]

"WHAT WE HAVE AND WHAT WE DON'T HAVE" MEANING-MAKING IN THE LIFE OF INTERNATIONAL UNIVERSITY STUDENTS IN UAE: A MIGRATION-BASED STUDY

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ABSTRACT

The United Arab Emirates (UAE) has emerged as a global hub for economic opportunities, drawing migrants from diverse corners of the world, including international students whose relative position as minorities in their new environment accounts for their experiences of segregation or marginalization affecting their well-being. However, limited studies have focused on the social well-being of international students. This quantitative study examines the relationship between meaning-making and social well-being among international university students in the UAE. The study investigates how the presence of meaning and search for meaning as well as sources of meaning in life are predictors of social well-being. Using the Meaning in Life Questionnaire, sources of Meaning in Life scale and the social well-being 15-item scale, data collected were analyzed using inferential statistics. Findings indicated a significant positive association between scores on the Meaning in Life Questionnaire, sources of meaning and dimensions of social well-being among international university students in the UAE. Students who reported a stronger sense of meaning in life tended to exhibit higher levels of social well-being. They were more likely to engage in cultural activities, form strong social networks, and seek opportunities for personal development. They demonstrated higher levels of adaptation and adjustment to the new cultural and social environment. They engaged in diverse meaning-making strategies including cultural engagement, social connections, academic pursuits, and personal growth activities to construct meaning amidst the challenges in their new environment. Students who reported a lack of meaning or purpose in their lives reported poor social wellbeing. The sources of meaning (i.e. self-transcendence, self-actualization, order, well-being and related) they draw from were important predictors of social well-being promotion and thus proper adaptation in the UAE. These findings suggest valuable insights for universities and policymakers to enhance support systems and resources for this student population.

Keywords: mental health, meaning making, meaning in life, support networks, United Arab Emirates

D7

[53]

GOVERNANCE AND MANAGEMENT OF INCLUSIVE EDUCATION PROGRAM

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ABSTRACT

Inclusive education is an approach ensuring all learners are in mainstream classrooms. It holds a promise that children learn better in an equitable and enriching learning environment for all. However, despite given efforts by educators, several challenges hinder its effective implementation. The study explored the governance and management practices of school heads in La Trinidad District, Benguet province with specific problems: profile of respondents, degree of governance, and extent of management. This study used quantitative research through the use of the descriptive survey method in collecting numerical data from 22 school heads through total enumeration. To measure the responses of the degree of governance and extent of management practices of respondents, median and equivalents were used. Relationship between profile and governance; profile and management practices; and, governance and management practices, correlation analysis was used through non-parametric Tau-b. Results shows that majority of school heads were master's degree holders, academic rank of Teacher In-charged and Principal 1. They are young in their administrative position. Three-fourths of the school heads attended training and seminars related to inclusive education. The inclusive education program was highly governed by school heads. Likewise, management practices of school heads along planning, leading, organizing, and coordinating were generally always practiced while innovating was moderately practiced. There is no significant relationship between profile and governance, and profile and management practices. However, there is a strong positive and significant correlation between the degree of governance and management practices of school heads. Results will help school heads to revisit their program of inclusive education for better implementation of inclusion. Moreover, school heads and teachers can create a positive and inclusive school culture.

Keywords: governance, inclusive education program, management practices

D8

[54]

**DIGITAL LEADERSHIP, EMOTIONAL INTELLIGENCE, LEADERSHIP STYLES,
AND PERFORMANCE OF BASIC EDUCATION TEACHERS: A CAUSAL MODEL**

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ABSTRACT

This study developed a causal model of leadership styles, organizational climate, and supervisory effectiveness on the performance of public-school principals in the Division of Lanao del Sur I and Marawi City Division. Using descriptive statistics, Pearson product – moment correlation, and multiple regression analysis, the study found that principals generally exhibit high levels of leadership styles, and organizational climate especially in planning and directing. Supervisory effectiveness in management and human relations are also rated high, though supervision and employee management show room for improvement. Significant positive correlations were found between principals' performance and leadership style, supervisory effectiveness, and organizational climate. Employee management, human relations, information requests, and overall management significantly predict principals' performance, accounting for 82.9% of variability. The study introduces the Integrated Educational Leadership and Organizational Effectiveness Theory (IELOET), combining various leadership theories to explain how leadership styles, organizational climate, and supervisory effectiveness influence principals' performance. The best fit model of principal's performance is anchored on autonomous organizational climate, effective information dissemination, controlling leadership, and strong human relationship practices.

Keywords: causal study on teaching performance, basic education teachers. digital literacy and reflective practices, communication skills and self-awareness, technical skills with interpersonal abilities

E1

[55]

PREDICTOR VARIABLES OF GRADUATES' EMPLOYABILITY SKILLS IN A PRIVATE HIGHER EDUCATION INSTITUTION IN CAGAYAN DE ORO CITY

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ABSTRACT

The COVID-19 pandemic, among others, increased the demand for graduates who possess certain characteristics that are valuable in the fast-changing landscape of the hospitality and tourism industry. This study investigated the predictor variables of graduates' employability skills in a private higher education institution in Cagayan de Oro City. The study utilized a descriptive-correlational research design involving 208 snowball-sampled Hospitality and Tourism Management (HTM) students from private higher educational institutions in Cagayan de Oro City. An adopted research questionnaire was used as the primary data-gathering tool. The results showed that participants who have higher emotional well-being took more time to gain their first employment. Emotional well-being is also significantly associated with employability in terms of time required before the first employment. Individuals with higher levels of emotional well-being tend to take longer periods to secure their first employment. The results further reveal that employability skills are significantly influenced by multicultural competence, technological competence, and overall well-being. These findings highlight the importance of emotional well-being and other factors in determining employability among the participants, providing valuable insights for HTM graduates.

Keywords: employability, emotional well-being, multicultural competence, technological competence

E2

[56]

TEACHER PERSPECTIVES ON THE IMPACT OF GAME DESIGN ELEMENTS ON LANGUAGE ACQUISITION IN EFL CLASSES

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ABSTRACT

Over recent decades, games have become widely recognized as valuable pedagogical tools within English as a Foreign Language (EFL) classrooms globally. However, research often concentrated on the game rules rather than the students' responses. Additionally, the overemphasis on competition as a game element excludes valuable insight from studying other elements, limiting our understanding of their potential benefits. Therefore, this study aims to fill this gap by delving into how various game design elements influence students' language acquisition in EFL classes, with a focus on the EFL teachers' perspective in Hungary and the Kurdistan Region of Iraq. This study was conducted using expert sampling and qualitative group interviews with 8 experienced English language teachers in secondary schools from both research regions. The interview took around 60 minutes, and the transcripts were analyzed through thematic analysis facilitated by ATLAS.ti software. The study examines the effectiveness and impact of various game design elements, such as competition versus cooperation, individual versus group tasks, feedback, and reward structures, on the nature and frequency of students' involvement in language learning and identifies the most effective element. It also investigates the teachers' perceptions about the development of different language skills through these elements, along with the challenges they encounter using these games in the classroom. Additionally, it investigates the support or resources teachers perceive for integrating language games into their EFL instruction. According to the findings of the research, teachers perceive the collaborative language game elements to have a greater impact on fostering students' independence and language learning, compared to competitive elements. Teachers perceive this as a valuable contribution to language acquisition, highlighting the benefits of negotiation, collaborative problem-solving, and peer feedback that are aligned with the sociocultural theories' aspects in the learning environment. The results are anticipated to expand the theoretical knowledge base, through which, educators and game designers can create more engaging and effective language games.

Keywords: game design elements, sociocultural theory, teacher facilitation, teachers, language acquisition.

E3

[57]

**REVISITING FACTORS PERCEIVED ASSOCIATED WITH ONLINE LEARNING:
A QUALITATIVE STUDY**

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ABSTRACT

The global pandemic occurred in 2020 has accelerated the shifting of educational paradigm from conventional or face to face into an online form. Many learning problems have emerged as the aftermath of this dramatic shifting. These problems resulted learning situation that cannot be addressed using current learning theories such as Theory of Transactional Distance, Theory of Community of Inquiry (CoI), and the Wisdom of Communities Model. Thus, a robust understanding of the current online learning situation is required as this type of learning is getting proliferated in education. This study revisits the factors perceived associated with the students' success in an online learning. Taking a context in an online learning situation in one of Indonesian Higher Education Institutions, this study employed a semi-structured interviews to teachers and students to disclose the covert perceptions and experiences that would not be revealed through surveys. Guided by thematic analysis data from Braun and Clarke (2006), this study found four prominent themes emerged as the factors associated with the students' online learning i.e. learners engagement, motivation, learner autonomy, and teacher's assistance. The nexuses of these factors are discussed.

Keywords: autonomy, engagement, learning factors, online learning

E4

[58]

TEACHERS' PERCEPTIONS OF LEVERAGING GENERATIVE AI FOR MATHEMATICS ASSESSMENTS

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ABSTRACT

This research investigates the mathematics teachers' perceptions of leveraging Generative AI for assessments. Three key objectives guide this research. First, it seeks to assess the level of acceptance of Generative AI among Mathematics teachers by using the Technology Acceptance Model (TAM) as the framework. Acceptance of the technology will be based on the perceived usefulness, perceived ease of use, attitude, and intention of the respondents regarding Generative AI. Second, it seeks to know the differences among the four perceived aspects to understand the respondents better and to be able to provide them with targeted interventions. Finally, it explores specific variables, such as age, teaching experience, awareness, and moderate teachers' acceptance of Generative AI. Based on these insights, the study will propose a program to enhance the acceptance and integration of Generative AI in Mathematics. Data was gathered using a structured questionnaire from 385 math teachers in Metro Manila, subjected to descriptive and inferential statistical analyses. Results have shown high acceptance of GAI based on high general averages among all perceived aspects of TAM. Notably, significant differences were observed among perceived aspects, particularly in perceived ease of use (PU) and intention to use (IN). Furthermore, demographic factors such as age and awareness of Generative AI were found to moderate the teachers' perceptions. These findings led this research to develop strategies for using Generative AI in making Mathematics assessments. Strategies include disseminating informative resources to address awareness issues, interactive workshops to enhance the teachers' perception regarding ease of use, personalized learning for the generational divide observed, and showcasing best practices to capitalize on strong results across different grade levels.

Keywords: generative AI assessments, perceptions, technology

E5

[59]

**SLACK–HUDDLE TOOL IN THE PARTICIPATION AND ENGAGEMENT OF
FIRST YEAR BSED-SCIENCE STUDENTS IN ASTRONOMY**

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ABSTRACT

This research investigated how a particular communication platform commonly used in a business entity could enhance the student’s participation and engagement. The researchers conducted a study entitled, “SLACK-Huddle Tool in the Participation and Engagement of the First-Year BSED-Science Students in Astronomy”. Slack is a platform that offers a variety of features that help businesses as part of their communication and tool to collaborate with one another. Huddle, one of its features, has significantly become the main focus of this study. The researchers aimed to apply it in the field of Education by employing a quasi-experimental approach where a single-group of 27 respondents participated. After such, two sets of questions were given such as the pre-implementation and post-implementation. The findings of this study revealed that the implementation of SLACK-Huddle tool in Astronomy class has significantly affected the level of participation and engagement of the 27 respondents which led to a conclusion that students increased their involvement and interest in the subject. In addition, the relationship between the utilization of the SLACK-Huddle tool as a form of teaching strategy showed a positive relationship to the student’s participation and engagement; thus, incorporating technology inside the classroom setting promotes active learning and collaboration. These findings suggest that this form of educational technology should be used to improve and support the learning of the students inside the classroom setting.

Keywords: astronomy, implementation, participation and engagement, slack-huddle

E6

[60]

**TECHNOSTRESS IMPACT ON POST-PANDEMIC TPACK-21 MASTERY AMONG
HIGH SCHOOL TEACHERS IN THE SOUTHERN PHILIPPINES**

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ABSTRACT

This study delved into the correlation between technostress and 21st century Technological Pedagogical and Content Knowledge (TPACK-21) among high school teachers in the southern districts of the Department of Education- Divisions of Bukidnon and Valencia City, Bukidnon, Mindanao, Philippines. The participant pool consisted of 169 teachers. Data collection utilized two parts of the survey questionnaire: technostress, adapted from Chen (2018), and TPACK-21 survey questionnaire by Valtonen et al. (2017). Statistical analysis employed descriptive statistics (frequency, mean, percentile), Pearson Product-moment coefficient, and multiple linear regression. Findings revealed that teachers' technostress averaged at 2.89, indicating a moderate level of stress. Notably, high proficiency in TPACK-21 was evident with a grand mean of 3.97. Significant correlation was observed between TPACK-21 and technostress ($r = -0.58$, $p < 0.038$), along with its subcomponents: Technological Knowledge (TK-21) ($r = -0.10$, $p < 0.043$), Pedagogical Knowledge (PK – 21) ($r = 0.82$, $p < 0.025$), and Technological Pedagogical Knowledge ($r = -0.78$, $p < 0.047$). Pedagogical Content Knowledge, Technological Content Knowledge, and Technological Pedagogical and Content Knowledge emerged as the three predictor variables, collectively explaining 69% of the variance in teachers' technostress ($R^2 = 0.069$). This study underscores the need for administrators in DepEd Divisions of Bukidnon and Valencia City to reassess teacher training and implementation strategies to enhance teaching efficacy, considering the impact of technostress on their TPACK-21.

