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Preface

Welcome, Hoşgeldiniz, Willkommen, Bienvenue, Добро пожаловать, لهسوﻻها, 歡迎光臨, Bienvenido, Καλώς Ορίσατε, Benvenuto, ようこそ, 환영합니다, ยินดีต้อนรับ, אבהקורב to the 5th Global Conference on Education and Research (GLOCER 2024), proudly organized and sponsored by the University of South Florida M3 Center(USF).

GLOCER 2024 received 150+ abstracts/papers for the conference from 200+ authors. Eighty-eight of these abstracts/papers have been accepted for presentation at GLOCER 2024. GLOCER is truly an interdisciplinary and global conference, as we will host presenters from 16 countries and from different fields of study. We would like to thank each author for submitting their research papers to GLOCER 2024.

GLOCER 2024 was a peer-reviewed, double-blind review conference, and we extend our deepest gratitude to every reviewer who ensured a high-quality and seamless paper review process. A special thank you goes to the University of South Florida M3 Center for hosting GLOCER 2024 and to Suleyman Demirel University for sponsoring the *University of the Future* Think Tank. Your contributions have been instrumental to the success of this event. Also, we would like to extend our gratitude to our keynote speakers: Drs. Kevin Yee, Denise Davis-Cotton and Bendegul Okumus. We extend our heartfelt gratitude to the conference coordinator, Selda Duzgun, for her tireless efforts and dedicated service at the GLOCER 2024 Conference. We also sincerely thank all the other volunteers for their invaluable contributions.

Congratulations to all of the presenters at this conference and a warm Welcome!

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From Evolution to Revolution: Narrowing the Technological Skills Gap of Accounting Graduates

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Abstract

A growing number of firms have cited the lack of technological skills that college graduates entering the accounting profession exhibit, raising concerns about their ability to serve clients effectively. Yet accounting graduates are not exposed to new technologies in the classroom or on the Certified Public Accountant (CPA) exam. The CPA Evolution initiative aims to restructure the CPA Exam to ensure that graduates have the technological skills to enter the profession and assist educators with transitioning to the new exam through the development of the CPA Evolution Model Curriculum. We argue that while the restructuring of the CPA exam and a Model Curriculum provide opportunities to address the technological skills gap of accounting graduates, a divide still exists between the technological requirements of the profession and the technological skills accounting graduates acquire academically. To narrow the technological skills gap, we suggest that educators embrace an approach that embeds technology across the accounting curriculum. This study suggests a framework educators can employ to embed technological competencies in an accounting curriculum. We expect this framework will narrow the technological skills gap and prepare accounting graduates to enter the profession successfully.

Keywords: T.E.C.H. framework, technological skills gaps, accounting education, accounting curriculum, accounting graduates

Advancing Blended Education: Caribbean Lecturers' Reflective Narratives of Caution, Creativity, and Change

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Abstract

Blended learning is part of the global digital transformation trajectory, as such, Caribbean higher learning institutions ought to leverage digital technologies catering to student populations that have become more diverse regarding learning capabilities, readiness, skills, and prior life experiences. Blended teaching requires lecturers to constantly self-reflect on their pedagogical practice to enhance student learning. However, there is yet to be a significant corpus of literature within higher education that takes the perspective of lecturers. This is of concern given lecturers' role as blended learning pedagogies who are best placed to identify challenges, proffer practical solutions, and design innovative strategies to ensure quality learning outcomes and the advancement of university-level blended teaching mandates. This qualitative case study explored how twelve Caribbean lecturers experienced and navigated the teaching process in a blended undergraduate psychology program. Twelve themes emerged from the data representing the pedagogical practices that lecturers believed were important in facilitating effective blended teaching. The themes ranged from behaviors that the lecturers successfully achieved or aspired to achieve (e.g., prior preparation, promotion of student-led activities, promotion of communal learning) to cognitions that guided their blended practice (e.g., desire to balance student and instructor needs, pedagogical self-confidence, PGCUTL, re-evaluation of pedagogical practices). A grounded theoretical approach was used, resulting in a new pedagogical model: The Blended Learning Environmental Nexus Development (BLEND) model, which highlights cognitive, behavioral, and environmental factors that contribute to success for students and lecturers alike within a blended learning environment. Study implications, limitations, and recommendations for future research are discussed.

Keywords: blended learning, Caribbean higher education, digital transformation, pedagogical practices, BLEND model

Digital Competence in Construction: A Case Study From Khyber Pakhtunkhwa, Pakistan

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Abstract

The construction sector has long been considered the backbone of a nation's growth, particularly evident in developing countries like Pakistan. However, amidst its pivotal role, the construction industry in Khyber Pakhtunkhwa, Pakistan, faces significant challenges due to a lack of digital competencies among its workforce and management. This study investigates the effects of inadequate digital competencies on the construction industry in Khyber Pakhtunkhwa, Pakistan. The construction sector, a critical driver of economic development, increasingly relies on digital technologies for enhanced efficiency, cost management, and project execution. However, a significant portion of the workforce and management in Khyber Pakhtunkhwa lacks the necessary digital skills, impeding the industry's growth and productivity. Digital transformation has revolutionized industries worldwide, enhancing efficiency, accuracy, and cost-effectiveness. In the construction sector, digital tools such as Building Information Modeling, project management software, and data analytics have proven to streamline operations, improve communication, and optimize resource utilization. Similarly, more advanced equipments are now used in the modern international world, while Khyber Pakhtunkhwa province of Pakistan is still using old and outdated methods and techniques for the construction of buildings, roads, and other important infrastructure. Among all the issues due to the lack of digital competencies in the construction industry of Khyber Pakhtunkhwa province of Pakistan, Time overrun stands as a formidable challenge, impeding progress and economic advancement. Time overruns simply denote the delay in completing a construction project beyond its stipulated timeline—an unsettling deviation from the agreed-upon schedule during tendering to the actual physical completion. This study explores the prevalent issues besieging government-funded construction projects in Pakistan's Khyber Pakhtunkhwa province, aiming to unearth the underlying causes behind these persistent time overruns. The insights gathered herein hold promise for all stakeholders within the construction domain, facilitating timely and budget-conscious project completions.

In its preliminary phase, the research undertook an exhaustive review of literature spanning the past two decades, laying bare the multifaceted causes and repercussions of time overruns in construction projects worldwide. From this comprehensive analysis, distinct categories of time overrun emerged, encompassing factors ranging from contractor capabilities to external environmental constraints. Subsequently, in the study's second phase, a questionnaire survey was conducted, engaging 328 contractors, consultants, and clients through personal interactions. These questionnaires were distributed among the stakeholders either personally or by email and WhatsApp. Personal visits to the stakeholders proved to be more fruitful in the scenario of explaining the questionnaire to a group of stakeholders including clients, contractors, and consultants. During discussions with the groups of stakeholders, many new ideas and questions

came to mind and were included in the study. The sample size was selected from a total of more than 4000 contractors, consultants, and clients (as per the website of Pakistan Engineering Council www.pec.org.pk), working in different districts of Khyber Pakhtunkhwa Pakistan.

Making use of the statistical proficiency of SPSS, the collected data was passed through a rigorous analysis, revealing a remarkable alignment with the identified categories from existing literature. Using a mixed-methods approach, this research combined quantitative surveys with qualitative interviews and case studies to assess the current state of digital literacy in the region's construction sector. The analysis reveals that the absence of digital competencies results in numerous operational challenges, including inefficient project management, inaccurate cost estimation, poor communication, and suboptimal data utilization. These issues contribute to project delays, cost overruns, reduced quality, and overall decreased competitiveness.

Moreover, the study explores the root causes of this digital competency gap, identifying factors such as limited access to digital training, outdated educational curricula, and a lack of awareness regarding the benefits of digital tools. The research also examines the potential impact of digital transformation on the construction industry, emphasizing the need for targeted training programs, investments in digital infrastructure, and policy reforms to foster a digitally competent workforce. The research study carefully analyzed the data collected from different stakeholders of the construction industry of Pakistan Khyber Pakhtunkhwa province and recorded the impact of insufficient digital skills on the efficiency, productivity, and competitiveness of construction businesses in the region. The research identified key areas where digital deficiencies hinder progress, including project management, cost estimation, communication, and data analysis. The findings highlight a gap in digital literacy that leads to project delays, cost overruns, and decreased quality. The study also explored potential solutions, such as targeted training programs and the integration of digital tools, to enhance the sector's performance. Recommendations are provided for stakeholders to bridge the digital competency gap, aiming to foster a more efficient and competitive construction industry in Khyber Pakhtunkhwa. Notable among the identified causes of time overrun in the Construction industry of Khyber Pakhtunkhwa province of Pakistan due to lack of digital competencies were the financial constraints plaguing contractors, delayed payments exacerbating project timelines, procedural bottlenecks hindering final inspections, and suboptimal construction methodologies. Moreover, the scarcity of construction materials in the market and deviations in specifications compounded the challenges.

Conversely, the ramifications of time overrun proved equally dire, with notable effects including the lapse of time, overrun of costs, project abandonment, and the specter of litigation looming large. Such findings underscore the imperative for proactive measures aimed at mitigating time overrun, fostering a conducive environment for the expeditious and efficient completion of construction projects, thereby catalyzing sustainable development and prosperity. The findings underscore the urgency of addressing digital skill deficiencies to improve the sector's performance and competitiveness. The study provides actionable recommendations for stakeholders, including contractors, clients, consultants, government bodies, educational institutions, and industry leaders, to bridge the digital competency gap. In this modern age of technology, it is recommended that all technical universities, colleges, and degree-awarding institutions equip engineers and other technical staff with the modern digital competencies required in the modern construction industry. In conclusion, the construction industry in Pakistan faces significant challenges due to a pervasive lack of digital competency. This deficiency hampers productivity, efficiency, and innovation,

thereby limiting the industry's growth potential and its ability to meet modern demands. Addressing these digital gaps through targeted education, training, and investment in technology is imperative for the industry to thrive and compete on a global scale. By embracing digital tools and competencies, Pakistan's construction sector can significantly improve its performance and sustainability.