Keywords: TPACK-21, technostress, and high school teachers

F1

[61]

**LEADING FOR ACHIEVEMENT: THE HIGHLY PROFICIENT TEACHERS’
CORE COMPETENCIES AND INSTRUCTIONAL LEADERSHIP SKILLS IN
ENHANCING SCHOOL PERFORMANCE**

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ABSTRACT

This study described the practices and strategies employed by the Highly Proficient Teachers to support student success and school achievement. It utilizes the descriptive self-made questionnaire survey. The respondents of the study were the 161 Highly Proficient Teachers of the selected Medium and Large Secondary Schools in DepEd Division of Laguna. The research hypothesis initially postulates that there is no significant relationship between the Highly Proficient Teachers’ Core Competencies and Instructional Leadership Skills. Statistical results a significant correlation between instructional leadership and school performance. With a sample size of 161 respondents, the statistical analysis reveals significant correlations between some pairs of variables. Demographic Profile, strategies using Higher Order Thinking Skills, teamwork, Seminars and Trainings attended, number of research conducted, Relevant duties and responsibilities and Number of Technical Assistance to proficient teachers have significant positive correlation at Pearson Correlation=0.208, p-value=0.008. The research suggests that school performance such as Master Teachers’ Development Program, Assessment of Learning Achievement, Developing Higher Order Thinking Skills, conducting research, Participation to seminars and training be reinforced. The finding points out that policy makers should design a Development of new Teaching Learning methods for teachers to adapt to the changing demands of education and to provide high-quality instruction. Reinventing teaching methods and experimenting with different Pedagogical Techniques in Curriculum Enhancement ensures the highest standards of quality in teaching delivery.

Keywords: highly proficient teachers, school performance, instructional skills, core competencies, demographic profile

F2

[62]

**META-ANALYSIS ON ENTREPRENEURIAL SKILLS FOR INTEGRATION IN
RADIO, TELEVISION, AND ELECTRONICS WORK PROGRAMME**

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ABSTRACT

Enterprise skills required for self-reliance and wealth creation are crucial for survival in any nation. The gap between the enterprise skill needs and Radio Television and Electronic Work (RTEW) students' skills exists due to insufficient curriculum adopted in technical colleges. Although entrepreneurship skills are discovered effective but have not been implemented in RTEW trade curriculum in Nigeria. This has led to RTEW students graduating from Nigerian technical colleges without the needed enterprise skills that will effectively equip them for the world of work. Hence, there is need to investigate entrepreneurship skills suitable for inclusion into RTEW trade curriculum to trim the problem of skills shortages among RTEW students at technical colleges levels. As such, meta-analysis of entrepreneurship skills was conducted on 10 different studies with the purpose of sieving desired entrepreneurship skills needed for integration into the curriculum of RTEW trade in Nigerian technical colleges. However, the results of the meta-analysis of literature conducted revealed that entrepreneurship awareness, qualities of entrepreneurs, self and paid employment, ethics in life and business, business ideas and opportunities, starting and operating a business, and business plans, among others, were the enterprise skills needed in the RTEW trade curriculum. The implication of the results is to overcome potential challenges encountered in the job market and guide for effective curriculum design in Radio Television and Electronic Programme in order to help students in developing the necessary skills needed for successful employment after graduation so that they could contribute to the sustainable development of Nigeria.

Keywords: aptitudes, competencies, enterprise, infusion, vocation

F3

[63]

**EFFECTS OF 7E LEARNING CYCLE MODEL ON ACHIEVEMENT AND
RETENTION OF MOTOR VEHICLE MECHANIC WORK STUDENTS IN
TECHNICAL COLLEGE MALALI, KADUNA STATE, NIGERIA**

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ABSTRACT

This study examined the effects of 7E learning cycle on academic achievement and retention of motor vehicle mechanic work students in Technical College Malali, Kaduna state, Nigeria. A pre-test-post-test-control group design was adopted. 60 NTC II students participated in the study. The students were divided into two equal groups, namely: experimental (7E learning cycle) and control group (conventional approach), both at random. Achievement and retention were used as instruments for data collection. The SPSS version 25.0 was used for analysis and the data collected for the study was analysed using, mean, standard deviation, and inferential statistics of independent samples t- test. The study found that at the pre-test stage, there was no statistically significant difference between the achievement of 7E learning cycle students and conventional approach students, the results suggested that the students were initially equal in terms of their achievements. Nevertheless, at the post-test stage, the achievement of students who were exposed to the 7E learning cycle was found to be significantly better than the achievement of students who were exposed to the conventional approach. Additionally, retention score of 7E learning cycle students was significantly better than the retention score of conventional approach students in Technical College Malali, Kaduna state, Nigeria. These findings will promote students' autonomy in selecting, deciding, merging, evaluating, and extending ideas for learning to make the knowledge permanent. It is, therefore, recommended that government should encourage both curriculum planners and Technical Colleges' teachers to adopt 7E learning cycle as a learning approach for teaching motor vehicle mechanic work in Technical Colleges to improve students' achievement and retention in the subject.

Keywords: 7E learning cycle, academic achievement, retention, motor vehicle mechanic work

F4

[64]

**LANGUAGE DIMENSION TO IMPROVING QUALITY TECHNOLOGY
EDUCATION FOR NATIONAL DEVELOPMENT: TEACHER EDUCATORS'
PERCEPTION OF NIGERIA'S LANGUAGE IN EDUCATION POLICY**

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ABSTRACT

Education has been identified as the bedrock of the development of any nation. It is also a known fact that all education programmes always have a language dimension to them hence the need for language education policy. The study, therefore, focused on teacher educators' perception of Nigeria's language education policy on imparting the needed technical vocational skills and pedagogy for graduates' self-reliance, empowerment of semi-skilled practitioners and national development. The study was guided by four research objectives which included: finding out the teacher educators' perception of language education provision on technology education in Nigeria; determining the language to be combined with English in technology education classroom; identifying the challenges in the adoption of bilingual education model for teaching and learning of technology education; and identifying the strategies for the adoption of bilingual education as an alternative model in the teaching and learning of technology education in Nigeria with four corresponding research questions. A survey research design was adopted for the study. The population for the study was 87 technology teacher educators, 10 technologists and 10 technicians from Federal Colleges of Education (Technical) Bichi, Kano who were all selected as respondents. The instrument for data collection was a self-designed structured questionnaire. The data for the research was analyzed using mean and standard deviation. It was discovered that combining the Language of the Immediate Community with English in technology education instruction will not only improve the quality of its delivery but will also empower the products with ample opportunity for easy technology transfer between them and the semi-skilled practitioners both when in school and after graduation. It was recommended among others that technology teacher educators should make skillful use of bilingual education approach in their instruction delivery for optimal output.

Keywords: language, technology education, national development, language in education, graduates; self-reliance

F5

[65]

**AN ASSESSMENT OF THE QUALITY OF KANO STATE BASIC SCIENCE
CERTIFICATION EXAMINATION DOCUMENT: IMPLICATIONS FOR THE
UNIVERSAL BASIC EDUCATION PROGRAM**

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ABSTRACT

Quality Education is one of the United Nations' 17 Goals for Sustainable Development. It has been adjudged to be the fulcrum to which all developments are hinged to. To attain such developments, member nations made education at the grass root (Basic Education) free and compulsory for all school age children. Basic Science is made a core subject to provide the very foundation required for technological growth. For decades, the graduates of the Basic Education system in general and Basic Science in particular have been found lacking in the basic skills expected of them after the training. This made the United Nations to lament that by 2030, over 300 million students will lack basic numeracy and literacy skills. Yet, the graduates of the system are certificated! This presumes that there could be problems in the assessment procedure upon which the certificates are issued. This paper assesses the quality of Basic Science question papers employed by the Kano State Ministry of Education Nigeria, to assess and award certificates of completion of the upper basic program. The paper employed a meta –analytical approach to review a decade (10 sets) of question papers from (2013 – 2022). The findings revealed that the items of the examination did not follow the rigors of test standardization. They are more inclined to concepts of you as a living thing than other aspects of matter and energy that are seldom raised! Items are full of typographic and grammatical errors and often ambiguous that students can hardly respond to. It is recommended among others that the assessment and certification of upper basic education should be done by the Universal basic education commission to accord the certificate its national status.

Keywords: assessment, basic science, quality

F6

[66]

**USING MOBILE PHONES TO IMPROVE EDUCATION: A SURVEY OF SCIENCE
TEACHERS' ATTITUDES AND PERCEPTIONS IN SECONDARY SCHOOLS IN
BICHI EDUCATION ZONE, KANO STATE – NIGERIA**

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ABSTRACT

Mobil phones technology is recently becoming one of the fastest media for disseminating information. The use of these devices has changed the style of so many things in the world. Its multitude services have made it to become an important integral part and parcel necessary for everyday mode of life. Mobile phones performs phenomenal roles as far as education is concerned. The increasing number of youth addiction to phone is fueling an emergent research attention in countries like Nigeria. This study therefore, examined science teachers' attitudes and perceptions towards Mobil phones as an innovative devices to support teaching and learning. The study employed descriptive survey research design. The target population of the study was all science teachers in secondary schools of Bichi education zone. The study used ninety four science teachers selected from the zone as the sample. Purposive and convenience sampling techniques were used in the selection of the sample. Questionnaire was used in data collection and analyzed using descriptive statistics. The findings from the study revealed that the participating teachers have high perceptions of Mobile phones in teaching and were ready to use it in teaching and learning. It was concluded that science teachers have positive perceptions of Mobile phone as an instructional tool and can be used to improve education, if not for the perceived hindrances. It therefore, proffered some recommendations to science education stake holders for utilization of mobile phones in science teaching in secondary schools.

Keywords: mobile phone, sample, secondary schools, science teachers, teaching and learning

F7

[67]

GLOBALIZING EDUCATION: MENTORING, LEARNING AND EXCELLENCE IN COLLEGES OF EDUCATION IN KANO STATE, NIGERIA

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ABSTRACT

This paper explores the pivotal role of mentoring and learning practices in Colleges of Education in Kano State, Nigeria, with a focus on fostering global perspectives. The paper sets out to address the problem of the challenge of enhancing the quality and relevance of education within Colleges of Education in Kano State, with the aim of tackling the need to improve professional development strategies. The objectives of the paper are to examine the impact of mentoring programs on the development of educators in Colleges of Education in Kano State, and to explore the integration of global perspectives into learning practices and its effects on cultural awareness, critical thinking and adaptability among educators and students. The methodology adopted is a mixed- method approach, to investigate the dynamics of mentoring, learning practices and global perspectives within Colleges of Education in Kano State. The approach combined qualitative and quantitative research methods to gather data. The major results of the research indicate that mentoring programs in Colleges of Education significantly impact the professional development of educators, leading to enhanced teaching practices and student outcomes. The infusion of global practices fosters greater critical thinking and adaptability among students and educators. The research draws the conclusion that integrating mentoring programs with a focus on global perspectives is instrumental in bridging educational gaps and cultivating excellence in Colleges of Education in Kano state.

Keywords: global practices, mentoring, learning practices, excellence

F8

[68]

MEDICAL STUDENTS' PERCEPTIONS OF PROBLEM-BASED LEARNING: A QUANTITATIVE ANALYSIS

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ABSTRACT

The 21st century has marked significant transformations in various fields, particularly in health and education, propelled by technological advancements. Active teaching modalities, such as Problem-Based Learning (PBL), have emerged as pivotal tools in medical education, fostering autonomy, critical thinking, and communication skills. However, challenges persist in terms of infrastructure and pedagogical efficacy. This study aimed to assess medical students' perceptions at Instituto Tocantinense Presidente Antônio Carlos (ITPAC) Porto regarding the influence of active methodology using PBL on study direction, encouragement of self-directed learning, increase in basic medical knowledge, and the adequacy of tutor training for this methodological approach. Carried out between March and December 2021, this cross-sectional survey involved 386 medical students. A standardized questionnaire (Cronbach's Alpha value of 0.85), utilizing a Likert scale, was employed to gather data, which was subsequently analyzed using descriptive and non-parametric inferential statistical methods. The results demonstrated a strong acceptance of active methodologies, with extensive student engagement in group discussions (93%) and recognition of the contributions of PBL to problem-solving skills development (69%). Additionally, tutor feedback and the promotion of decision-making were identified as positive aspects by 68% and 60% of students, respectively. However, significant challenges were identified, particularly related to deficiencies in pre-session PBL preparation (76%) and the time management required for the autonomous study of PBL objectives (31%). This study emphasizes the importance of improving the preparation and time management processes associated with Problem-Based Learning (PBL). The authors suggest more attention to the training of tutors and the curricular structure. Therefore, aligning active teaching methodologies with personalized pedagogical support is essential to maximizing the effectiveness of PBL.