Keywords: digital competence, construction, time overrun, contractor, consultant, client

Acknowledgments

We would like to express our heartfelt gratitude to all those who contributed to this study titled Lack of Digital Competency in the Construction Industry of Khyber Pakhtunkhwa, Pakistan. Our sincere thanks go to the industry professionals and stakeholders who generously shared their insights and experiences. We are also grateful to the academic advisors and colleagues whose guidance and support were invaluable. Special thanks to Professor. Dr. Rab Nawaz Lodhi, for his support and guidance during this study. Without the collective efforts of these individuals and organizations, this study would not have been possible.

Reconnecting Schools With the Community Through Cultural Heritage

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Abstract

Education and Culture: When addressing these two concepts, it is difficult to ignore the link between culture and education. On the one hand, there is culture, with its symbolism and limitless range of meanings and substance; on the other hand, there is the human being, capable of absorbing the culture and imparting its values in the formation of new cultures. This cognitive conflict of subjects with reality happens in social action and social communication when the individual develops his or her own picture of the world, through which he or she identifies wholly new and separate linkages to the world. Education is a basic right as well as a requirement for exercising other human rights. Education and culture are intrinsically linked in the sense that education promotes cultural diversity and allows people to express their right to participate in cultural life, as underlined in international treaties. Furthermore, utilizing culture's potential for education in both formal and informal contexts broadens the development perspective. It broadens people's options beyond economics to include social, cultural, and spiritual aspects of their lives, thereby preserving alternative development models. In recent decades, there has been a rising recognition of the value of protecting cultural heritage as a method of supporting sustainable development, coupled with a similar re-evaluation of the role of heritage education as a vital driver of citizen participation. It is critical to design and execute heritage education at all levels, especially in the context of teacher education. Learning environment design necessitates those educational actors clarify, rationalize, and formalize their practices. To increase coherence and relevance, implicit cultural assumptions had to be revisited, resulting in a greater awareness of the type of learning that schools and universities specialize in, as well as the underlying values and beliefs. In this regard, the aim of this paper is to examine the importance of the connection between education and the culture module in schools and in the UN.

Keywords: education, culture, community, environment, heritage

Educator and Student Perspectives for Enhancing International Students' Sense of Belonging in Ontario Secondary Schools

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Abstract

While existing research has tackled barriers faced by international students in higher education, a gap remains in understanding these barriers' specific impact on the sense of belonging in secondary education. This study, influenced by Baumeister and Leary's (1995) need-to-knowledge theoretical framework, applied a concurrent mixed-methods approach, which incorporated both qualitative and quantitative elements that engaged 45 international students and nine teachers/staff. Combining and integrating both quantitative and qualitative data collected through student surveys and focus groups with students and staff/educators has shed light on four prominent themes. The first theme revolves around the pivotal role of interpersonal connections within the school environment. Welcoming teachers who engage personally psychologically, and educationally, expressing genuine interest in students' well-being and significantly contributing to a sense of belonging. The second theme centers on peer relationships, especially those sharing linguistic and cultural backgrounds. These peer connections including group work, clubs, and extracurricular activities establish a community to relax and find common ground amidst adaptation challenges, offering opportunities for cross-cultural friendships. The third theme highlights the impact of school activities, clubs, and extracurricular programs. These collective events offer an inclusive platform for students with similar experiences to connect and develop social networks, shared interests, and a sense of community. The fourth theme emphasizes the role of active classroom engagement, instructional strategies, and accessible resources as integral to enhancing international students' sense of belonging. This study's findings provide valuable insights for educators and institutions aiming to foster an inclusive and supportive environment for international students. Key takeaways emphasize the complex and interconnected components influencing international students' sense of belonging in Ontario secondary schools, offering guidance for educators, institutions, and families to create supportive environments for successful student adaptation into the school community.

Keywords: international students, sense of belonging, secondary schools

Reference

Baumeister, R. F., & Leary M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.

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Informal Learning Through Reflections – A Long Tail Theory Perspective

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Abstract

The continuous growth of the internet and technology has altered the way demand and supply of learning functions. To meet the various demands of the evolving societies, our formalized education systems no longer have a unified structure to develop a graduate. In order to meet the different learning needs of different individuals, informal learning has become a very important form of learning. Reflection is an important part of informal learning, and it is more of an ongoing learning process than an outcome. The concept of reflection has emerged and become more pervasive in education in contemporary times. We often reflect regularly on our work and assess where we stand and where we want to go. These reflections can be noted down and shared with mentors or team members for continuous improvement. Indian Technical and Vocational Education institutes, which consist majority of Industrial Training Institute (ITI), may no longer develop an integrated standard, integrated specification graduates, but can nurture the practitioners in various areas as required by society, and create a diversified, customized professional development. Although classrooms serve as the main channel for knowledge acquisition, their relevance to the needs of learners has disappeared. ITI needs to continuously develop more channels of learning that can be availed anytime and anywhere to meet the growing needs of society. This calls for a change in current education, teaching, and learning methods. Reflection is widely acknowledged and accepted as a learning tool. Reflection facilitating informal learning can be offered by using long-tail perspectives through establishing supportive mentoring relationships.

Keywords: informal learning, long tail theory, industrial training institutes, online study, reflections

An Innovative School-University Professional Development Collaboration: Linking an Australian Regional University With a Local School

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Abstract

In Australia, there has been a history of partnerships between universities (as Initial Teacher Education providers) and schools. This has included at various points in time, the use of demonstration schools, the establishment of research partnerships, and the development of programs supporting cross-collaboration to explore and enhance professional experience and placements. While these partnerships have been developing with the view to achieving the common goal of preparing initial teacher education students for teaching, they have at times been criticized. This includes teachers towards university academics for their perceived lack of authenticity and connection to real-world practice (Clarke & Winslade, 2019) and conversely, it has been observed that university academics have reproached teachers for a perceived lack of evidence-based practice (Snow, 2019). As a result, the relationship between schools and universities can at times be characterized by a degree of underlying mistrust. It has been perceived that this can contribute to a potential disconnect of stakeholders and the further potential for each side of the relationship to lose sight of each other's roles. Ultimately this impacts the overall experience of the teacher education student as they progress through their study, particularly when they reach the nexus point between school and university of professional experience placement. Despite these perceived challenges, school-university partnerships provide the genuine opportunity to challenge and reconceptualize practice to establish meaningful relationships that benefit all stakeholders. It can be seen through the work of researchers such as Zeichner (2021) that there have been increasing calls for universities to reconsider their perceptions of schools from solely places of professional experience placements to genuine partners in the overall preparation of initial teacher education students. Genuine partnerships value the input from all stakeholders, and this should include not only university academics and teachers but also the teacher education students who find themselves in the middle of the process. Ferns and Lilly (2015) proffer that authentic accessible experiences can combine to allow initial teacher education students (as pre-service teachers) to successfully bridge the theory-practice divide in a safe space that can nurture their emerging skills and the development of their professional identity. Further, these experiences, such as co-designing and delivering professional development programs can assist with addressing the trust issues that may exist between universities and schools by facilitating authentic engagement with each other's practice and in each other's contexts.

This study explores an innovative partnership between a regional Australian university and a local school situated in the university footprint. A tangible aspect of this partnership is the aim to address current staffing challenges and high attrition rates that are currently a concern among regional areas of Australia. One of the partnership's innovations is its research team composition, including the collaboration of university and school-based staff. Unlike traditional university-led

research, this collaboration has the school identify areas of exploration (and professional development) with the university co-designing appropriate research strategies designed to provide the school with evidence on which to make strategic school planning decisions, with publications featuring lead authors from both institutions and the partnership featuring prominently in the school plan. Further, the project highlights the significance of university-school partnerships in fostering the professional growth of teacher education students. By emphasizing collaborative professional development, the initiative aims to enhance the mentoring capabilities of supervising teachers and improve the classroom readiness of pre-service teachers.

This presentation examines mentoring relationships, providing insights from both mentors and mentees. Currently, limited research exists on shared professional development of preservice and in-service teachers, particularly in regional Australian settings. Evidence provided by the jurisdictional body for the state of New South Wales has highlighted the difficulties that are being faced in rural and regional schools both regarding attracting and then keeping teachers into the profession. The attrition rate of early career teachers has been emphasized as an area of concern. Evidence suggests that part of the reason behind this early attrition may lie in the classroom readiness of graduates and feelings of being overwhelmed as they transition from student to teacher (AITSL). A key tenet of the partnership underpinning this study is the introduction of individualized professional development opportunities to improve the ability of in-service teachers to supervise pre-service teachers. As such this collaboration has the potential to build the mentoring capabilities of the supervising teacher, classroom readiness of the pre-service teacher, and improve student outcomes. In addition, both sets of stakeholders were also given the opportunity to engage in curriculum (numeracy) focused professional development sessions, again side by side, and then implement these learnings directly into their respective classrooms with in-service teachers and pre-service teachers being given equal status in the professional learning. It is important to note that prior to this collaboration there was a noted reluctance (by the school executive) within the in-service teacher community located at the host school to engage in professional development opportunities or adopt more contemporary approaches to classroom practice in addition to a perceived lack of confidence in mentoring pre-service teachers to undertake professional experience in their classroom.

This study utilizes a mixed method approach combining both survey and qualitative interviews to explore the perceived efficacy of stakeholders following the participation in a co-designed professional development program that places both the teacher as a mentor and the pre-service teacher side by side in the same learning context. Initial survey data collected from the host school was used to gain an understanding of attitudes toward professional development needs and mentoring of pre-service teachers. Focus groups and interviews were used to analyze a small case study of teachers (both in and preservice) and their experiences.

Findings suggest that the autonomy of professional learning supported in-service teacher's willingness to mentor pre-service teachers. The in-service teachers felt more prepared to provide appropriate mentoring support for pre-service teachers. The implications for continuing with professional learning at this school and how the school facilitated individualized learning programs in the current climate of teacher shortages and budget constraints will be explored. Preliminary results show that this collaboration has the potential to both build the mentoring capabilities of the supervising teacher and the classroom readiness of pre-service teachers and improve student outcomes. Importantly, the findings indicate that professional experience opportunities that

include a focus on genuine classroom professional learning can be effective in building the confidence and capacity of pre-service teachers. Additionally, in-service teachers indicated that through their participation they developed new insight into the learnings the pre-service teachers can bring to the partnership regarding contemporary practices in the classroom. Finally, results also indicated that school student performance in numeracy increased across the classes of the teachers involved in the program.

We argue that by building a robust university-school partnership, educational stakeholders feel supported and empowered. We feel that expanding such partnerships can advance quality work-integrated learning to improve outcomes for both student learning and contribute to a more sustainable employment level (particularly for early career teachers) in the profession supporting our partners in the education community.

Keywords: innovation, partnership, professional learning

References

- Australian Institute for Teaching and School Leadership (AITSL). What do we know about early career teacher attrition rates in Australia Recovered from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.aitsl.edu.au/docs/default-source/research-evidence/spotlight/attrition.pdf
- Clarke, D., & Winslade, M. (2019). A school university teacher education partnership: Reconceptualising reciprocity of learning. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 138-156.
- Ferns, S., & Lilly, L. (2015). Driving institutional engagement in WIL: Enhancing graduate employability. *Journal of Teaching and Learning for Graduate Employability*, 6(1), 116–133.
- Snow, P. (2019). What does evidence-based practice mean in education in 2019? *Nomanis*, 8(October Issue), 7-9.
- Zeichner, K. (2021). Critical Unresolved and Understudied Issues in Clinical Teacher Education. *Peabody Journal of Education*, 96(1), 1-7.

Fostering Ecological Awareness and Inclusion Through Narrative Pedagogy: Insights From the “Eco-Narrations” Project

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Abstract

The paper presents *The Eco-Narrations: Educational Care Atelier*, an innovative collaborative initiative between the University of Catania and the Municipality of Ragusa. The project integrates narrative pedagogy into education to advance ecological awareness and social inclusion. From June to December 2023, the initiative offered a comprehensive training program to over 100 educators across kindergarten, primary, and lower secondary schools, blending theoretical sessions with practical workshops. Central to the program were eco-narrations, which employed ecological storytelling to deepen knowledge, foster emotional engagement, and promote inclusion. The project enhanced teachers’ abilities to address ecological and social issues while cultivating a collaborative community of educators, students, and families. This partnership demonstrates the transformative power of narrative pedagogy in creating sustainable and inclusive educational practices.

Keywords: narrative pedagogy, agenda 2030, teacher training, ecological awareness

The Eye and the Voice: A Fourth Relationship Based on Eye-Movement Data and Its Implications for Classroom Teaching

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Abstract

Based on different strands of research reviewed, this presentation theorizes that the cognitive modalities of the eye and the voice are closely related during emotional prosody (reading aloud with intonation). Visual reading involves turning the printed words into intonation, while the voice converts the words into linguistic or emotional prosody. The first three strands of research, namely, hiccups, reading behavior, and race have been researched rather extensively, whereas the fourth strand (the waves) is just beginning. This presentation will introduce a method using three groups (native English speakers, advanced speakers, and learners), three reading tasks (sentences with one emotional word, it-clefts, and contrastive sentences), and two conditions (reading aloud and passive listening). The research method employs a 3 x 3 x 2 matrix, providing comprehensive data on how these variables interact. A total of 150 participants participated (native English speakers, advanced, and intermediate learners) in our experiments. In this presentation, continuous eye movements were measured by an EyeLink 1000 eye-tracker, and voice changes were assessed by pitch (F0) and word duration (milliseconds). The main question was: Do the eyes focus on words that are then stressed strongly? In summary, it investigates whether the eye-voice relationship plays a role in the production of melodic or emotional prosody under different conditions.

Keywords: eye tracking, prosody, pronunciation teaching

Exploring Andragogical Content Knowledge and the Implementation of Andragogical Principles in Literacy Facilitation Among Adult Literacy Facilitators in Nigeria

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Abstract

This study investigated adult literacy facilitators andragogical content knowledge and how andragogical principles are implemented as well as the professional development needs of the literacy facilitators in Nigeria. The study adopted a quantitative research approach, and the participants of the study consisted of 120 adult literacy facilitators in Oyo State, Nigeria. A structured questionnaire consisting of 4 domains (demographic data, andragogical content knowledge, use of andragogical principles, and training needs) was used as a data collection instrument. Data collected from the study were analyzed using mean, standard deviation, and chi-square. Results revealed that literacy facilitators' andragogical content knowledge is high and the major andragogical principles literacy facilitators implement in their teaching practices include learner guidance and mentoring; picture description and analysis; and question and answering as these were ranked 1st, 2nd, and 3rd respectively. Further, the results show that among the various professional development needs of the literacy facilitators, digital literacy training ranks first followed by general facilitation training and andragogical content training. Moreover, it was revealed that marital status, education background, and literacy centre ownership type significantly predict andragogical content knowledge among literacy facilitators. Therefore, it was suggested that the identified factors should be considered when hiring and training as well as designing support systems that address different life circumstances for facilitators to thrive in their roles. This will not only enhance the facilitators' capabilities but also improve the overall quality of literacy education provided to adult learners in the country.

Keywords: andragogical content knowledge, literacy facilitators, adult learners, andragogy, Nigeria

Application of the Hattie and Timperley Power of Feedback Model With Graduate Teacher Education Students

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Abstract

Student feedback is a crucial part of learning and improvement. The Hattie and Timperley (2007) model has been identified in the literature as the most useful feedback model evolving out of the literature on feedback and formative assessment prompted by the seminal Black and Wiliam (1998) study. The model consists of three questions: Where am I going? (feed-up), How am I going/doing? (feedback), and Where am I going next? (feed-forward). The combination of these three questions establishes a process for preparing the student with an advance organizer (the goal or student learning outcome), an assessment of actual performance, and a mindset about what the student will learn next (possibly the next SLO in a sequence). This research study provides perceptions of 61 master's level teacher education students whose performance tasks were evaluated, in part, using the three-question model. Student responses to an open-ended survey item, collected as part of the researcher's regular self-evaluation of teaching, were analyzed. Results provided an enthusiastic endorsement of the model. Of note, however, is that the model was supplemented by additional feedback through rubrics and comments on student work, which limits the interpretation of the results independent of the model. The perceptual data on the Hattie and Timperley model strongly support continued use and testing of the model with similar or different populations and in combination or without additional feedback tools.

Keywords: feedback, formative assessment, higher education, adult education

Review of Further Education Teachers’ Attitudes, Intentions, and Behaviors in Response to the “Professionalization Agenda” UK

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Abstract

The FE “Professionalization Agenda” is a contentious concept. Putting it simply, it refers to the process of increasing the status, recognition, and qualifications of those who work in a sector or area. For these professionals, ‘Cognitive mastery’ of a subject, demonstrating expertise through occupational behaviors and practices, and technical and tacit knowledge following a period of tertiary education and vocational training and experience are essential prerequisites in Further Education (ETF, 2018, 2022). Since 1993, consecutive governments in England have introduced a range of education reforms referred to as the Professionalization Agenda, aimed at developing the quality of teaching and training provisions in Further Education (FE). This agenda, while overtly seeking to achieve parity of esteem of FE teachers with schoolteachers has reportedly given more work and diminished autonomy, imposing a contract culture on organizations, a target culture on staff, and a wider sense of de-professionalization and proletarianization with little consultation with the profession (Crawley, 2024). This study explores the views of a sample of teachers, teacher educators, and education managers on the impact of enhanced academic and professional qualifications and professional membership on teachers’ development and practice. The research uses questionnaires and semi-structured interviews to collect data from participants working in both vocational and academic curriculum areas, teaching in FE institutions in England. The research adopts a pragmatic design (Creswell & Creswell, 2018; Silverman, 2021), which accommodates the features of both positivist and interpretivist paradigms and uses the research questions to structure a practitioner-based study. Policies are constantly evolving and growing in number over the eight years of my study leading to a review and implementation of new standards from 1st September 2024 (DfE, 2023; ETF, 2022). Eliciting the views of the FE workforce members on the so-called professionalization agenda policies yielded perceptive views contributing to an understanding of the narrowing and marketization of FE.