Keywords: active study, medical education, Problem-Based Learning, small groups

F9

[69]

**OJT PERFORMANCE AND COMPETENCIES OF BSA STUDENTS IN THE CITY
COLLEGE OF CALAMBA: BASIS FOR OJT TRAINING MANUAL**

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ABSTRACT

In today's dynamic and ever-evolving educational landscape, one of the most effective and well-recognized methods for educating students in the information and abilities required to operate in a professional setting is on-the-job training (OJT). The likelihood of a seamless transition from college to the workforce is frequently diminished by a lack of OJT. Many businesses therefore provide OJT to students before hiring them for full-time jobs, hence this study enabled to determine the OJT performance of the Bachelor of Science in Accountancy (BSA) students in six areas namely: Attendance; Communication skills; Collaboration and teamwork; Problem-Solving; Work Ethics; and Time Management. Also, the study described the level of competencies the interns have in terms of Training Skills Adoptability; Critical thinking; and Attitude. The areas were evaluated by the sixty-six (66) employers of the interns after they finish their OJT work hours. Employers evaluated a very satisfactory ($\bar{x} = 3.83; n = 66$) overall OJT performance and an outstanding ($\bar{x} = 4.26; n = 66$) BSA Competency. Strong Correlations existed between the BSA competencies and how they perform in the six areas of OJT performance from attendance to time management ($p < 0.000$). It only implies that; the college has to continue developing the competencies so that it will be reflected to their internship performance in the field. By investing the college in these techniques and programs, the institution can help BSA students grow academically while also succeeding in their future employment. So that when they graduate, good cooperation abilities will be more capable to negotiate complicated work situations, inspire creativity, and create collective success in their chosen professions. Hence, all strong areas for sustainability were included in the draft of the OJT Manual of the institution as its proven to have a strong capacity to increase factor of employability once the OJT graduates.

Keywords: Communication skills, Collaboration and teamwork, Problem-Solving, Work Ethics, Time Management, Adoptability, Critical thinking, Attitude, OJT

F10

[70]

**EFL TEACHERS' PERSPECTIVE ON TEACHER AUTONOMY IN
IMPLEMENTING EMANCIPATED CURRICULUM**

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ABSTRACT

The government of Indonesia has assigned the newest curriculum, namely Emancipated Curriculum, due to the current needs of education adjustment in the rapid digital era. The current curriculum is considered different due to its core concept, which, as emancipated, means empowering students, teachers, and schools with the freedom to choose the most suitable learning process for them. Teacher autonomy is clearly stated as one of the crucial points for creating independent learning. This study aims to investigate how teacher autonomy in the emancipated curriculum is perceived by teachers, especially in the English as a Foreign Language (EFL) class context. Applying the convenience sampling technique, three EFL teachers from different schools in Indonesia who had applied the curriculum earlier as it was implemented gradually by the government were selected. The study used a qualitative research method with a case study approach. Data were collected using semi-structured, open-ended, parallel interviews with different subtopics to obtain in-depth data. The result showed that teachers' perspective on teacher autonomy in implementing emancipated curriculum was considered perplexity despite some positive values of the curriculum. The difficulty lies in preparing the lesson plan and applying differentiated instruction (DI). This study is significant since teachers' voices should be taken into account as they are the implementers of the recent curriculum. Furthermore, it plays a role as an evaluation for Indonesia's government policy to equip teachers with the whole knowledge and skills through augmented teacher trainings to aid their adjustment to the Emancipated Curriculum.

Keywords: teachers' perspective, teacher autonomy, emancipated curriculum

F11

[71]

**ASSESSING THE LEVEL OF RESEARCH INVOLVEMENT AND PRODUCTIVITY
AMONG ISU FACULTY**

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ABSTRACT

A university's reputation grew significantly as a result of its research success. Various factors were used to rank universities around the world, one of which was research. The focus of this study entailed the assessment of the research involvement among faculty in performing educational research. The statistical tools used for the analysis of the study were frequency counts and percentage, Mean and Standard Deviation to determine the level of research involvement of the faculty-respondents as group according to Instructor, Assistant Professor, Associate Professor and Professor. Structural Equation Modeling was used to represent the relationship and interaction between research involvement and academic rank of Isabela State University faculty in the conduct of educational research. It was found out that the level of research involvement is moderate. However, research involvement among professor ranks is high while instructor to assistant professors is just reasonable. There is a significant relationship between age, educational level and research involvement. Although there are challenges in doing research, it is important to highlight that faculty members contribute to or support the university's overall research output.

Keywords: research involvement, problems encountered, structural equation modelling

F12

[72]

COURSE PORTFOLIO MANAGEMENT THROUGH LEARNING OUTCOMES

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ABSTRACT

The course portfolio of a university develops over the years and focuses on the needs of one or several selected degree programs. The underlying didactic methods, practices and concepts are subject to the available scientific findings, which also develop over the years. These circumstances lead to a historically grown course portfolio that contains redundancies and inefficiencies after years of change. Top down portfolio management approaches focusing the whole university are not widespread, nevertheless it would have positive impact to quality assurance, resource efficiency, generation of interdisciplinary offerings, increasing competitiveness as well resilience and innovation. Improving the courses and further development generates a lot of effort and is done very often in parallel on similar courses. This paper examines how dependencies and redundancies in the course portfolio can be made visible by analyzing learning outcomes. Decomposition of courses based on learning outcomes, didactical taxonomies for clustering and generative AI are used as analysis methods. More details about the methods would be discussed in the paper. The findings can be used to group similar courses together and thus streamline the course portfolio. The primary goal is to bundle efforts in the development and, above all, further development of courses, thereby reducing the necessary use of resources and improving quality through collaboration. The paper contains specific examples which outlines the impact of the described approach. At the end of the session, participants will be aware of this potential for improvement and will be able to adapt this tool-supported procedure to apply it to their own course portfolio. Based on a real world example the practical implications are shown and help the educators to estimate a possible impact to their own university.

Keywords: course portfolio, learning outcomes, generative AI

F13

[73]

THE STUDENTS' PERCEPTIONS ON THE EFFICIENCY OF EDUCATIONAL CLUB PRACTICES IN THE UNIVERSITY OF BAGUIO

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ABSTRACT

School organization plays a vital role in students' holistic development. The efficiency of school organizations means the relationship of inputs to their related outputs. It is with this direction that this study aims to strengthen school clubs that support learning opportunities in elementary education. This descriptive-quantitative study described the students' perceptions on the efficiency of educational club practices in the University of Baguio Laboratory Elementary School (UBLES). The study made use of a researcher-made survey questionnaire designed to get feedbacks from the members of the different school clubs of UBLES. A total of 60 learners who are members of the school clubs for the school year 2021-2022 participated in the study. The data were analyzed using SPSS to come up with the frequencies, weighted means, ANOVA, Kruskal Wallis Test and Pairwise Mann-Whitney tests. Results revealed that students from the different grade levels and clubs have positive perceptions on the efficiency of the educational club practices. This suggests that the students' perceptions on the efficiency of clubs in student organizations have a similar impact on the development of competencies, outcomes and values. The study also revealed that there is no significant difference on the students' perceptions on the efficiency of educational club practices according to grade level and clubs. These results revealed that the responses of the respondents who belong to the different grade level and clubs have no significant differences from the items under the competence-based, outcome-based and value-based category of items. The study also reveals that the respondents were able to grasp the necessary values needed by the members such as; application of knowledge and skills, development of sense of responsibility, discovery of strengths and weaknesses, application of skills to real life situations, allowing them to reflect on behaviours and thoughts, boosts students' interests, motivates students to learn, improves social skills, improves or strengthens relationships with friends, classmates, or schoolmates, team spirit and collaboration and sense of belongingness and leadership. This further implies that even during the Covid-19 pandemic, educational clubs can still provide a positive impact to students' holistic development. In order to continue these practices, educational club programs and activities being implemented in the classroom should be constantly reviewed and innovations need to be updated in the program based on feedback, developing systems and technological conditions. In this way, the education of the more informed and productive generations will be possible.

Keywords: efficiency, school clubs, competence-based, outcome-based, value-based

F14

[74]

**EXPLORING THE EFFICACY OF ICT TEACHER TRAINING PROGRAMS:
IMPACT ON EDUCATOR PERSPECTIVES AND PRACTICES**

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ABSTRACT

This study investigates the effectiveness of Information and Communication Technology (ICT) training programs for teachers, focusing on how such training influences their teaching practices, beliefs, and readiness for embracing change. The present research employs a quantitative methodology, wherein data is collected through a structured survey from 103 educators located in Klang Valley, Malaysia. The educators represent a diverse range of academic disciplines, including sciences, mathematics, language, social studies, and ICT. A thorough examination of the effects that ICT training had on these educators is presented. The findings reveal a positive reception of the training, highlighted by participants' increased willingness to mentor peers, changes in perceptions of teaching and curriculum, alteration in deep-rooted teaching beliefs, and an enhanced readiness to challenge existing beliefs for progressive educational changes. The study also delves into the relationship between the teachers' years of experience, subject specialization, and the perceived effectiveness of the ICT training. These insights are pivotal in understanding the role of ICT training in modifying teaching methodologies and shaping educator attitudes. This research underscores the importance of continuous professional development in ICT for educators and its critical role in improving teaching quality and fostering innovative educational practices in an increasingly digital world. The outcomes of this study are expected to inform future training program development and educational policy-making, emphasizing the significance of integrating ICT effectively in educational settings.

Keywords: ICT training, teaching practices, pedagogical change

F15

[75]

**ENSURING EDUCATIONAL EXCELLENCE: THE ROLE OF QUALITY
ASSURANCE IN ADDRESSING TEACHER SHORTAGES**

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ABSTRACT

The United States confronts a profound teacher shortage, intensified by the challenges posed by the COVID-19 pandemic. To address the urgent need for teachers, states are expanding pathways for individuals to obtain teaching credentials, with district-based programs, including apprenticeships, gaining popularity. Departing from the long-established process of program approval. However, the swift implementation of many district-based programs has led to organizational deficiencies, hindering sustained growth and improvement. Quality assurance practices are paramount in ensuring these programs operate under equal standards. Smith et al. (2018) emphasize the critical nature of quality assurance for continuous improvement in educational processes, citing a direct correlation between these practices and enhanced learning outcomes. Anderson et al. (2020) affirms the importance of systematic review and assessment in tailoring approaches to meet learners' needs. Quality assurance in education involves strategies such as systematic evaluation and continuous monitoring to identify areas for improvement, as highlighted by Brown and Johnson (2019). Especially in times of crisis, quality assurance plays a crucial role in institutional effectiveness. Accreditation bodies, as outlined by Johnson and Smith (2021), become vital in establishing and maintaining specific quality standards. They foster accountability, transparency, and continuous improvement, with government agency collaboration. This presentation delves into the imperative of quality assurance in educational initiatives, emphasizing its pivotal role in identifying and rectifying issues for the continuous improvement of effective educator preparation programs. In light of the teacher shortage crisis, it underscores the need for alternative pathways into the teaching profession, identifies critical components of effective programs, and emphasizes the significance of quality assurance in maintaining and elevating educational standards amid the rapid expansion of district-based programs.

Keywords: teacher shortage, district-based programs, quality assurance

F16

[76]

**ENHANCING ACCESS TO QUALITY EDUCATION THROUGH EFFECTIVE
COOPERATIVE LEARNING STRATEGIES FOR VILLAGER STUDENTS IN
REMOTE AREAS: INSIGHTS, CHALLENGES, AND SOLUTIONS IN THE
CONTEXT OF SDG 4**

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ABSTRACT

Access to quality education for villager students in remote areas, as outlined in Sustainable Development Goal 4 (SDG 4), remains a significant challenge globally. This qualitative study aims to address this issue by exploring effective cooperative learning strategies tailored to the needs of villager students in remote areas, focusing on insights, challenges, and solutions. The rationale for this research stems from the unique educational challenges faced by villager students, including limited resources, infrastructure constraints, and cultural factors. The study investigates how cooperative learning can improve access to quality education and promote lifelong learning opportunities in line with SDG 4. Research methods include semi-structured interviews and classroom observations conducted with teachers and students in remote villages. Thematic analysis reveals key insights into participants' experiences and perceptions regarding cooperative learning strategies. Findings highlight the importance of culturally responsive teaching methods, innovative use of technology, and community partnerships in enhancing educational outcomes for villager students, contributing to a deeper understanding of effective educational practices in remote areas. For future research, longitudinal studies can assess the sustained impact of culturally responsive teaching methods. Exploring the integration of emerging technologies like artificial intelligence (AI) and virtual reality (VR) in educational settings could enhance learning outcomes. Investigating the scalability and replicability of successful community partnerships across diverse rural contexts can provide insights into sustainable educational interventions. This research's implications extend to educators, policymakers, and stakeholders promoting inclusive and quality education, contributing to advancing SDG 4 and fostering educational equity and sustainability in remote areas.