Keywords: professionalization agenda, performativity, continuous professional development (CPD), de-professionalization, professional autonomy

References

- Crawley, J. (2024) *Understanding the Further Education Sector - History, Challenges and Achievements* at <https://www.routledge.com/Understanding-the-Further-Education-Sector-History-Challenges-and-Achievements/Crawley/p/book/9781032742649>
- Creswell, J. and Creswell, D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, London: Sage Publications, Inc; 5th edition
- DfE. (2023) <https://www.gov.uk/government/publications/initial-teacher-training-reform-funding-guidance#full-publication-update-history>
- ETF. (2022) *New Framework guidance for Diploma in Teaching (FE and Skills)* <https://www.et-foundation.co.uk/news/new-framework-guidance-for-diploma-in-teaching-fe-and-skills-availabl/>
- Silverman, D. (2021). *Doing Qualitative Research* SAGE Publications Ltd; Sixth edition

Rubrics With Feedback for all Learning Levels

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Abstract

Rubric formats have evolved over the past two decades but continue to rely on the classic model of analytic rubrics, which do not meet the need for specific and useful feedback to students of any age. An alternative format is clearly needed. As a follow-up study of students ranging from third grade to adult, perceptions of teachers enrolled in a master's program are presented herein, confirming the utility of the "Areas for Improvement" (AFI) style rubric.

Keywords: assessment, rubrics, improvement

Tourism Culture in Students of Primary Education for Sustainable Development at the Local Level: An Experience From Mexico

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Abstract

Tourism education in Mexico has a significant history (Acevedo et al., 2024). However, the most remarkable progress has been at the university level, as the need to teach tourism culture from childhood is not consistently recognized as necessary for promoting sustainability. In their research on tourism knowledge, Rojas (2018) and Herrera (2013) identified a lack of tourist-educational interest, which they attributed to a lack of knowledge on the subject. Therefore, studying and promoting the formation of a general tourism culture from primary education is necessary to educate children to be responsible tourists and better hosts (López & Torres, 2023; Vico, 2024). Educating a general tourism culture in primary school should be a compulsory practice, as it facilitates understanding of sustainable tourism. The present study aimed to verify the tourism knowledge of primary school children in two schools in Juárez, Mexico, and examine teachers' perceptions of their contribution to the formation of a general tourism culture. Qualitative methodologies were used in combination with a diagnostic-projective approach, drawing on theoretical and empirical methods and techniques, such as participant observation, bibliographic analysis, diagnostic drawing, experiences analysis, and interviews. The diagnosis of tourism knowledge using projective drawing allowed for verification of differences according to the children's level of study regarding attractions, trips, and tourist activities, as well as drawing skills and affective-motivational aspects, verifying a progressive process of formation of general tourism culture from first to sixth grade. The findings were validated through interviews with the teachers. The results emphasize the importance of contributing to tourism culture from an early age, especially in areas that are popular sites for tourism, to promote sustainable development. In this study was found that the children could make reasonably accurate representations of tourism and showed basic knowledge of tourist attractions, tourist activities, and destinations they would like to visit. They also demonstrated drawing skills and reflected affective-motivational aspects associated with tourism, which coincides with findings by Sajid et al. (2024) and Vico (2024). These results point to a progressive formation of the general tourism culture differentiated by school levels and few sustainability references. In this regard, it was found that tourism education is more spontaneous than a planned process since it has yet to be consciously guided, despite the previous family experiences students bring. In another practical contribution, we found that the teachers perceived tourism as an essential socioeconomic activity in Mexico. However, they need to be made aware of the importance of incorporating it as an object of study, neglecting the high potential of study plans and programs and the leading role children can play in favor of sustainable tourism. Most could identify the contents that enhance tourism knowledge; nevertheless, they need more tools to operationalize them and put them into practice efficiently to favor the comprehensive training of children. From a methodological point of view, the projective drawing technique was validated as an efficient instrument for measuring the tourism knowledge of primary school children since it provided graphical information about ideas, concepts, emotions, and preferences. The findings coincide with those of Aguilera (2014) and Villamizar (2024) since the technique is

a form of creative expression that stimulates the integral development of the child and encourages the development of school tourism with the participation of the child population. Among the main limitations was the lack of motivation and willingness of some teachers to participate in the study for reasons that included a lack of knowledge of the importance of the subject. The sample was small, as only two schools in the city were selected, so the study findings must be confirmed by studying a larger number of children and the perception of more teachers in the municipality and the state. A significant amount of time was required since working with children is demanding, instructions must be repeated, and discipline must be maintained. In future research, a training program should be planned to form a general tourism culture in primary education for teachers in the municipality since it is a need felt by the teachers surveyed. The educational workshop on tourism for children should be implemented and the training efficiency evaluated. In addition, the opportunities associated with educational tourism in primary education should be explored in depth. School trips should be encouraged as a learning tool, and the practical use of the calendar of tourist days and events should be systematized in a self-managed way to contribute to sustainable development from primary school.

Keywords: tourism culture, knowledge, basic primary education, sustainability, Mexico

References

- Acevedo, E., Valdés, C., y Soberanis, F. (2024). La creación de programas públicos de educación superior en turismo en México, 1958-2021. *El Periplo Sustentable*, (46), 286-305. <https://rperiplo.uaemex.mx/article/view/20330>
- Aguilera, L. (2014). *El Dibujo infantil*. <https://bit.ly/3LcQYNh>
- Herrera, B. (2013). *Propuesta para el diseño de un circuito turístico dirigidos a estudiantes de sexto a décimo nivel de educación básica en el centro histórico de Quito. Ecuador*. [Tesis de grado. Instituto Superior Tecnológico de Turismo y Hotelería]. <https://bit.ly/4eViEDK>
- López, F., y Torres, N. (2023). *Conversemos en el aula. Una propuesta didáctica para la construcción compartida del conocimiento, con estudiantes de los grados tercero y cuarto*. [Trabajo de grado. UTP]. <https://repositorio.utp.edu.co/items/a4e12f11-76b0-4625-ab7a-0395c4f38e32>
- Rojas, C. (2018). *Conocimientos e importancia del turismo en alumnos de quinto grado de secundaria en colegios públicos de Puno y su interés en una guía de educación turística. Puno, Perú*. [Tesis de Grado. Universidad Nacional del Altiplano]. <https://bit.ly/3zymWB3>
- Sajid, M., Zakkariya, K., Surira, M., and Peethambaran, M. (2024). Flipping the script: how awareness of positive consequences outweighs negative in encouraging tourists' environmentally responsible behavior? *Journal of Sustainable Tourism*, 32(7), 1350-1369. <https://doi.org/10.1080/09669582.2023.2227776>
- Vico, M. (2024). Educación en sostenibilidad para el turismo. Propuesta para educación primaria en la Sierra de Cazorla, Segura y las Villas. [Trabajo de Fin de máster. Universidad de Jaén]. <https://crea.ujaen.es/handle/10953.1/23015>
- Villamizar, M. (2024). El dibujo libre como estrategia grafomotriz para la enseñanza de la escritura en primaria. *Educación y sociedad*, 22(1), 222-239. <https://dialnet.unirioja.es/servlet/articulo?codigo=9318000>

Building Interest and Awareness of Marine Science Careers

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Abstract

Introducing North Carolina Youth to Marine Science Careers and Critical Issues (INCY2MSCCI) is a Student STEM Enrichment Program that aims to inform diverse middle students about important environmental topics of concern in coastal and aquatic sciences. This is achieved through interdisciplinary and engaging hands-on activities that utilize a “Marine STEM” approach. In year 1, these opportunities included activities such as a tour of Duke Marine labs and a sea turtle talk and dissection, as well as Marine STEM career presentations completed by the students. Approximately 80 middle school students over two years will be recruited and selected from a 21-county service region of Northeast North Carolina. The emphasis of recruitment will be on finding and selecting students from underserved schools and students with little to no prior exposure to marine science topics. Through semi-structured interviews, observations, and administration of the MUSIC instrument, data were collected regarding students’ attitudes, interests, and understandings of marine and STEM-related careers. Results from Year 1 showed that the program fostered student engagement with marine STEM careers and motivated them to consider STEM-related education and career paths. However, addressing issues related to communication and hands-on engagement and refining the recruitment process would further enhance the program’s impact and provide a more rewarding experience for future participants.

Keywords: STEM Education, career development, marine education, blue economy

Acknowledgments

We would like to thank the Burroughs Wellcome Fund for the grant funding. Furthermore, we would like to thank the evaluation team and the project PI, Dr. Tim Goodale.

Producing More STEM Teachers: Sharing Formative Results From a Noyce Scholars Program

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Abstract

Science, technology, engineering, and mathematics (STEM) teacher education remains a critical national and global priority as the demand for a STEM-literate population and workforce grows each year. The Transforming Effective Educators of Mathematics and Science in Southeast Virginia (TEEMS) program addresses this need by developing teacher pathways that not only strengthen the STEM workforce but also tackle inequities in education systems. The program focuses on increasing the representation of underrepresented groups in STEM education, ensuring diverse voices are present at the head of the classroom. TEEMS achieves its goals through a range of strategies, including inclusive recruitment efforts that target students from diverse backgrounds, tuition support to reduce financial barriers and active learning opportunities. These learning opportunities include internships, student teaching experiences, mentorship programs, access to honors and graduate level classes, and coursework centered on cultural competency and DEIA-informed (diversity, equity, inclusion, and accessibility) pedagogies. The Year 2 Evaluation utilizes multiple data sources to assess the program's impact. The evaluation findings reveal that TEEMS is effectively preparing more STEM teachers while fostering inclusive teaching practices. The evaluation also offers recommendations for enhancing the program's efficiency, ensuring sustained success, and expanding its impact in the future years that it will be implemented.

Keywords: teacher preparation, initially licensed teachers, teacher scholarships

Acknowledgments

We would like to thank the National Science Foundation for the grant funding. Furthermore, we would like to thank the evaluation team and the project PI (Clair Berube) and Co-PI (William McConnell) for their continued support.