Keywords: cooperative learning, villager students, remote areas, SDG 4, quality education, sustainable development

F17

[77]

**STUDENTS' ENGAGEMENT IN PHYSICS VIA INTENTIONAL LEARNING
ENVIRONMENT**

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ABSTRACT

The study investigated Grade-12 Physics students' engagement within an Intentional Learning Environment (ILE). It aimed to assess engagement levels between ILE-exposed and non-ILE-exposed students across cognitive, affective, and behavioral domains and to determine any significant differences in engagement between the two groups. Employing a quasi-experimental design, two intact sections were exposed to ILE and non-ILE, with non-academic assessment tools used for evaluation. The findings revealed that the ILE group exhibited high engagement across all domains in their order of Affective, Cognitive, and Behavioral, while the non-ILE group demonstrated high affective but moderate cognitive and behavioral engagement. Although both groups achieved high overall engagement, a significant difference was observed in the behavioral domain, favoring the ILE group. Despite this, no significant difference in engagement was found between the two groups in the cognitive and affective domains. These results exhibited the effectiveness of the Intentional Learning Environment in fostering high engagement levels among Grade-12 Physics students. While both groups demonstrated commendable overall engagement levels, the ILE group consistently showed higher engagement, particularly in the behavioral domain. This further supports the notion that the implementation of ILEs can positively impact student engagement and learning experiences in Physics education.

Keywords: intentional learning environment, student engagement

F18

[78]

**SERENITY BREEDS SUCCESS: WOMEN ARCHITECTS' JOURNEY INTO
WORKSPACE OPTIMIZATION THROUGH ORGANIZING, DECLUTTERING
AND TIDYING AND ITS IMPACT ON PRODUCTIVITY**

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ABSTRACT

This study delves into the experiences of women architects and examines how the principles of organizing, decluttering, and tidying within their workspaces in a deliberate effort to optimize it contribute to enhanced productivity and success. The study employs a qualitative approach, gathering data from a purposive sample of women architects in Cebu who have demonstrated significant professional experience and project completion. Through in-depth interviews and workspace observations, the research explores the personal and professional benefits of a systematic and intentional approach to workspace optimization. The findings reveal that regular organizing, decluttering, and tidying are not merely incidental activities but are strategic practices integral to the work process of women architects. These practices are shown to have a positive correlation with the perceived productivity and creativity in their architectural tasks, processes, and outputs. Moreover, the study highlights that such workspace optimization practices can influence client perceptions, leading to faster design acceptance and approval rates. The research concludes with a recommendation for the adoption of a two-pronged strategy for Workspace Optimization, The Two-Way Tactic Workspace Optimization (TWO) Model, providing a sustainable framework for professionals in creative fields to enhance their work environments. This study contributes to the discourse on workspace design and its impact on professional efficacy, suggesting that a serene and optimized workspace is a key ingredient in the recipe for success in the architectural profession.

Keywords: workspace design, women architects, professional efficacy, work environments, recipe for success in the architectural profession

F19

[79]

**UNVEILING THE CHALLENGES AND TRIUMPHS OF WOMEN AS
TRAILBLAZING LEADERS IN HIGHER EDUCATION**

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ABSTRACT

For any business to serve and satisfy both customers and employees, employee productivity is essential. Leveraging the full potential of their workforce, ensuring long-term gains in productivity, and fostering a culture of ongoing improvement for the purpose of attaining organizational excellence. This study seeks to develop a structural model of employees' commitment, job satisfaction, teamwork, and trainings on productivity. After scientific validation and reliability tests, questionnaires were used as data-gathering tools. Data for this descriptive-correlational and causal-comparative research design were gathered from the 518 staff and faculty members in Higher Education Institution. Results revealed that employee productivity was positively correlated with the independent variables. This indicates that high productivity was associated with higher levels of commitment, job satisfaction, effective teamwork, and trainings of the employees. Nonetheless, Higher Education employees' productivity is significantly influenced by teamwork and trainings. This means that when there is teamwork among the employees and top management, and employees are provided with relevant trainings, employees' productivity is better. Finally, structural model 5 best fits the employees' productivity. This model is anchored on teamwork and trainings and this is called the "GEROY'S MODEL ON PRODUCTIVITY OF EMPLOYEES IN A PRIVATE HIGHER EDUCATION INSTITUTION".

Keywords: employee productivity, structural model, teamwork, training, higher education institution

F20

[80]

THE POWER OF POSITIVE INQUIRY: VIRTUAL INTERVENTIONS FOR ORAL SKILLS ENHANCEMENT OF ASPIRING TEACHERS IN A LOCAL COLLEGE

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ABSTRACT

One of the core competencies future educators are expected to exemplify is strong communication skills. It is imperative that those who wish to serve as teachers have excellent verbal ability and adaptability. An innovative inquiry-based approach that goes beyond traditional strategies of classroom engagement not only helps aspiring teachers improve their academic performance, but more so, be the reformers the future students of this nation need. This study looked into the integration of a positive inquiry-based virtual intervention in the teaching-learning plans of a local college in the Philippines. A group of secondary education pre-service teachers were subjected to undergo a series of Appreciative Inquiry workshops conducted via a video conferencing platform.. Post-observation and interviews, it was found that the integration of the virtual interventions in the course syllabi, the pre-service teachers' drive to enhance their verbal ability has increased. Results showed that the main reason for the decrease in motivation comes from their negative self-talk and the lack of avenue and opportunity for them to showcase their strengths. The pre-service teachers described the virtual interventions as a transformational force that drove them to "finish what they started." During the post-intervention, it was made clear that the positive inquiry-based intervention is a promising approach that posits a safe learning experience for future educators. It can also be used as an additional method in the implementation of performance tasks in the classroom, one wherein the students are not only kept in line with what is required but are given equal chances to showcase their capacities.

Keywords: positive inquiry, inquiry-based approach, verbal ability, communication skills, teacher education, intervention

F21

[81]

TEACHER EDUCATION GRADUATES: MULTIDIMENSIONAL ANALYSIS ON INDICATORS OF PERFORMANCE

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ABSTRACT

This study is a multidimensional analysis of the performance of the teacher education to inform institutions and to improve services. The aim was to evaluate teacher education graduates' employability skills, adherence of their competencies to the Philippine Professional Standards for Teachers (PPST), and the predictors of their job satisfaction and productivity. It used a quantitative survey in a descriptive-correlation design. Data was collected from teachers employed in DepEd within the Province of Bukidnon, Philippines. The significance of the curriculum was underscored, with emphasis on communication skills, critical thinking, and human relations. However, for their current roles, knowledge and communication skills were deemed essential. They demonstrated strong understanding of fundamental professional knowledge with gaps in "Learning Environment" and "Content Knowledge and Pedagogy." The Teacher Competency Enhancement Initiative (TCEI) was proposed to address these gaps. The study also identified school cohesion and mental well-being as significant predictors of job satisfaction. Additionally, a strong correlation was observed between teacher productivity and their levels of professional development and digital competency, highlighting the need for supportive environments along with the perceived importance and confidence in digital competency.

Keywords: teacher education, performance, standards, employability, correlation

F22

[82]

ANALYZING THE IMPACT OF HIGHER EDUCATION IN FACILITATING BOARD EXAM SUCCESS AND CAREER PROGRESSION OF THE BEED ALUMNI

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ABSTRACT

Tracer studies are crucial sources of information about graduates and academic programs in Higher Education Institutions. They provide valuable insights for evaluating higher education outcomes, which serve as a basis for further improvement and quality assurance of the institution. This quantitative study utilized a correlational research design with descriptive methods to explore the relationships between higher education, board examination success, and the career progression of BEED Alumni from the batch of 2019-2023. The study aimed to investigate the impact of higher education, including BEED courses, services, and facilities at the City College of Calamba, as well as the level of contribution of BEED programs and the implementation of preparatory programs for BLEPT, on the board exam performance and employment status of the BEED Alumni. The respondents in the study were graduates of the Bachelor of Elementary Education program from 2019-2023, selected through purposive sampling. Due to difficulties in finding and contacting some BEED Alumni, only 153 out of the initial 253 respondents completed the survey questionnaires. The researchers employed the CCC Tracer Standardized Questionnaire, and a self-made questionnaire aligned with the literature and validated by three. A pilot testing was conducted to ensure the authenticity and reliability of the instrument. After this, data gathering was conducted using Facebook and Messenger. In analyzing the data, quantitative analysis involved the use of frequency, percentage, mean, Spearman's rho, and chi-square tests. The data revealed that most of the graduates were between 22-25 years old, female, licensed teachers, and single. The study also indicated a significant contribution of higher education to the lives of BEED Alumni, with high levels of satisfaction among students at the institution. Furthermore, the employment status of the graduates was promising, with a significant number of them gainfully employed locally within 1-3 months after graduation.

Keywords: higher education institutions, board exam success, elementary courses, tracer study, alumni

F23

[83]

**MICROLECTURES IN HYBRID LEARNING: ENHANCING STUDENTS’
ACADEMIC PERFORMANCE IN SCIENCE, TECHNOLOGY, AND SOCIETY**

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ABSTRACT

Learning Science, Technology, and Society (STS) has been a challenge to students due to complex topics and factors like disinterest and short attention spans which is reflected to their poor performance in the subject. Innovative learning strategies and materials are needed to address these challenges. This study investigated the effects of microlectures as a pedagogic approach in enhancing students’ performance in STS. It was conducted in the College of Education, Central Mindanao University, University Town, Maramag, Bukidnon. Specifically, it aimed to: describe the academic performance of students exposed to microlectures and those exposed to nonmicrolectures under hybrid learning; and find out if there is a significant difference on the academic performance of students exposed to microlectures and those exposed to nonmicrolectures under hybrid learning. A quasi-experimental design was used involving two groups exposed to microlectures and nonmicrolectures where it utilized academic assessments as instrument. Descriptive statistics were used to describe the academic performance of students, while analysis of covariance (ANCOVA) was employed to find out the significant difference on the academic performance of students exposed to microlectures and those exposed to nonmicrolectures under hybrid learning. Results of the study revealed that the academic performance of students was good and enhanced after exposure to microlectures under hybrid learning. When compared, a slight difference in their performance in STS is evident with a high mean score in favor for microlecture than in the nonmicrolecture class. Therefore, students’ academic performance under microlectures was improved and enhanced. A significant difference existed in the academic performance of students exposed to microlectures and those exposed to nonmicrolectures. Hence, students improved their academic performance in STS.

Keywords: academic performance, hybrid learning, microlecture

G1

[84]

**EFFECTIVENESS OF USING THE COLORFUL SEMANTIC IN FLASHCARD
LEARNING MEDIA TO IMPROVE SENTENCE ARRANGEMENT FOR AUTISM
CHILD**

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ABSTRACT

Composing sentences (syntax) is a crucial skill in autism children in order to communicate, convey opinions, express feelings, thoughts and exchange information. This has affected their language skills and communication. In order to improve this ability, appropriate learning media is required, such as flashcard with colorful semantic method. It is a visual media in the form of images and symbols presenting in small cards by applying the colorful semantic method using color codes to understand vocabulary and sentence structure. The aim of this research is to test the effectiveness of using the colorful semantic method in flashcard media for children with autism to construct sentences. This research method used single subject research (SSR). The subject of this research was an autism child in grade 7th at the Dian Amanah Autism Special Needs School. The data was collected through interviews, observation, and tests. Descriptive statistics was used to analyze the data by relying on visual analysis with graphic data. The results showed a positive influence which was obtained from increasing and stable data from calculations in the baseline condition phase (A1) to the second baseline (A2) of +24 including data overlap analysis reaching 0%. In conclusion, the ability to construct sentences has increased as the subject was able to compose sentences consisting of 5 words correctly, writing sentences based on picture descriptions and composing sentences orally without the help of pictures.

Keywords: autism, flashcard, colorful semantic, arrange sentence

G2

[85]

**COOPERATION BETWEEN SPECIAL SCHOOLS AND THE BUSINESS WORLD
TO PREPARE DEAF STUDENTS IN THE FASHION CLASS TO ENTER THE
WORKFORCE**

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ABSTRACT

One of the problems that occurs among deaf in special school graduates is the employability of graduates. In Indonesia, high school students will receive 18 hours of vocational education. One of the vocations given is fashion. It emphasizes the need to integrate vocational learning with the needs of the business world, especially for deaf students who are hard of hearing. The research uses a qualitative descriptive method with a case study at the Purbalingga State Special School. The results show that the school provides vocational learning about fashion design to deaf students, and collaboration with local businesses is carried out through fieldwork practices and the absorption of graduates. Efforts to improve student competency include providing equipment according to industry standards, training, and transferring knowledge from students who have taken part in internships to their classmates. In conclusion, collaboration between school and the business world provides great benefits in improving the quality of graduates and preparing them to become employe . This collaborative strategy is an important foundation for ensuring the success of students with special needs in facing the challenges of the world of work

Keywords: vocational, deaf, cooperation, work

G3

[86]

**SUPPLEMENTARY LEARNING MATERIALS IN GRADE 9 PHYSICS FOR
MAINSTREAMED SPECIAL EDUCATION STUDENTS**

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ABSTRACT

Mainstream due to inclusive education initiatives benefit students greatly with appropriate learning materials. As such, the study aimed to develop supplementary learning materials to address the least learned competencies in Grade 9 Physics and focused on the exceptionalities and difficulties of mainstreamed special education students. The mixed methods research design was used to collect and analyze the needed data. The Grade 9 Supplementary Learning Materials on Projectile Motion, Momentum, and Impulse were tailored to suit the demographic profiles, exceptionalities, and learning challenges of students. These materials were differentiated, contextualized, and integrated with multimedia elements to enhance understanding and engagement. The study findings indicate that participants experienced various challenges, including visual impairment, hearing impairment, and speech/language disorders. Additionally, exceptionalities such as autism, learning disabilities, and orthopedic/physical handicaps were observed among the participants. The difficulty in using text-based learning materials was that the text was too small, and the pictures were small and abstract. Students also expressed confusion and boredom in using these materials. The significant experiences observed among the participants were classified into four themes: (a) ease of doing experiences; (b) fun-filled experiences; (c) familiar experience with the topics; and (d) comfortable experience without fear of discrimination. The positive effects of the learning materials on conceptual understanding and motivation of the students towards Physics were observed.

Keywords: mainstream, multimedia, differentiation, contextualization

H1

[87]

**UPDATED STUDY PROGRAM WITH ACCENTUATION ON TECHNOLOGY FOR
A UNIVERSITY COURSE ON “INDUSTRY AND CULTURAL POLICY”**

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ABSTRACT

The B.A. Program in Multicultural Studies at the Universidad de la Ciénega in the state of Michoacán, Mexico, includes the course “Industry and Cultural Policy”, an essential field for students’ formation in the area of Cultural Management. The course’s study program must be actualized continuously to align it with demand in the labor market. The UNESCO recognizes “Cultural and Creative Industries” as sectors focused on creating, promoting, and commercializing goods and services of cultural value, governed by cultural policies in specific legal frameworks. Every year, Mexico’s INEGI (National Institute of Statistics and Geography) evaluates cultural production through the instrument, “Satellite Account of Culture”, which is based on international standards. Using a mixed research approach, we analyzed data from the most recent survey to design an instrument for gathering information from students and analyze it utilizing SPSS and ATLAS.ti software. This process revealed the areas of greater interest and economic growth in the sphere of culture, and guided the proposal to actualize the study program with a shift in emphasis toward a digital perspective. The aim was to align students’ interests with opportunities in an expanding cultural sector by taking advantage of the technological capacities of the program in education and fomenting collaboration with key actors in the sector. The ongoing review and actualization of the study program, based on updated evidence and modern technologies, is essential to offer students a relevant, vanguardist formation in this field. The initiatives, projects, and research promoted by the Laboratory of Cultural Management and Digital Humanities play key roles in achieving these objectives.

Keywords: curriculum design, cultural management, cultural and creative industries, digital perspective

H2

[88]

**ENHANCING EDUCATION THROUGH GAMIFICATION: SUNWAY
UNIVERSITY'S ESCAPE ROOM EXPERIENCE**

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ABSTRACT

Gamification in education involves integrating game elements into non-game contexts to enhance student engagement and motivation. This approach has proven effective in improving learning outcomes and knowledge acquisition across various disciplines. Sunway University's American Degree Transfer Program (ADTP) recently hosted an "Escape Room" event to boost student participation using game elements to make learning fun and interactive. Six lecturers crafted challenges for Engineering, Computer Science, Business, and Arts majors. Working in teams, students tackled 15-minute activities, applying their knowledge and problem-solving skills. The Escape Room featured diverse tasks: constructing activity diagrams from pseudocode, recognizing universal facial expressions, solving math problems through charades, answering U.S. history questions, matching types of energy to diagrams, and solving engineering crosswords. These activities promoted critical thinking, collaboration, and creativity. Post-event analysis showed second-year and science-majored students performed better, highlighting their advanced knowledge and the need for differentiated instruction. The study revealed the effectiveness of the "Mathematics Charade Challenge" and the difficulty of the "Facial Expression" task, suggesting activity variation based on student strengths. Overall, gamification, exemplified by the Escape Room, creates a dynamic learning environment that fosters critical thinking, collaboration, and motivation, leading to better knowledge retention. The tailored activities demonstrated the value of engaging students in interactive and subject-relevant tasks, promoting efficient problem-solving and continuous learning.

Keywords: gamification, game elements, dynamic learning, engaging, motivation

H3

[89]

**EFFECTIVE STRATEGIES FOR ENHANCING PARENTAL ENGAGEMENT IN
EDUCATION: A PRACTICAL APPROACH**

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ABSTRACT

Parental activities that support their child's learning and development, both cognitively and non-cognitively, are referred to as *parental involvement* (Jeynes, 2007; Hill and Tyson, 2009). The lack of parental involvement can significantly impact students' academic achievement, as parents play a crucial role in supporting their children's learning and development, both at home and within the school environment. Without active parental engagement, students may lack essential support systems, guidance, and reinforcement necessary for academic success. The present qualitative study (N=45), which employed multi-stage, stratified sampling and utilised manual content analysis, aims at exploring the degree of awareness among teachers regarding the involvement of parents in school life as well as effective strategies used for enhancing communication between the school, teachers, and parents in an economically disadvantaged area in the Northern part of Hungary (Garami, 2020), where the unemployment rate is high, therefore posing formidable challenges in securing employment opportunities. The findings of the present research suggest that fostering a triple alliance between parents, teachers, and students is of vital importance for enhancing communication and collaboration within educational institutions. Additionally, emphasizing contact communication – either in the form of face-to-face or online communication – and community events as key components can further strengthen these partnerships, ultimately benefiting students' overall educational experiences and achievements.

Keywords: parental involvement, awareness, communication, cooperation, parental community engagement

H4

[90]

**EMPOWERING MATHEMATICAL INQUIRY IN PRIMARY EDUCATION
THROUGH MODERN TECHNOLOGIES**

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ABSTRACT

The "Compulsory Education Mathematics Curriculum Standards" (2022) emphasize mathematics as essential for cultivating critical thinking and scientific inquiry. This study explores the status of Chinese pupils' spirit of mathematical inquiry, the relevant reasons and how integrating modern technologies into primary education can enhance the spirit of mathematical inquiry, crucial for nurturing skills that benefit lifelong learning. The study highlights various technology-enhanced strategies to engage young learners, including interactive digital platforms that simulate real-world mathematical problems and collaborative tools that enhance communication and cooperation among students, teachers, and parents. These technologies not only make learning more engaging but also support the development of independent thinking skills. Additionally, the paper discusses the critical role of educators in effectively integrating these tools into both the classroom and extended learning at home. By bridging the gap between formal education and home learning, modern technologies ensure a comprehensive, continuous learning experience. The findings suggest that well-implemented digital tools can significantly foster mathematical inquiry, encouraging students to explore, question, and understand mathematical concepts deeply. This approach promises to cultivate a generation of learners equipped with the analytical skills necessary in a technology-driven world.

Keywords: modern technologies, mathematical inquiry, primary education, interactive learning, digital tools, educational collaboration

H5

[91]

**RESEARCH ON THE OPTIMIZATION OF MORAL EDUCATION MODEL
EDUCATION IN PRIMARY SCHOOLS IN THE DIGITAL ERA**

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ABSTRACT

As the educational sector progresses, integrating AI technology becomes crucial for enhancing moral education in primary schools. This study delves into the potential of AI-assisted role model education to tackle the challenges posed by the evolving societal norms and information technology. A thorough literature review constructs a theoretical framework for a redefined role model pedagogy. Interviews with primary students reveal that traditional role model selection and educational methods falter amidst technological advancements. Issues such as the superficial understanding of role models and the gap between knowledge and action are highlighted. Our analysis suggests incorporating AI to personalize role model narratives based on students' moral development needs, utilizing natural language processing to understand and guide student reflections, and employing recommendation algorithms to present a spectrum of virtual role models. This AI-enriched strategy aims to enhance engagement and provide adaptive moral education. By leveraging AI, educators can create interactive and immersive experiences that bridge the gap between theoretical role models and students' real-life applications, fostering a deeper connection and understanding. The tailored content and feedback mechanisms can revolutionize moral education, leading to a more profound moral and character development in primary students.

Keywords: role model education, AI technology, moral growth, primary school, personalized learning

H6

[92]

**EXPLORING THE SPEAKING SKILLS OF BACHELOR OF SECONDARY
EDUCATION STUDENTS: POST-PANDEMIC EXPERIENCES**

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ABSTRACT

Speaking is the foremost utilized skill, especially by individuals in the teaching field. However, the poor speaking skills of pre-service teachers have been a recurrent feedback of cooperating teachers, and speaking has become apparently difficult to teach among the Bachelor of Secondary Education (BSED) students brought about by the COVID-19 pandemic. Opportunities for speaking practice were limited during online classes which may have affected the students' speaking skills. Thus, this study aims to: 1. identify the problems of BSED students in speaking; and, 2. ascertain the factors that affect the students' speaking skills. Classroom recordings and a semi-structured interview were conducted among the third-year and fourth-year BSED (English, Math, Science, and Physical Education) students of A.Y. 2022-2023. Data were analyzed employing the Classic Grounded Theory, progressing from open coding through Substantive coding. It involved the fracturing and analysis of the data gathered. Results revealed that the BSED students displayed problems in fluency, code-switching, grammar, vocabulary, pronunciation, organization and development, and coherence and cohesion. Affect and other individual differences, age, motivation, linguistic environment, and cognition are the emerging factors that affect the students' speaking skills. These data imply that the BSED students lack the necessary speaking skills, indicating a need for intervention programs to improve their communication skills before they are deployed in the field.

Keywords: speaking, speaking skills, speaking problems, speaking factors, BSED students

H7

[93]

**THE INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM (IELTS) AND
ACADEMIC PERFORMANCE IN MATHEMATICS PROFICIENCY TOWARDS A
CONCEPT ATTAINMENT APPROACH (CAA)**

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ABSTRACT

Mathematics is a worldwide language, although skill in English may significantly impact pupils' success in mathematics. Proficiency in English is essential for students to be able to comprehend mathematics textbooks, lessons, and problem-solving instructions since they are mostly delivered in English (Durrani, 2016). Inadequate English skills may impede pupils' comprehension of mathematical terminology, symbols, and word problems, (Rubinstein-Avila, 2017). The study shows 10th and 11th graders' IELTS band scores. The mean speaking band score for grade 10 and 11 pupils is showing competence ($\bar{x} = 6.38, sd = 0.304; \bar{x} = 6.35, sd = 0.58$), for writing band score is indicating high proficiency ($\bar{x} = 6.54, sd = 0.292; \bar{x} = 6.6, sd = 0.39$), for listening and reading are both strong proficiency ($\bar{x} = 7.5, sd = 0.59; \bar{x} = 7.0, sd = 0.39; \bar{x} = 7.69, sd = 0.586; \bar{x} = 7.5, sd = 0.722$). Hence overall grade 10 and 11 IELTS mean band score was 7.0 and 7.13 with a standard deviation of 0.39 and 0.397, indicating high proficiency. Across grades 10 and 11, most students scored excellent to very well on IELTS tasks. Moreover, Summative test for grades 11 and 12 are outstanding and very satisfactory in mathematics ($\bar{x} = 85.54; \bar{x} = 78.75$) findings demonstrate a low to moderate association between IELTS band scores and senior high school students' math skills. Grade 10 and Grade 11 students' mean IELTS band scores vary from competent to very excellent across abilities. The IELTS Writing score for Grade 10 has a modest association ($r = 0.519, p = 0.009$) with mathematical competence, whereas the other band scores have extremely low to low correlations. Therefore, for mathematics, Grade 11 students' relatively lower mean performance scores and skill level classification compared to Grade 10 students suggest the need for additional support to maintain outstanding performance levels as students' progress to higher grades. Continued monitoring of students' progress and tailored interventions as needed will be important to maximize learning outcomes for all students.