“Through Their Eyes”: Unveiling Student Perceptions of Academic and Administrative Support in a Caribbean Tertiary Institution

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Abstract

Student support, integral to student success in higher education, has become a global priority, with institutions facing increasing pressure to demonstrate their effectiveness in fostering positive student outcomes. This success encompasses academic, personal, and social achievements that contribute to persistence, graduation, and overall development (Schreiner, 2018). This success is strongly linked to students' perceptions of the academic and administrative support they receive, as such support directly impacts their engagement, satisfaction, and resilience. The COVID-19 pandemic exposed significant vulnerabilities in educational systems, particularly in the Caribbean, where institutions already struggled with limited resources and technological challenges. As Caribbean higher education institutions (HEIs) transition into the post-pandemic era, there is an urgent need for adaptive, holistic support structures that address both existing and new challenges (Beckles & Richards-Kennedy, 2021). This study explored students' perceptions of academic and administrative support at a Caribbean HEI. The study utilized a convergent mixed methods design to gather quantitative data through surveys and qualitative data from focus groups. The findings revealed that students viewed academic support positively, particularly faculty engagement, competence, and advisement, which were strongly associated with satisfaction. However, significant challenges were noted in administrative support, including delays, inconsistent information, and a perceived lack of professionalism among staff. Timeliness and accessibility emerged as critical factors influencing both academic and administrative satisfaction.

Keywords: student success, student satisfaction, academic support, administrative support, higher education

References

- Beckles, H., & Richards-Kennedy, S. (2021). Accelerating the future into the present: Re-imagining higher education in the Caribbean. In H. van't Land, A. Corcoran, & D. C. Iancu. The effect of incentives in web surveys: Application and ethical considerations. *The promise of higher education: Essays in honour of 70 years of IAU* (pp. 475–488).
- Schreiner, L. A. (2018). Thriving in the second year of college: Pathways to success. *New Directions for Higher Education*, 2018(183), 9–21. <https://doi.org/10.1002/he.20289>

“AI Technology Application and Students” Behavior: In Exploring the Impact on Academic Performance at Higher Education in Vietnam

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Abstract

Higher education has been impacted by the development of artificial intelligence (AI), particularly the program ChatGPT with its widespread application among students. This paper aims to investigate how perceived usefulness, motivation to use, ethics, and concerns regarding ChatGPT influence students' usage behavior of the tool and, eventually, their effects on student learning outcomes in the context of Vietnamese universities. A mixed-methods approach using SPSS and SmartPLS was applied for the research model, leveraging information from focus group interviews and 205 survey responses. The results of this study show two factors - perceived ethics and perceived concern, that do not explain for any change in usage behavior. Most importantly, perceived usefulness and motivation to use are significant determinants of students' usage behavior and habits, leading to a change in their academic performance. Therefore, the findings reflect the practical mindset of students in using ChatGPT to gain academic achievement, outweighing their concerns or ethics, if any. Furthermore, ANOVA analysis shows that students with a longer year of schooling have stronger motivation to use ChatGPT, and there exist different perceived usefulness and academic performance for students with high levels of frequency of use. Those findings could help educators and policymakers be aware of the irreversible tendency for students to apply AI tools in higher education in order to gain higher academic achievement.

Keywords: ChatGPT application, usage and behavior, academic performance, higher education

Academic Support – What Are We Missing?

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Abstract

A discussion among tutors on a PGCE (Postgraduate Certificate in Education) further education pre-service teacher training program highlighted an important issue: the concern that Black and Minority Ethnic (BME) students were failing assignments at a higher rate than their white counterparts and not seeking academic support from the university either before or after their first submission. This concern was compounded by the observation that BME students were not engaging with available academic support services to improve their resubmissions, raising significant questions about the accessibility and effectiveness of these services for BME students. The attainment gap between BME and white students has long been a priority for universities across the UK, with numerous institutions implementing strategies to address and reduce the disparity in degree outcomes (Arday et al 2022; Mahmud and Gagnon 2023). The authors' university has engaged with the toolkit produced by Kingston University to develop strategies with the aim of closing the attainment gap (Mcduff et al 2018). The university has employed the use of the Continuous Improvement Tool to track and identify mainly undergraduate programs with concerning levels of student attainment, degree outcomes, or dissatisfaction. This has led to increased scrutiny of these programs, including creating task forces and having meetings with university leadership to develop action plans and implement changes to program content and structure in an effort to improve metrics on an annual basis. Whilst these measures and strategies have been primarily aimed at undergraduate students, there has been a noticeable lack of specific focus on postgraduate students. Metrics such as the Postgraduate Taught Experience Survey (PTES) and Postgraduate Research Experience Survey (PRES), published by Advances HEA, signify a growing recognition of the need to address the postgraduate attainment gap. The outcomes of these surveys provide insight into the student experience in postgraduate programs in terms of key areas such as teaching and learning, engagement, assessment and feedback, organization and management, and skill development. The outcomes benchmark the university against other similar institutions and competitors. The public nature of these measures increases university accountability and potentially impacts student recruitment. This is particularly important in the current climate where student recruitment has been a concern and the ability to attract a diverse population of students is critical to the survival of many universities. One critical area intersecting both undergraduate and postgraduate student experiences is academic support. Research by Mimirinis, Ventrous, and Wright (2024) explored how academic support is perceived by Black students on an undergraduate program and how they perceive support, revealing differing perceptions and needs depending on their ethnoracial background and level of privilege. Arambewela and Maringe (2012) further highlight that postgraduate students often view academic services as less relevant to their needs compared to undergraduate students, suggesting a disconnect between the services offered and the actual needs of postgraduate students.

Given this context, the authors of this research project were motivated to investigate how BME postgraduate students perceive and use academic support services in their context. The research aimed to explore whether the perceptions of academic support services by these students align with or diverge from the experiences reported by tutors. An interpretive approach was adopted to delve into the experiences of BME students, specifically focusing on alumni from the past five years to gather insights into their use of and engagement with academic support during their studies. The research methodology involved distributing a questionnaire to the alumni to gather initial perceptions of academic support. Following this, focus groups were conducted to provide a more in-depth understanding of their experiences and engagement with support services. Additionally, the research team interviewed key stakeholders, including an academic tutor, a digital champion, and a tutor from the postgraduate program, to gain a comprehensive view of the support system from multiple perspectives. Preliminary findings from the research project suggest a disparity between the perceptions held by tutors and the actual experiences of students. While tutors may perceive a lack of engagement from BME students with academic support services, the student's experiences reveal a broader understanding of what constitutes academic support. Students often view academic support not only in terms of centralized university services. This gap between tutors' perceptions and students' lived experiences underscores the need for a more nuanced understanding of how academic support is utilized by postgraduate students. Bridging this gap is crucial for improving student success and enhancing the overall postgraduate experience. Addressing these discrepancies involves not only revising how support services are offered but also ensuring that they are accessible and relevant to the diverse needs of postgraduate students. To address these issues, the research presentation will outline the preliminary findings in more detail with key recommendations. First, it will emphasize the importance of integrating feedback from students into the development and delivery of academic support services. This could involve regular consultations with students to better understand their needs and preferences, thereby aligning support services with the actual requirements of the student body. Second, the presentation will advocate for targeted interventions to support postgraduate students, recognizing the unique challenges they may face. This could include creating tailored support programs and resources that address the specific barriers encountered by BME students, as well as fostering an inclusive and supportive environment within the academic community. Lastly, the presentation will propose the implementation of ongoing professional development for tutors and academic staff. This training would focus on cultural competence and the specific needs of postgraduate students, ensuring that all staff members are equipped to provide effective support and understand the diverse perspectives of their students. In conclusion, this research project highlights a critical area for improvement in the support of BME postgraduate students. By addressing the gap between perceptions of academic support held by tutors and the actual experiences of students, universities can work towards more equitable outcomes and a more inclusive academic environment. The recommendations set forth aim to bridge this gap and enhance the support structures available to all students, ultimately contributing to greater success and satisfaction in postgraduate education, and further research to be conducted.

Keywords: BME students, higher education, assessment support, student success, postgraduate, award gap

References

- Arambewela, R., & Maringe, F. (2012). Mind the gap: staff and postgraduate perceptions of student experience in higher education. *Higher education review*, 44(2), 63-84.
- Arday, J., Branchu, C., & Boliver, V. (2022). What do we know about Black and minority ethnic (BAME) participation in UK higher education? *Social Policy and Society*, 21(1), 12–25
- Mahmud, A., & Gagnon, J. (2023). Racial disparities in student outcomes in British higher education: Examining mindsets and bias. *Teaching in Higher Education*, 28(2), 254-269.
- Mcduff, N., Tatam, J., Beacock, O., & Ross, F. (2018). Closing the attainment gap for students from black and minority ethnic backgrounds through institutional change. *Widening Participation and Lifelong Learning*, 20(1), 79-101.
- Mimirinis, M., Ventouris, A., & Wright, E. (2024). Variation in Black students' conceptions of academic support. *British Educational Research Journal*, 50(1), 241-259.

Necessary Digital Competencies of Preschool Teachers in Austria

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Abstract

This paper analyses the competencies preschool teachers need to provide appropriate digital education to preschool children. In many countries models for digital competencies have been developed and implemented for primary and secondary school teachers in recent years (Dardanou & Kofoed, 2019; Kewalramani et. al, 2023; Novella-García & Cloquell-Lozano, 2021), there are only a few national models for preschool teachers worldwide, but none in the German-speaking area (Fröhlich-Gildhoff et al., 2011). The aim of this paper is therefore to create a list of specific digital competencies that preschool teachers need in comparison to school teachers for the extension of the Austrian model for digital competencies of teachers, *digi.kompP* (Brandhofer et al., 2016). As a research methodology, interviews with Austrian experts in the fields of early childhood education, media pedagogy, computer science, and preschool teacher education were conducted. Austrian expert's interviews dealt with questions about the digital competencies required by preschool teachers, differences in competencies compared to schoolteachers, the timing and nature of competence development for preschool teachers, and the institutions involved. As a result of this study, sixteen new can-do statements were developed for the expansion of the existing *digi.kompP* model, which maps the specific competencies required by teachers in Austria. The findings of this study also provide valuable insights for the development of training and further education programs, emphasizing the critical need to integrate digital education into the curricula of vocational training and further education programs for preschool teachers. Furthermore, this study presents compelling arguments for the promotion of digital education in early childhood education and demonstrates the necessity for a collaborative strategy for digital education at the preschool level.

Keywords: preschool teachers, digital competencies, competence model

References

- Brandhofer, G., Kohl, A., Miglbauer, M., & Nárosy, T. (2016). *digi.kompP – Digitale Kompetenzen für Lehrende. Das digi.kompP-Modell im internationalen Vergleich und in der Praxis der österreichischen Pädagoginnen- und Pädagogenbildung*. R&E-SOURCE - Open Online Journal for Research and Education, 6, 14.
- Dardanou, M., & Kofoed, T. (2019). It is not only about the tools! Professional digital competence, in Gray, C. and I. Palaiologou (Eds.), *Early Learning in the Digital Age*. SAGE Publications.
- Fröhlich-Gildhoff, K., Nentwig-Gesemann, I. & Pietsch, S. (2011). *Kompetenzorientierung in der Qualifizierung frühpädagogischer Fachkräfte: Eine Expertise der Weiterbildungsinitiative Frühpädagogische Fachkräfte (WiFF)*.
- Kewalramani, S., Palaiologou, I., & Dardanou, M. (2023). *The Integration of Internet of Toys in Early Childhood Education: Research from Australia, England, and Norway*. Routledge.
<https://doi.org/10.4324/9781003185840>.
- Novella-García, C. and A. Cloquell-Lozano (2021), *The ethical dimension of digital competence in teacher training*. Education and Information Technologies, Vol. 26/3, pp. 3529-3541, <https://doi.org/10.1007/s10639-021-10436-z>.

A Secret Society of Readers: College-Age Mentors' Literacy Experiences With Young Adolescent Mentees

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Abstract

This study occurred within a literacy initiative designed to build reader identities among underserved middle school students. Using a near-peer mentoring model, mentees were paired with college-student mentors to interact weekly around books and reading. Reader interests and identities are influenced by affective and relational approaches through mentored reading experiences and a variety of texts. This qualitative case study aimed to identify the ways mentor/mentee relationships affect reader interests, attitudes, and skills and to evaluate the initiative. We codified key themes in the interview data and identified ideas that were recurrent and reinforced. We assert that near-peer relationships were central, group dynamics matter, reader interests and identities were key, reader identities were (re)discovered, and time proved both structural and relational. Literacy practices through mentored reading experiences compel us to consider how interactions with texts and each other shape who we are and who we become.

Keywords: mentoring, affect theory, near-peer, relationships, reader identity, reader agency, wide reading

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Integrating Indian Knowledge Traditions to Enhance Self-Concept and Emotional Intelligence in Education

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Abstract

This paper examines the incorporation of Indian knowledge traditions into the prevailing educational framework with the objective of enhancing students' self-concept and emotional intelligence. The study aims to provide a comprehensive perspective on Social and Emotional Learning (SEL) by incorporating traditional Indian concepts such as Yoga, Ayurveda, and Vedanta. It offers a comprehensive overview of the relevant Indian traditions and emphasizes the importance of incorporating these traditions into contemporary education. The results indicate notable enhancements in students' ability to manage their emotions, understand themselves, and interact with others. This study delves into the ways of amalgamating ancient wisdom with contemporary pedagogies in which Yoga, Ayurveda, and Vedanta—three branches of Indian knowledge—can be incorporated into modern educational practices to help students develop a healthy sense of identity and emotional intelligence. Because of their emphasis on harmony, compassion, and self-awareness, these traditions provide comprehensive practices that are compatible perfectly with SEL's ideals. Studies show that adolescents' autonomy, self-awareness, and feelings of compassion are significantly enhanced by these traditions, and this study summarizes the current literature on SEL and the advantages of Indian educational approaches. The approach aligns with the vision of holistic education outlined in the NEP-2020 policy and various other government initiatives globally. Several studies' important results are summarized here: yoga therapies boost endurance, state of mind, and managing stressful situations; Ayurvedic practices raise the clarity of mind and emotional equilibrium; and Vedantic self-exploration approaches optimize a sense of self and psychological resilience. Teachers can contribute to the welfare of students, happiness, and academic performance by incorporating these techniques into a SEL curriculum that is both thorough and globally relevant. Investigation into the practical implications of these holistic strategies in the fields of education and developing curricula, as well as their lasting impacts, are recommended for future studies in the study's conclusion.

Keywords: Indian knowledge traditions, self-concept, socio-emotional learning, educational practices, emotional intelligence, curriculum, Ayurveda practices, equilibrium, Vedanta, yoga

Generative AI in Academia: Student Perspectives on ChatGPT's Impact

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Abstract

Artificial Intelligence (AI) tools, particularly Large Language Models (LLMs) like ChatGPT, have gained significant attention for their ability to generate coherent, human-like text. Since its launch in November 2022, ChatGPT has become a popular tool in education, aiding tasks from grammar checks to drafting documents. However, its evolving capabilities, such as GPT-4's text and image processing, have introduced ethical challenges, particularly in higher education. These include concerns about academic integrity (Lund & Wang, 2023), over-reliance on AI, and the potential devaluation of learning outcomes (Cu & Hochman, 2023). This study examines how university students, particularly preservice teachers, perceive and interact with ChatGPT, focusing on its impact on academic practices. A university-wide survey (Amani et al., 2023) conducted in spring 2024 captured data from 126 respondents aged 22 to 66, focusing on critical thinking, problem-solving, and teamwork in the context of AI. The study adopts a constructivist approach, viewing learning as integrating new experiences with existing knowledge, to explore how future educators view AI's potential benefits and risks. Results reveal that preservice teachers recognize AI's ability to enhance efficiency in lesson planning, research, and data organization while aiding brainstorming and personalized learning. However, concerns about over-reliance, diminished critical thinking, and ethical misuse persist. Disciplines emphasizing creativity and subjective judgment, such as music and psychology, raise skepticism about AI's capacity to replicate the human element essential to these fields. The study highlights the need for responsible integration of AI tools into education to ensure they complement, rather than replace, human effort in developing essential skills. This research underscores the critical role of teacher education programs in preparing future educators to navigate AI's complexities. By addressing academic integrity, ethical considerations, and effective AI use, these programs can empower teachers to integrate AI responsibly, shaping the future of education in an increasingly AI-driven world.

Keywords: ChatGPT, teacher education, preservice teachers, AI in Academia

References

- Amani, S., White, L., Balart, T., Arora, L., Shryock, D. K. J., Brumbelow, D. K., & Watson, D. K. L. (2023). Generative AI Perceptions: A Survey to Measure the Perceptions of Faculty, Staff, and Students on Generative AI Tools in Academia (arXiv:2304.14415; Issue arXiv:2304.14415). arXiv.
- Cu, M. A., & Hochman, S. (2023). Scores of Stanford students used ChatGPT on final exams, survey suggests. Preuzeto s <https://Stanforddaily.com/2023/01/22/Scores-of-Stanford-Students-Used-Chatgpt-on-Final-Exams-Survey-Suggests>.
- Lund, B. D., & Wang, T. (2023). Chatting about ChatGPT: how may AI and GPT impact academia and libraries? *Library Hi Tech News*, 40(3), Article 3. <https://doi.org/10.1108/LHTN-01-2023-0009>

Exploring the Relationship Between Informal Learning Activities and Learning Motivations Among College Students

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Abstract

Informal learning is an important and prevalent learning type among college students, and it has different forms that occur in a flexible learning environment. Meanwhile, informal learning is also initiated by different learning motivational factors. Therefore, this study intends to investigate the relationship between informal learning and different learning motivational factors among college students. The data were analyzed using independent t-test, multiple regression, and Pearson-product correlations. Results indicated that adult learners have a higher level of informal learning than traditional college students. College students with a higher level of intrinsic motivation tend to adopt informal learning. The challenge is positively associated with informal learning. The finding of this research indicated that the methods of establishing a variety of learning resources and understanding psychological needs would be useful for educators and practitioners to engage college students in informal learning activities.

Keywords: informal learning, learning motivation, college students

Preparing Effective STEM Communicators Through Focused Interventions

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Abstract

Advancement of scientific knowledge is dependent on effective communication. It requires engineers and scientists to engage in well-grounded argumentation to establish and justify their claims. Educators must move beyond assignments that simply summarize or replicate established findings and begin to engage students in argumentation. This study had undergraduate students work in teams to identify topics for further scientific inquiry. They were tasked with making “pitches” as a tool for recruiting other students to their teams. It was realized that the engineering and computer science students involved with this project had not yet developed sufficient argumentation skills, which led a team of interdisciplinary faculty and researchers to leverage expertise from literacy education. The students participated in three intervention workshops for them to identify, evaluate, and eventually engage in scientific argumentation. This paper discusses notable observed changes in students’ argumentation skills and their increased confidence in other areas of scientific literacy resulting from these interventions.