Keywords: concept attainment approach, IELTS band scores, mathematics

H8

[94]

**AN ASSESSMENT OF THE GRADING SYSTEM IN MATH IN CHINESE
PRIMARY SCHOOL TOWARD THE DEVELOPMENT OF A FEEDBACK
MECHANISM GUIDE**

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ABSTRACT

The mathematical grading system serves as a crucial tool for evaluating students advancement and understanding in various areas of mathematics. Grades serve as invaluable feedback mechanisms, motivating students to identify areas for improvement and guiding teachers in adjusting instruction to meet students' needs effectively., hence this study intends to provide a Feedback Mechanism Guide for assessing Chinese elementary school pupils' arithmetic awareness and academic progress including pupils understanding in their arithmetic grading system for Calculative Ability, Applicative Ability, STEAM, and HOTS and their actual performance in each. While testing how does students' perception of grading knowledge affects their math performance. The study utilized correlational-descriptive method using stratified sampling technique to 400 students where 55 grade 4, 48 grade 5, and 55 grade 6 pupils in one of the foreign schools in China. The findings of the perceived grading system in mathematics were in very high extent in all four areas of criterion. Also, the study found the described academic level all three grade level in above average in all four areas except HOTS area of grade 4 and grade 8 which were only average level. Moreover, it is evident that salient combined values from the regression output especially the R-values which are 0.079, 0.040, 0.064, and 0.127 which indicates a fairly linear relationship between the predictor extent of understanding how pupils are graded and the response variable students' academic achievement. However, the overall model is not statistically significant, as evidenced by the F values and p-values of 0.324(calculative), 0.786 (applicative), 0.667 (STEAM), and 0.390 (HOTS). It implies that, in improving academic achievement of the current grade, the understanding on the areas of measures how each pupil is graded are not sufficient but rather to have a deeper understanding of the contents of each criterion itself. Therefore, the study created a Feedback Mechanism wo where students find weakness in the four areas of Mathematics grading system so that they will know where to improve better.

Keywords: awareness of the grading system, primary school, feedback mechanism

H9

[95]

**EXPLORING EFFICIENCY AND ENGAGEMENT: AN ANALYSIS BETWEEN
GESTURAL AND KEYFRAME ANIMATION TECHNIQUES AMONG
ANIMATION LEARNERS**

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ABSTRACT

In creating animation, traditional keyframe techniques require meticulous frame-by-frame editing of poses, while gestural animation offers a more immediate approach by directly mapping an animator's hand movements, similar to puppeteering. This paper presents a within-subject experimental study conducted with 23 animation students comparing a gestural system with a standard keyframe interface. Participants were asked to create animations using both systems in a controlled setting, and their performance was evaluated through timed session. Usability and satisfaction were assessed through structured questionnaires, while qualitative insights were gained from a semi-structured interview. The results demonstrate that participants were able to generate animations more quickly using the gestural interface. However, there was no significant difference in their perceptions of usability and satisfaction between the two techniques. Qualitative interviews provided additional insights. While some participants appreciated the "naturalness" and directness of gestural animation, many preferred the precision and control offered by keyframing. The interviews also highlighted that gestural animation demands a different, more embodied approach compared to keyframing, necessitating animators to acquire new skills. This study presents contrasting findings on the practicality of gestural animation as a tool for animators. While quantitative results show promise, qualitative interviews indicate animators' reluctance to embrace gestural interfaces due to limitations in toolsets and the transformative nature of gestural animation. To overcome these obstacles, the study recommends targeting non-animators as potential users, addressing issues related to editability and control accuracy, and conducting extensive artistic exploration to comprehend the unique style of gestural animation. Further research is required to explore the artistic potential and stylistic implications of gestural animation, allowing for a deeper understanding of how it can foster artistic innovation and expand the boundaries of animation as an art form.

Keywords: gestural animation, keyframe animation, interaction design, UI/UX design, teaching and learning

H10

[96]

INNOVATIVE CURRICULUM DESIGN, CLASSROOM MANAGEMENT STRATEGIES, COMPETENCIES, AND MATHEMATICS TEACHERS' PERFORMANCE: A CAUSAL MODEL

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ABSTRACT

This study developed a causal model of innovative curriculum design, classroom management strategies, and teacher competencies on elementary mathematics teachers' performance. A sample of 339 teachers participated, responding to eighty-three (83) item questionnaire. Descriptive Correlational and causal comparative research designs were employed in the study. Descriptive Statistics such as mean and standard deviation were used to describe the parameters of the study and inferential statistics such as Pearson-product moment correlation, multiple regression analysis, and path analysis were used to test the null hypothesis. The findings highlighted the importance of innovative curriculum design, real-world application, and problem-solving skills, in promoting student engagement and effective teaching. Well-developed classroom management strategies and strong teacher competencies, professional development, and differentiated instruction, were found as the best predictors of teachers' performance. Causal model 3 is the best-fit model on teachers' performance. This model is anchored on elementary school mathematics teachers' competencies, differentiated instruction, assessment and feedback, classroom management strategies, problem-based learning and collaboration, and professional development, for teachers to foster a conducive learning environment and improve teaching quality in mathematics education. This causal model is called "MelD's Model on Elementary School Teachers' Performance."

Keywords: teaching quality in mathematics, conducive learning environment, best-fit model, educational policies and practices, continuous professional development

H11

[97]

**EVALUATION OF MODULE FOR IMPROVING READING ABILITIES OF
GRADE V-SLOW READERS THROUGH PROJECT READ (READING
ENHANCEMENT AND ASSESSMENT DYNAMICALLY**

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ABSTRACT

Teaching reading and comprehension to non-readers and dissatisfaction level readers today is not the same as the past. Capable reading and composing abilities are basic to victory. Most students in grade five experience trouble in figuring out how to read. They experience issues in learning phonetics, syllables, and words. Some of them are frightened to go to classes while perusing examples began. Because of this circumstance, some of them drop out from school and don't go on until the following school year starts. This PROJECT READ for Grade 5 pupils is descriptive in its research climate. Non-probability purposive sampling technique was utilized as basis for actual selection of 56 teacher-evaluators in Nagcarlan Sub-Office. Locally constructed questionnaire with five-scale checklist for resolutions of the four (4) basic criteria in establishing in the validity of the proposed module was used to gather data which were subjected to weighted mean, standard deviation and Pearson r correlation as basic for acceptance or rejection of the Ho at 5% level. As evaluated by the Grade 5 teachers, the module's objectives were very achievable, the contents were substantial, the activities were very relevant, the language was clear, and as a whole, it was well organized as shown by the overall weighted mean of 4.31. The mean level of usability and effectiveness of the module in terms of MPS was very high as yielded by the mean of 13.79. The essential features of the module in terms of objectives, contents, activities, organization, and language established significant relations with its appropriateness and interest as reinforced by the overall r value of 0.385 which rejected the Ho at 5% level of significance. Based on data gathered, the module's objective were very achievable, contents were substantial, activities were very relevant, language was clear and in general was well organized.

Keywords: Teaching reading, Grade 5, comprehension, module evaluation

H12

[98]

**THE IMPACT OF 21ST-CENTURY GEOPOLITICAL SHIFTS ON
INTERNATIONAL COLLABORATION IN HIGHER EDUCATION IN SRI LANKA**

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ABSTRACT

The start of the 21st century brought the world to a different level of context with global power shifts, economic alliances, political realignments, trade wars, technological rivalries, regional conflicts, and international cooperation agreements. These geopolitical shifts have created a new framework for international collaboration in higher education, significantly impacting the Sri Lankan context. The 21st-century geopolitical shifts in international collaboration in higher education present opportunities, such as enhanced education, improving academic standards and innovation, economic and developmental benefits, promoting cultural understanding, and addressing local challenges. However, they also pose challenges, including geopolitical instability and tensions, technological and infrastructure gaps, cultural and social adaptation, and quality assurance and accreditation in Sri Lanka. This research aims to discuss the impact of 21st-century geopolitical shifts on international collaboration in higher education in the Sri Lankan context through qualitative research methods. Data were collected using surveys with open-ended questions, case studies, and document analysis. The survey targeted students within ten years after completing their A/Ls, gathering data on their higher education experiences with international collaboration. Relevant research, agreements, and university websites were analyzed as documents, and two case studies provided in-depth insights. Content analysis and case study analysis were used for data analysis. The findings reveal that while geopolitical shifts have opened up new opportunities for Sri Lankan students and institutions through enhanced partnerships and scholarships, challenges such as adapting to different educational systems and maintaining quality standards persist. The study concludes that proactive engagement and strategic planning are essential for Sri Lankan higher education institutions to navigate these geopolitical shifts effectively. Addressing technological and infrastructural gaps, fostering cultural adaptability, and ensuring quality standards are crucial for sustaining and enhancing international collaborations.

Keywords: international collaboration, higher education, Sri Lanka, impact

H13

[99]

**THE IMPACT OF 21ST-CENTURY GEOPOLITICAL SHIFTS ON
INTERNATIONAL COLLABORATION IN HIGHER EDUCATION IN SRI LANKA**

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ABSTRACT

This study aimed to assess the productivity of higher education faculty by developing a structural model incorporating predetermined factors such as transformational leadership exhibited by academic heads, faculty cultural intelligence, and self-efficacy. Following scientific validation and reliability tests, questionnaires were employed as data-gathering tools in this descriptive-correlational and causal-comparative research design. Data were collected from 500 higher education faculty members at the state universities in Region 10-Northern Mindanao, Philippines. The results unveiled a high level of productivity among higher education faculty, described by their exceptional proficiency in producing instructional tools, productivity in professional development and community engagement, and a moderately productive level in research and publication. Remarkably, academic heads demonstrated an excellent display of transformational leadership. Higher education faculty members exhibited high levels of cultural intelligence and self-efficacy. This implies that the academic head's exemplary display of transformational leadership highlights a commendable commitment to inspiring positive change and fostering growth within the academic setting. Simultaneously, the Higher Education Faculty exhibits remarkable levels of cultural intelligence and self-efficacy, showcasing their proficiency in navigating diverse cultural landscapes and their confidence in their own capabilities. The determinants of productivity of higher education faculty are transformational leadership coupled with faculty cultural intelligence and self-efficacy. This highlights the interconnectedness of these factors in shaping and enhancing the overall productivity of the higher education faculty.

Keywords: higher education faculty's productivity, transformational leadership, cultural intelligence, self-efficacy, structural equation model

J1

[100]

**AN ANALYSIS OF THE EXPERIENCES OF COLLEGE STUDENTS WHO HAVE
RESERVATIONS ABOUT BEING VACCINATED**

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ABSTRACT

The COVID-19 pandemic, caused by a newly discovered coronavirus, has had a profound impact on the health, economy, and cultures of people worldwide. This study investigates how respondents view COVID-19 vaccines and the reasons why individuals would be reluctant to get vaccinated against the virus. This was accomplished using purposive sampling due to a small number of unvaccinated students through the use of a structured questionnaire that was adopted from the study of Cabrillas (2021) which was then subjected to theme analysis after being collected using qualitative methods. According to the findings, there is a widespread understanding of COVID-19 immunizations, as well as a positive perception of the effectiveness of these vaccinations. Reluctance, on the other hand, emerged as a result of worries regarding the possibility of adverse effects, concerns regarding safety, and exposure to poor material. A modest amount of influence was exerted by religious beliefs on vaccination choices. Positive reinforcement, the provision of information, and possibly even the mandated administration of vaccinations was all proposed as potential positive government outreach strategies by the respondents. The research underscores the significance of properly communicating accurate information and interacting with communities to combat vaccine resistance and ensure widespread acceptance of the vaccine. To improve educational campaigns, fact-checking efforts, collaboration with religious figures, addressing safety issues, monitoring and countering misinformation, implementing strategic government actions, building supportive communities, and conducting ongoing research to customize interventions for different situations are some of the recommendations that have been made. To accomplish the goals of improving public health and community safety, it is vital to employ a variety of techniques to combat vaccination reluctance.

Keywords: COVID-19, hesitancy, vaccine, Pabakuna, Coronavirus Disease, SDG

J2

[101]

EXPLORING THE GAP IN IMPLEMENTING THE SDRRM IN THE PUBLIC ELEMENTARY SCHOOLS

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ABSTRACT

The three pillars serve as the foundation for conducting risk assessments, which are incorporated into the education development plans of regions, divisions, and schools. The objectives of this study are to determine the gap between the three pillars and the School Improvement Plan (SIP), to determine the significance of the relationship between the Disaster Risk Reduction Management (DRRM) Framework Pillars and the SIP, and to improve the SIP based on the gap analysis. Similarly, implementation difficulties were also investigated. The researchers made use of the Department of Education (DepEd) Gap Analysis template. Secondary data was taken from the SIP of the schools yearly achievement report. Results indicate that elementary public schools in San Mateo, Isabela, Philippines are highly compliant with the Three Pillars as the foundation for conducting risk assessments, and hindering factors have been identified and must be addressed. The findings of this study will eventually be used to enhance the school's SIP. Likewise, DRRM in schools is essential for protecting children and educators from the immediate and long-term impacts of disasters, ensuring the continuity of education, building resilience, and fostering a safer and more prepared society.