Keywords: science communication, argumentation, undergraduate engineering

Examining Participant Awareness in the Military-to-Academic Transition: Insights Into Institutional Preparedness, Perceptions of Student Veterans, and Policy Recommendations

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Abstract

The transition from military service to academic life represents a critical and often under-explored challenge for veterans re-entering civilian society through higher education. While veterans bring a wealth of life experience, leadership, and discipline to their academic pursuits, they frequently encounter barriers that complicate their integration into the academic environment (Hunter-Johnson, et al., 2020; Morris, et al., 2022). The contrast between the rigid, hierarchical nature of military service and the often unstructured, self-directed learning environment of higher education can create significant challenges (Taylor, 2022; Taylor & Amboy, 2024). This paper examines the level of awareness and understanding among both veterans and academic stakeholders—faculty, administrators, and support personnel—concerning the distinct needs of veterans as they navigate this transition. Despite the increasing number of veterans enrolling in post-secondary institutions, research indicates a persistent gap in the understanding of how prepared both veterans and educational institutions are to facilitate a successful military-to-academic transition (Blaauw-Hara, 2017; Hunter-Johnson, 2020; Lopez, 2016). The existing literature suggests that while some universities have made strides in providing veteran-specific resources, awareness of these services remains inconsistent, and many veterans continue to report difficulties in accessing the support necessary for their success (Blaauw-Hara, 2017; Hunter-Johnson, 2020; Lopez, 2016). This paper shares insights into a study that sought to explore the depth of this awareness from the broader academic community. This paper shares research that utilized a mixed-methods approach to gain a comprehensive understanding of participant awareness of the military-to-academic transition. Surveys with university staff provide quantitative insights into their knowledge and use of institutional resources, perceptions of the academic environment, and challenges student veterans often face. Additionally, qualitative interviews with student affairs professionals offer deeper insights into how well the institution understands student veterans' needs and the effectiveness of current support systems. These perspectives are crucial for identifying awareness gaps that may hinder veterans' successful integration into university life.

Keywords: student veterans, military to academic transition, veteran critical theory

References

- Blaauw-Hara, M. (2017). Learning shock and student veterans: Bridging the learning environments of the military and the academy. *Composition Forum* 35, 1-12.
- Hunter-Johnson, Y. (2020). Promoting a Veteran-Friendly Learning Environment. *New Directions for Adult and Continuing Education*. 2020, 111-123. <https://doi.org/10.1002/ace.20387>
- López, O., Springer, S., & Nelson, J. (2016). Veterans in the College Classroom: Guidelines for Instructional Practices. *Adult Learning*, 27(4), 143-151. DOI: <https://doi.org/10.1177/1045159515601825>

- Morris, P., Barker, L., & Monar, A. (2022). Applying the social ecological framework to enhance wellness for student veterans. *Journal of American College Health*, 70(7), 2099-2107.
<https://doi.org/10.1080/07448481.2020.1844716>
- Taylor, W.N. (2022). Who's got your six: A formative evaluation of a military-connected student cultural competence workshop.
- Taylor, W.N. & Amboy, L.R. (2024) Exploring the Military-to-Academic-to-Career Journey. In Holt, P. (Ed.). *Enriching the Adult Learner's Experience in Higher Education*. Linus Learning (pp.119-140). Linus Publishing.

Evidence-Based Positive Behavior Support Practices for Improving Academic and Social Outcomes for Youth With Challenging Behavior

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Abstract

Youth with challenging behaviors such as aggression, noncompliance, and social skills deficits are at risk for suspension, expulsion, eventual incarceration, and persistent mental health challenges (Alberto and Troutman, 2021). Too, academic underachievement and behavioral excesses in school settings are predictive of each other (Gresham, 2016) and may create an escalating cycle leading to further antisocial responses (Kaufman & Landrum, 2017). The literature identifies evidence-based strategies (e.g., What Works Clearinghouse) that have been associated with positive academic outcomes (increases in on-task, content mastery), as well as advantageous behavioral outcomes (increases in prosocial skills with concomitant decreases in challenging behavior). These evidence-based practices are often referred to as *positive behavior supports* (PBS). Administrators and teachers, however, have reported a lack of sufficient knowledge to implement such PBS services (Hurst, 2013), and there has been a concomitant decline in their implementation (Fox et al., 2022). Evidence-based PBS is exemplified by (1) differential reinforcement of appropriate behavior that is incompatible with, or competes with, externalizing problem behavior and academic disengagement, (2) self-directed interventions, or self-management, and (3) social skills instruction. Differential reinforcement strategies include DRI, or differential reinforcement of appropriate responses that are incompatible with specific challenging behavior (e.g., reinforcing academic engagement to decrease off-task), DRA, or differential reinforcement of alternative responses that may compete with specific challenging behavior (e.g., reinforcing prosocial verbal behavior to decrease noncompliance), and DRO, or differential reinforcement of zero rates of challenging behavior (e.g., reinforcing behavior that occurs in the absence of aggression for specified intervals). Self-management strategies can increase academic engagement (e.g., work completion) and social skills (e.g., giving compliments). Social skills instruction is exemplified by a step-by-step social skills instructional model that includes task analysis of skills, identification of environmental *triggers* for the skill, behavioral rehearsals, assessment and delivery of reinforcer preferences, and planning for generalization.

Keywords: self-management, differential reinforcement, social skills instruction, positive behavior supports

References

- Alberto, P., Troutman, A., & Axe, J. (2021). *Applied Behavior Analysis for Teachers*. Pearson.
- Fox, R. A., Leif, E. S., Moore, D. W., Furlonger, B., Anderson, A., & Sharma, U. (2022). A systematic review of the facilitators and barriers to the sustained implementation of school-wide positive behavioral interventions and supports. *Education and Treatment of Children*, 45(1), 105-126.
- Gresham, F. M. (2016). Social skills assessment and intervention for children and youth. *Cambridge Journal of Education*, 46(3), 319–332. <https://doi.org/10.1080/0305764X.2016.1195788>

- Hurst, B. C. (2013). *What do administrators and teachers know about positive behavior intervention and support*. Southeastern Louisiana University.
- Kauffman, J. M., & Landrum, T. J. (2017). *Characteristics of emotional and behavioral disorders of children and youth* (11th ed.). Pearson.

Religious Higher Education in Prison: The Importance of Well-Being

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Abstract

A well-established body of research suggests that providing educational opportunities to those who are incarcerated, particularly programs that are faith-based prepares individuals for successful reintegration into their communities and promotes long-term outcomes. We contribute to this important topic using a mixed-methods evaluation to explore how participation in a faith-based higher education program in prison was associated with well-being and whether program graduates maintained their well-being once they were outside of prison. We conducted 109 interviews inside six different U.S. prisons and administered 157 surveys to participants in four states to determine that participation in a prison theological education program was associated with higher levels of well-being, healthy thinking, effective coping, and positive interpersonal relationships among our sample ($N = 256$).

Keywords: higher education, prison, well-being, faith-based

Meta-Analysis of Mathematical Proficiency Through Game-Based Learning: Innovative Strategies for Higher Secondary Education

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Abstract

Teaching and Learning have taken many forms, especially during Covid-19 where almost a year the entire academic and examination were online. It is during the pandemic; that we discovered that without Online learning the entire academic community would have been at a deadlock and its importance has been felt by common people. There are various dimensions of online learning one such is game-based learning. Game-based learning combines the fun of games with learning goals. In this research, the importance of game-based learning in enhancing mathematical proficiency is investigated by doing a meta-analysis of the related work carried out.

Keywords: game-based learning, mathematics, proficiency, effectiveness, collaborative and practical learning

Role of Leadership in Gender Diversity Management in Higher Education Information Technology Universities in Pakistan

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Abstract

All over the world, higher education institutions and universities are becoming more gender diverse in terms of their employees and students. The potential workforce demands the integration of effective gender diversity management policies, rules, regulations, statutes, and practices. The relevant studies reveal that leadership supports participation, equity, and inclusion of the diverse workforce for optimal organizational performance as a poorly managed workforce may result in decreasing the organizational performance in the short and long runs. Therefore, the effective role of leadership in workforce gender diversity management is found critical in human resource management, strategic management human resource management, and human development literature. Pakistan contains a highly gender-diverse society resulting producing a more diverse workforce. Pakistan has a highly gender-diverse society 51% male and 49% female and resultantly produces a more diverse workforce (Pakistan Bureau of Statistics, 2024). Even though 48.51% of the population of Pakistan are females, the ratio for employment / full-time services is 81% male and only 19% are females (United Nations Women, 2023). However, the research studies investigating effective diversity management and organizational performance in conjunction with leadership are very limited in Pakistan. Therefore, the major aim of this study is to investigate the relationship between gender diversity management human resource management policies and practices, moderating role of leadership, and organizational performance having various demographic conditions in higher education offering information technology in Pakistan. Gender diversity management is emerging research area, and technology universities are emerging in producing the highly skilled with the necessary knowledge, abilities, and competent workforce in Pakistan (Hanif et al., 2023). Therefore, the most emerging information technologies- computer science, software engineering, computer engineering, artificial intelligence, cyber security, data science and data analytics-based universities are chosen for this study. In this research study, the research philosophy adopted is positivism, research approach is deductive, the research method is quantitative, and the research design is correlational. Hypotheses developed, diversity management and moderating role of different leadership styles have been measured with the help of using scales validated from literature with a sample size of 500 employees of universities offering computing education and research programs in Pakistan. The moderation of different leadership facets on the relationship between diversity management policies and practices and perceived organizational performance has been established with structural equation modeling. The data analysis was performed with PLS-SEM in SmartPLS. The results of the study authenticate that leadership significantly impact the association between diversity management practices and

organizational performance in Pakistan. The study concluded that for effective gender diversity management, equity, and inclusion, an effective role of leadership is needed to create a more diversity climate in organizations in which all employees, irrespective of their gender feel valued, appreciated, and included. Lastly, practical implications for practitioners and policymakers are also discussed.