Keywords: basic education framework, risk assessment, risk disaster, school improvement plan, SDRRM Framework, Three Pillars

J3

[101]

**DEMYSTIFYING MISCONCEPTIONS ON KEY TENETS OF QUALITY BASIC
EDUCATION IN CHIKOMBA DISTRICT, ZIMBABWE: A SYSTEMATIC
LITERATURE REVIEW**

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ABSTRACT

Educational stakeholders in Zimbabwe have been expressing sentiments on deteriorating basic quality education. Accordingly, this led to continuous updates of curriculum peculiarly over past decade to embrace qualities of basic education. The specific objectives of the study were to: explore fundamental features of quality basic education, analyse challenges impeding it and propose strategies to overcome obstacles for quality basic education in Chikomba District, Zimbabwe. Research methodology adopted was Systematic Literature Review. A comprehensive 7 steps research design was crafted from the formulation of review questions to interpretation of results. This was done following the Preferred Reporting Items for Systematic Reviews and Meta Analyses Chart. Twenty-five sources were finally selected and reviewed from total of 35. These were government publications, journals, books, articles, published research papers, newspapers and international organisation's reports. Validity and reliability were enhanced through the utilization of in-depth analysis of data collection methods, administration of checklist and use of three experienced reviewers. The findings revealed that, basic quality education should encompass digital infrastructure; competency curriculum; inclusivity; learner-centred approaches; innovativeness; creativity; practical problem-solving skills; qualified teachers; abundant resources and quality assurance systems. 50% of the sources reflected economic challenges, 20% technological hindrances, 10% inconsistencies of policy makers, 15% social and cultural barriers and 5% indicated Geo-physical factors. The research proposes recommendations inform of strategies for attainment of quality basic education. These include: stakeholder engagement, society and problem-solving centred education, resources mobilisation, training of teachers, regular curriculum review, quality assurance and educational policies towards women inclusivity and those gifted differently. Conclusively, the research noted that qualities of basic education are multifaceted, and Chikomba District will be used as a field for data collection to test the hypothesis.

Keywords: demystifying, misconceptions, quality, basic education, systematic literature review

J4

[102]

**PRIVATE HIGHER EDUCATION INSTITUTION FACULTY TURNOVER
INTENTIONS: A CAUSAL MODEL**

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ABSTRACT

Educational institutions were regarded as significant social institutions in a society. They hold a powerful and controlling role in a social setting. In the Philippines, the turnover intention was higher among private-sector employees due to lack of security and tenure compared to public sector employees. This paper sought towards determining the faculty's extent of turnover intentions in six (6) different private higher education institutions in Cagayan de Oro City. Also, it looked into the most pressing factors that influence the level of faculty's level of job satisfaction, work engagement, and organizational commitment. This study used a descriptive-correlational and causal-comparative research designs of over 281 respondents. Moreover, the study revealed that faculty members were highly satisfied with their jobs, moderately committed, and highly engaged towards work. Furthermore, job satisfaction in terms of work and workplace and recognition and normative commitment significantly has positive relationship towards turnover intention. Aside from the aforementioned variables which showed relationship, dedication and continuance commitment significantly influence turnover intention. Hence, from the hypothesized 4 models, model 4 is the best fit model on turnover intentions. This is anchored on work, workplace, and normative commitment.

Keywords: higher education institution, teachers, turnover intention, job satisfaction, organization commitment, work engagement

J5

[103]

**LEADERSHIP STYLES OF ADMINISTRATORS IN ACADEMIC INSTITUTION
FOR A SPECIFIED SITUATION: INPUTS FOR AN IMPROVED PUBLIC SERVICE**

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ABSTRACT

Academic administrators perform essential roles for the school's performance. Administrative staff collaborate with instructors and administration, handle money and infrastructure, and foster community and parent-institution relations. The research's major goal was established then. In order to improve administrators' public service, the academic institution's administrators' leadership styles and the appropriate style for the situation were examined to create a Training Plan for Employees. It examined whether two sets of respondents assessed administrators' leadership styles differently. Agile leadership practice and responsiveness were evaluated separately to determine their relationship. Final aim was checklist and key informant interview validation to identify concerns and solutions. These goals were tested utilizing a researcher-made survey questionnaire from numerous customized studies sent to 150 personnel, 52 administrators and 53 rank-and-file. Key informant interviews were conducted with three selected administrators. Key Informant Interview focus groups assisted descriptive quantitative research. Descriptive statistics were used to analyze quantitative data, including frequency, weighted mean with four-point Likert scale measuring strongly agree to strongly disagree for styles practiced, completely responsive to not responsive at all for levels in different situations practices, and basic rank We utilized Pearson product moment correlation coefficient r and z -test for independence. Rank-and-file workers witnessed transactional leadership, while administrators saw transformational influence. The organization used several styles, but some stood out. The institution always responded well. The components' correlations showed leadership traits. This study indicated that servant leadership is best in routine settings, transformative in crises, and agile in disputes. The Key Informant Interview (KII) with Academic Institution Administrators confirmed certain administrator issues and solutions from the research. This led to a recommended training plan for staff to use the study's conclusions and best practices as administrators. The study will show that many leadership styles must be embraced and modified to different leaders to maintain economic and social success. Faculty who trains and workshop students in diverse leadership styles may be a wonderful place for them to test them out before leaving their positions.

Keywords: Leadership styles: agile, normal, conflict, emergency

J6

[104]

**A PREDICTION MODELLING OF LICENSURE EXAMINATION PERFORMANCE
UTILIZING PREBOARD REVIEW RESULTS OF THE SECONDARY EDUCATION
NEWLY GRADUATES**

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ABSTRACT

Institutions can utilize prediction models to identify students who are at risk of failing licensing exams and to implement targeted interventions. Additionally, they can guide curriculum enhancements in the areas that have the greatest influence on exam outcomes. Like previous studies such as Tarun (2017), mock board test results and the timing of self-review by students are reliable indicators of licensing exam scores. Students who do well on practice examinations and constantly engage in reviewing material tend to get better scores. The study utilized this prediction modeling for decision-making what variance of chance can be determined by the preboard results from the free review sessions of the college. The findings revealed that out of forty-six (46) secondary education newly graduates and first takers of the licensure examination for teachers (LET), this goes that 43.3% of the proportion of the General Education (GE) LET results' variance (mean=82.33, sd=3.51, F=35.365, p=0.000) can be explained by GE mock result (mean=59.2, sd=8.58) in the review. Similarly, the 39.1% of the Professional Education (ProfEd) LET result (mean=81.968, s.d=3.18, F=29.922, p-value=0.000) can be explained by the ProfEd preboard result (mean=61.58, sd=7.55). Lastly, since the review program did not offer specialization review only the combined GE and ProfEd results (mean=49.26, sd=1.77, F=22.688, p-value=0.000) were taken, that the 32.5% of the ratings can be explained by the Pre-Board combined results (mean=38.51, sd=5.84). Hence linear models consider new graduates $y = 0.273x_1 + 66.167$; $y = 0.268x_2 + 65.468$; and $y = 0.177x_3 + 42.428$ may be considered for the decision whether to take the LET exam for institutional performance. However, the study recommends utilizing not only linear models since many factors are possible to explore including 4-year specialization course grades, scores in each course during the review, and the number of attendances in the review as the study limits to do.

Keywords: general education, professional education, licensure examination, prediction modeling, secondary education, preboard

K1

[105]

**FIRST IMPRESSIONS MATTER: EFFECTS OF SYLLABUS DESIGN AND
CONSTRUCT TO STUDENT IMPRESSION FORMATION AND MOTIVATION**

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ABSTRACT

This study aimed to investigate the effects of syllabus design and syllabus construct on the impression formation and motivation of first year students in a rural state university in the Philippines. A quantitative 2x2 factorial independent-groups research design was utilized to determine the significant difference between 4 syllabus treatments for an introductory mathematics course.. A 9-point Likert scale survey questionnaire adapted and appropriated from the studies of Nusbaum et al. (2020), Alsharif & Qi (2014) and Wheeler et al. (2019) was used for data collection. MANCOVA showed that syllabus design significantly affected the students' impression of their professor ($F=18.78$, $p < 0.001$) and their motivation to study the subject ($F=9.19$, $p = 0.003$). It was observed that regardless if the syllabus is teacher-centered or student-centered, students that received visually-rich syllabus perceived their professors more positively and are more motivated to study the course than those who received a text-rich syllabus. Multiple regression analysis showed that even after controlling for sex, college degree program, and senior high school strand, the effect of syllabus design towards impression formation ($p = <0.001$) and motivation ($p=0.003$) remains significant. Results of this study imply that the usage of more visual materials in education facilitates the process of rapport-formation between student and instructor. Usage of visually-rich materials lead to students forming more positive feelings towards their teacher and the subject which are factors that also affect academic performance.

Keywords: syllabus design, syllabus construct, learning, motivation, impression formation

K2

[106]

TIME'S UP: THE EFFECT OF TIME WARNING MODE AND FREQUENCY ON MEMORY TASK

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ABSTRACT

Time perception and memory processes, particularly memory recall, have been one of the interests of the researchers as they constitute the daily basis, especially in academia and the workplace. It is a crucial element of human cognition, influencing our ability to organize information, make decisions, and remember events. This study has been planned to determine the effect of time warning mode and frequency on memory tasks. This study seeks to bridge the gap in our understanding of how time-related cues affect memory. The study was set out on 304 MMSU undergraduate students with ages ranging from 18 to 23 years old after seeking their consent. The sample was predominantly from the psychology and civil engineering programs. However, outliers were removed from the data analysis ending with 296 subjects. The study carried out a two-by-two factorial between-subject design wherein Time Warning Mode (Appearance and Sound) has two levels, frequent and infrequent. The study used convenience sampling, however the subjects were randomly assigned into the four different treatments. The participants are provided with 2 minutes to memorize 20 non-vocabulary words and another 2 minutes to write down the words that they can recall. The analysis of memory scores was done using Analysis of Variance. The study revealed that there is no significant difference between the time warning modes. However, there is a significant difference between the frequency of time warning modes. This study will serve as a basis for educators and test proctors in administering examinations and enhancing test-takers' cognitive abilities, particularly memory recall. Given its importance, more studies are needed to better understand the effect of time warning on students' performance in memory.

Keywords: memory recall, memorization, time warning, memory task, examination

K3

[107]

**STUDENTS' PERCEPTIONS ON METACOGNITIVE SCAFFOLDING STRATEGY
FOR LEARNING WRITING COURSE**

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ABSTRACT

This study explores students' perceptions on Metacognitive Scaffolding Strategy (MSS) for learning Writing Course in Universitas Halu Oleo. A qualitative research design was employed to obtain natural participants' experiences regarding the implementation of MSS in Writing Course. The researcher used purposive sampling technique to select participants which consist of 12 female and 8 male students of English Education Department. Data was gathered through observation, student interviews, and the gathering of pertinent records. Focus Group Interviews (FGI) were the main research instrument employed in this study. The gathered material was examined using thematic analysis. The findings show that the students' perceive positive feelings towards the implementation of MSS in Writing Course in terms of motives, experiences, attitude, personalities, interest, and expectations. The implementation of MSS in Writing Course brings students perspectives that MSS can engage teaching methods in promoting interactive learning, motivation and purpose, and clear communication and understanding. In addition, the students also agree that MSS can enhance effectiveness of varied instructional approaches, technology integration, personal relevance, metacognitive awareness, encouragement and feedback, clarity of instruction, structured learning, and goal-oriented learning in creating an enriching and effective learning environment.

Keywords: Metacognitive Scaffolding Strategy, Writing Course, Students' Perceptions

K4

[108]

LEARNING STYLES AND CRITICAL THINKING RELATIONSHIPS IN NATURAL SCIENCE: A SYSTEMATIC REVIEW

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ABSTRACT

Learning styles reflect habitual behaviors that determine distinct preferences within learning situations. Evidence suggests that critical thinking could evolve through learning processes. The concepts of "learning styles" and "critical thinking" have been independently examined in the science literature. This study aims to identify the potential relationships between learning styles and critical thinking in students. Databases were searched for descriptive correlational studies that considered the relationship between learning styles and critical thinking in science education. The authors independently progressed the stage screening. Retrieved articles were reviewed at title, abstract, and complete text levels according to predetermined criteria. All included studies were quality appraised using a rating tool for descriptive studies. Fifteen studies were finally included. Findings were grouped under four essential themes pre: dominant learning styles, critical thinking scoring, critical thinking evolution across academic progress, and learning styles–essential correlations of thinking. Learning styles' diversities, weak critical thinking, and inconsistent evolution through academic progress were revealed across studies. Critical thinking differed significantly between learning styles. Commonly accepted models in science education were lacking in both learning styles and critical thinking. Within studies, identical learning styles were found to be positively or negatively related to critical thinking. However, comparative findings across studies revealed that all learning styles might be positive determinants toward essential thinking evolution, suggesting a relationship between learning styles and critical thinking.

Keywords: learning styles, critical thinking, science learning

K5

[109]

**LEARNING STYLES AND CRITICAL THINKING RELATIONSHIPS IN
NATURAL SCIENCE: A SYSTEMATIC REVIEW**

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ABSTRACT

Introduction: Examination phobia is a psychological condition in which people experience extreme stress, anxiety, discomfort and irrational fear before or during examination. Many students experience some nervousness or apprehension before, during or after a test or examination. When such experience aggravates to a degree that it leads to poor academic performance and interferes with learning, the student could be said to suffer from examination phobia. The objective of the study is to investigate the effect of Study Skills Training in reducing examination phobia among students of Federal College of Education (Technical) Bichi, Method: The research design adopted for this study was a pre-test-post-test control group design. This design was chosen because it permits the investigator to study change. The target population comprised of all the NCE II students which is One Thousand Six Hundred and Forty-eight (1648) from eight schools were selected. Simple random sampling technique was used. Test Anxiety Inventory (TAI) was administered on the sample and the instrument was re-validated using test-re-test method of reliability and content validity. In all, Eighty (80) NCE II students scored 50 marks and above participated in study. The students were randomly assigned to experimental and control groups. The experimental group was exposed to Study Skills Training (SST) and the control group was not given any treatment. Two research questions and two null hypotheses were formulated and tested. Result: It was discovered that there is a significant effect of SST intervention in reducing examination phobia of those in SST group ($t=35.02$, $P < 0.05$). Male and female students do not significantly differ in the effect of SST intervention in reducing examination phobia. Conclusion: Based on the efficacy of SST, the researcher recommends that professional Counsellors should utilize the SST intervention as it has proven effective in the reduction of examination phobia.

Keywords: examination fear, study skills training, test apprehension, examination

K6

[110]

**BLUEPRINTS OF THOUGHT: THE ROLE OF REFLECTIVE THINKING IN
ARCHITECTURAL LEARNING IN CONTEMPORARY TIMES**

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ABSTRACT

Reflective thinking in architecture is a multifaceted process that plays a pivotal role in shaping the design and development of built environments. This paper aims at exploring the concept of reflective thinking within the context of architectural practice, emphasizing its significance in fostering innovation, addressing societal needs, and promoting sustainable design solutions. By critically analyzing the various dimensions of reflective thinking, including introspection, critical analysis, and iterative problem-solving, this paper elucidates how architects engage in a continuous cycle of reflection to enhance their professional practice. Drawing upon theoretical frameworks from psychology, philosophy, and design theory, it investigates the cognitive processes involved in reflective thinking and their implications for architectural creativity and decision-making. Furthermore, it discusses the incorporation of AI for individuals to track their progress over time and identify patterns of growth and areas for improvement. This longitudinal view enables continuous development of reflective thinking skills and fosters self-awareness and adaptability. Reflective thinking is also crucial for new generations as it fosters deeper understanding, critical analysis, and personal growth. In an ever-changing world, it equips individuals with the ability to adapt, innovate, and make informed decisions. This paper aims to examine various interpretations of reflective thinking and create a model of reflective action in the context of developmental education. The data for this paper is gathered from diverse literature sources, exploring both the current capabilities and potential of artificial intelligence (AI) in terms of its practical applications and capacity. The outcome of this paper is the development of a comprehensive framework that incorporates artificial intelligence (AI) to facilitate reflective thinking by integrating various techniques such as journaling, mental models, etc.

Keywords: reflection, introspection, critical analysis, personal growth, architectural education

POSTER PRESENTATIONS

P1

[111]

IN AI, SHALL WE TRUST? A GROUNDED THEORY STUDY ON ARTIFICIAL INTELLIGENCE IN LANGUAGE EDUCATION

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ABSTRACT

This research explores the integration of Artificial Intelligence (AI) into language teaching to augment traditional methods. The study investigates how AI can complement, rather than replace, teacher-student interactions, emphasizing the importance of a balanced approach to innovation in language education. Utilizing a mixed-methods approach, the study includes surveys to gather insights from 300 language teachers on their perceptions and experiences with AI integration. Classroom observations are conducted to observe the dynamics of hybrid teaching models and collaborative AI-driven activities. Interviews with educators provide in-depth understanding of their strategies, challenges, and successes in augmenting language teaching with AI. Results indicate that educators see AI as a valuable tool to enhance student engagement and provide personalized feedback. Challenges such as teacher training and curriculum alignment are identified, along with strategies to overcome them. The study highlights the benefits for students, including enhanced engagement, personalized learning experiences, and improved collaborative skills. The findings contribute to the growing body of research on AI in education by providing practical insights into balancing AI innovation with traditional teaching methods. Recommendations include tailored professional development for educators, curriculum alignment with AI activities, and fostering a culture of collaboration and engagement among students using AI-supported tools.

Keywords: AI, language teaching, innovation, technology

P2

[112]

PLAGIARISM PREVENTION SKILLS TRAINING: A SERVICE-LEARNING PROJECT

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ABSTRACT

Plagiarism continues to be a significant global issue in universities and colleges, requiring effective measures to tackle its prevalence. This research explores the writing productions of pre-service teachers at Union Christian College (UCC) as part of a Plagiarism Prevention Service-Learning Project. The study investigates the similarity index of these writings, the project's progression, its influence, and the implementation of strategies to discourage plagiarism. This study employs a rigorous research design based on educational theories emphasizing active learning and experiential education. Research findings indicate a concerning prevalence of plagiarism among pre-service teachers, highlighting the urgency for intervention, hence the development of the Plagiarism Prevention Service-Learning Project. This comprehensive initiative encompasses thoughtfully designed components such as workshops, practical assignments, peer reviews, and reflective journals. By engaging with these elements, students gain a deeper understanding of plagiarism and develop essential technical writing skills while fostering a culture of academic integrity. Additionally, the project's focus on continuous improvement, gathering feedback, and thorough documentation ensures longevity. This research highlights the importance of a solid theoretical framework in guiding project development and validating its effectiveness. The study provides valuable insights for future research, advocating for long-term impact assessments, comparative studies across different fields, and evaluations considering global contexts. It also suggests integrating technology to enhance plagiarism prevention efforts further. To sum up, the Plagiarism Prevention Service-Learning Project shows excellent potential in tackling plagiarism among pre-service teachers. By incorporating educational theory and taking a holistic approach, this project equips students with the necessary skills and knowledge to address plagiarism effectively, thus promoting a culture of academic integrity.

Keywords: plagiarism, academic integrity, service-learning, technical writing, higher education

P3

[113]

**MANAGEMENT PRACTICES OF COOPERATIVE EDUCATION PROGRAMS OF
INTERNATIONAL COLLEGES AND UNIVERSITIES IN THAILAND**

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ABSTRACT

Cooperative Education Program is a planned approach of integrating academic learning with real-world experience. Students can offer a significant contribution to the organizations they work for while they are on the job. This study was conducted to assess and analyze the management practices of cooperative education programs offered in the four (4) international colleges and universities in Thailand along the areas of analysis, design, development, implementation, and evaluation (ADDIE). This further looked into the challenges that hindered their management practices. It utilized the descriptive-survey research design. A researcher-made survey questionnaire was administered to three groups of respondents - the students enrolled in the cooperative education programs (interns), the cooperative education program implementers (academic supervisors) under the faculty of business administration, and the cooperating agency supervisors where the interns were deployed. The data gathered were treated using weighted mean, frequency, percentage, and ANOVA with the help of SPSS version 20. The research found that the extent of practice of the cooperative education programs, along analysis and development were rated High; Design was rated from slightly managed to very highly managed; Implementation and Evaluation were rated highly managed to very highly managed. Significant differences were found between the groups' perception on the extent of practice along the different areas. They also experienced challenges in implementing the management practices along ADDIE. The results of the study served as basis in evolving a training development plan to further enhance the management of cooperative education programs of the universities and colleges in Thailand.

Keywords: ADDIE, cooperative education programs, descriptive survey research method, international colleges and universities, management practices, Thailand

P4

[114]

**THE EFFECTIVENESS OF A GENAI-INTEGRATED COACHING SYSTEM ON
SCIENCE INQUIRIES GENERATED BY REFUGEE STUDENTS**

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ABSTRACT

This study explores the impact of the Stanford Mobile Inquiry-based Learning Environment (SMILE) system, enhanced with Generative AI (GenAI), on refugee students pursuing careers in STEM fields. Addressing the educational disparities faced by this group, the research assesses how SMILE promotes interest in science topics and improves inquiry skills. Through a mixed-methods approach, refugee students interacted with SMILE, engaging in science inquiries while their progress and the evolution of their questioning abilities were monitored. SMILE's integration of GenAI provides personalized coaching, leveraging Bloom's taxonomy to offer nuanced feedback aimed at advancing students' cognitive engagement. Initial findings reveal a significant enhancement in the complexity and depth of student inquiries, indicating a progression towards higher-order cognitive questions. This advancement underscores the efficacy of SMILE, equipped with GenAI, in fostering critical thinking and creative problem-solving among refugee students. The study's implications extend to educational technology and pedagogy, suggesting that AI can play a pivotal role in providing equitable access to quality STEM education for diverse learner populations. By demonstrating SMILE's adaptability to the unique needs of refugee students, this research contributes to the discourse on the integration of AI into educational settings to support marginalized communities in STEM disciplines.

Keywords: Stanford Mobile Inquiry-based Learning Environment (SMILE), GenAI, inquiry-based learning, refugee students, STEM education, cognitive engagement

P5

[115]

DISSEMINATING HERITAGE THROUGH SERIOUS GAMES: A SYSTEMATIC REVIEW IN LATIN AMERICA

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ABSTRACT

This research examines the urgent need for innovative heritage dissemination methods in Latin America, a region rich in cultural, architectural, and natural legacies yet facing dissemination hurdles due to limited resources and access barriers. In this context, Serious Games (SG) emerge as a fundamental instrument for heritage dissemination, offering an engaging channel that captivates audiences and stimulates learning. Despite the scarcity of case studies in Latin America, there has been an effort to deploy SG and related playful activities as strategic tools for disseminating heritage, highlighting the region's growing commitment to innovative educational methods. Employing a systematic review methodology, this research sorts through existing literature to outline the panorama of SG in Latin America. This method involves a detailed evaluation of sources, focusing on SG designed for heritage education, to extract pertinent data on resources, thematic coverage, user engagement mechanisms, and overall impact. The findings highlight seven distinct SG implementations, spanning augmented reality, location-based games, and virtual environments. These case studies reveal a diverse spectrum of SG applications, from immersive historical site explorations to interactive learning modules on cultural practices. Analysis of these implementations uncovers nine variables that influence the efficacy of SG in heritage dissemination, such as technological innovation, content relevancy and cost-effectiveness. The study underscores the transformative potential of SG in enhancing public access and engagement with heritage resources and reveals that SG not only facilitate a deeper understanding of cultural narratives but also fosters a sense of ownership and responsibility. The research advocates for strategic integration of SG into educational curricula and public outreach programs, positing that well-designed SG can significantly boost public awareness of heritage, thus contributing to its sustainable preservation.

Keywords: architecture, gamification, serious games, cultural heritage, systematic review

P6

[116]

**AUGMENTED REALITY SUPPORTING READING ENGAGEMENT AND
EMOTIONS OF UNIVERSITY STUDENTS**

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ABSTRACT

Augmented Reality (AR) has been proved to have potential and benefits in language education, given its unique features of contextual visualization and interactive learning environment. However, to date, no previous studies have been conducted to understand its application in teaching Chinese as a Foreign Language (CFL) university students' reading comprehension. To unpack and broaden our understanding of the role of AR in reading, this study aims to examine the effects of AR in supporting CFL learners' reading comprehension, in particular in the aspects of reading engagement and emotions. This study utilized a quasi-experimental design, which included 54 CFL undergraduate students who studied in a northeastern university in China. In the experimental group, each students was administered a mobile-based AR tool embedded in their reading activities, while the control group used printed papers in their reading procedures. Quantitative results from independent t-tests showed that there was a significant difference between students in the experimental group and control group with regard to learners' overall reading engagement and emotions. However, no significant differences were found in the subscales of reading boredom and reading anxiety. The present findings can contribute to the future development of AR in instructional design embedded in reading activities and shed some light on implications for both educators and instructors.

Keywords: augmented reality, reading engagement, reading emotions, CFL, higher education



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