Keywords: gender diversity, diversity management, leadership and organizational performance

References

- Hanif, M., Athar, D. M. R., Rehman, D. Z. ur, Anwar, D. A., & Ali, M. Q. (2023). Diversity Management and Organizational Performance in Pakistan. *Reviews of Management Sciences*, 4(2), 95–116. <https://doi.org/10.53909/rms.04.02.0203>
- Pakistan Bureau of Statistics. (2024). “First Ever Digital Census” Key Findings Report. “First Ever Digital Census” Key Findings Report the Largest Digitization Exercise of South Asia, 148. <https://www.pbs.gov.pk/>
- United Nations Women. (2023). the Status of Women in Pakistan, 2023 a Summary. https://pakistan.unwomen.org/sites/default/files/2023-07/summary_-nrsw-inl_final.pdf.

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Chinese International Students' Classroom Behavioral Engagement in Canadian Classes: A Qualitative Study of Master's Business Students' Silence

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Abstract

As numerous Chinese international students (CISs) are pursuing their master's learning at Canadian universities, there is a growing interest in studying the factors and complexities that influence their academic achievement and classroom learning adaption during their learning at Canadian universities. This research investigated how master's business CISs adapted to Canadian classes and strategies promoting CISs' in-class engagement from CISs' and teachers' perspectives. Ten participants volunteered to participate in this study. The results reveal that most business CISs did not actively and spontaneously engage in classroom interactions. The influential factors to their engagement are various, including language proficiency, cultures, classroom environment, teachers and peers, personality, teaching content and approaches, and CISs' backgrounds. CISs suggest their teachers and schools engage in assisting their adjustment to Canadian classes.

Keywords: Chinese international students, classroom engagement, influential factors, promoting strategies

The Impact of In-Service Training on Employees: A Research in a Bank

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Abstract

In this study, the importance of in-service training and its impact on increasing skills, knowledge, attitudes, and overall productivity in the banking sector were investigated. Surveyed valid data were obtained from 101 employees working in the branches of a private bank operating in Konya in Türkiye. The findings revealed that in-service training is essential to ensure compliance with technological developments and legal regulations and to increase customer satisfaction in a competitive market. The research revealed the necessity of continuous employee development in order to meet evolving customer demands and make effective use of new technologies. In the study, the benefits and limitations of in-service training were discussed and the importance of special training programs with different learning preferences was emphasized. The results show that there is a positive relationship between in-service training and employee performance and that well-structured training initiatives can contribute significantly to organizational success. The findings revealed the critical role of human resources in maintaining competitiveness in the banking sector and the need for continued investment in employee training to foster a skilled and adaptable workforce.

Keywords: in-service training, bank employees, employee development

Use of Assistive Technology by Teachers of Students With Visual Impairments: A Descriptive Analysis

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Abstract

In schools, technology is used as a tool to enhance the knowledge and skills of learners with disabilities. The three primary challenges for students with visual impairments are: access to information, independent travel, and a lack of meaningful experiences. Assistive Technology (AT) can mitigate these deficits. This study aims to determine the use of AT in schools. An online survey was distributed to schools in Canada, the United States, and adjoining territories; 347 teachers of students with visual impairments (TSVIs) responded to the survey. The results explored the use of Refreshable Braille devices, Braille embossers, Braille Translation Software, Speech Access Systems, and tablets. Implications and recommendations are discussed. The study revealed that Assistive Technology (AT) can potentially facilitate literacy, numeracy, employment, socialization, and community-based needs of students with VI. However, in open-ended comments, participants stated their persistent barriers to integrating AT into the curricula. They advocated for ongoing training to keep up with evolving technologies. It is important that TSVIs advocate for use of AT in programs and services for their students because technologies can level out the playing field. In many countries, there is a lack of research related to AT utilization for school-age students with VI. This paper provides a platform for these countries to develop meaningful AT programs and services that can facilitate teaching and learning.

Keywords: blindness, impairment, braille, literacy, employment, school

What Has Problem-Based Learning (PBL) Got to Do With Teacher Education and Training?

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Abstract

Teachers' training in the 21st century is increasingly dependent on an inquiry approach to teaching and learning, and teachers need to consider how to develop their pedagogies to promote students' learning. One such approach is the use of PBL which is a constructivist approach to learning that is student-centered (Pepper, 2013; Loyens and Rikkers, 2017) allowing them to create knowledge and solve problems collaboratively through social interactions. PBL is extensively used in medicine (Barrows, 1996; Servant-Miklos, 2019) and other fields such as science and engineering are embracing it due to its impact on teaching and learning. Despite its advantages, it is not widely used in teacher education. The reasons will be discussed during the presentation. The presentation will explore research where PBL has been used to promote learning among students, and importantly identify those skills associated with PBL that teachers can promote among students. The PBL research was informed by Vygotsky's social constructivism allowing the participants to make meaning of the world around them. Various PBL approaches have been considered, however, this presentation will focus on Hung's (2009) 3C3R model for designing problems focusing on topics taught in the national curriculum for a group of students in secondary school in the United Kingdom. Data were collected through lesson observations, interviews, and focus group discussions. The recordings from the data were transcribed and analyzed using thematic analysis (Braun & Clarke, 2006) that generated themes representing the skills associated with PBL such as applying prior knowledge. Other interesting findings never considered elsewhere would be reported during the presentation. The study suggests developing teachers' pedagogical knowledge to promote learning in this area. However, other suggestions that have not been reported elsewhere will be presented.

Keywords: problem-based learning, collaboration, constructivism, knowledge creation

References

- Barrows, H.S. (1996). Problem-based learning in medicine and beyond a brief overview. In *New Directions in Teaching and Learning: Bringing Problem-Based Learning to Higher Education: Theory and Practice*; Wilkerson, L., Gijsselaers, W.H., Eds.; Jossey-Bass: Hoboken, NJ, USA, Issue 68, pp. 3–12.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Hung, W. (2009). The 9-step problem design process for problem-based learning: Application of the 3C3R model. *Educ. Res. Rev.* 4, 118–141.
- Loyens, S. M. M. & Rikers, R. M. J. P (2017). Instruction based on inquiry. In *Handbook of Research on Learning and Instruction*, 2nd ed.; Mayer, R.E., Alexander, P.A., Eds.; Routledge: New York, NY, USA, pp. 405–431.
- Pepper, C. (2013). Pre-service teacher perceptions of using problem-based learning in science investigations. *Teach. Science*, 59, 23–27.
- Servant-Miklos, V. F. C (2019). Fifty Years on: A retrospective on the world's first Problem-based learning programme at McMaster University Medical School. *Health Prof. Educ*, 5, 3–12.

International Mindedness: Still Relevant or Just Evolving?

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Abstract

International mindedness is a foundational concept that is found in the four educational programs in the International Baccalaureate Organization. It is also a term that has been discussed by scholars in the international education field. However, of late, the term is less often mentioned in the literature. Global competency and intercultural understanding are more prevalent in recent research. As an IB Diploma Programme Coordinator and a doctoral candidate, I am investigating the origin of the concept of International Mindedness in order to determine if it is still relevant and to discover how it has evolved or changed. How should education treat this concept? I am conducting ongoing research and will share my preliminary findings at the conference. I am researching the origin of the term International Mindedness and its impact, especially through the articles of Jeff Thompson, Ian Hill, and Mary Hayden. I am interviewing top scholars in the international field to hear their perspectives and experiences with the concept of International Mindedness, how they have witnessed any changes or evolution with the trend, and the importance of it still today in education.

Keywords: international education, international baccalaureate, IB diploma programme, global competency, intercultural competency

The Role of Family in Chinese Students' English Language Learning and Key Suggestions

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Abstract

This article examines the influence of Chinese families on their children's English language learning, with a focus on the role of family support in shaping students' English learning. Using Vygotsky's Zone of Proximal Development (ZPD) as a theoretical framework, this article analyzes how family resources, emotional support, and parental expectations foster Chinese students' motivation and language acquisition. By synthesizing current literature, this article reveals the impact of family socioeconomic status, parental involvement, and positive psychological support on students' self-efficacy, motivation, and language proficiency. Additionally, it highlights the potential negative effects of high expectations and excessive pressure, which may lead to anxiety and resistance to language learning. This article aims to help Chinese students achieve success and build emotional resilience in their English learning by providing practical recommendations for families, particularly for parents, like collaborating with schools and teachers, creating an English-friendly home environment, and offering emotional support.

Keywords: Chinese students, English learning, family influence

Bridging the Digital Divide in Developing and Developed Countries: A Meta-Analysis

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Abstract

Global school closures during the COVID-19 pandemic accelerated a universal shift towards technology-augmented education. This transference of learning platforms revealed both the potential and the challenges of implementing digital tools for learning worldwide. This meta-analysis examines the digital divide between developed and developing countries and how this divide disrupts the learning for students with disabilities, those living in poverty and extreme poverty as well as for those who live in remote areas. It concentrates on how technology has been used to surmount educational disparities, predominantly within the marginalized groups of students with disabilities, individuals in poverty, and those living in rural areas. Technology was principally used as an enhancement to traditional instructional methods, pre-pandemic. However, during COVID-19, technology, in all formats, became the fundamental means to conserve educational continuity. This research emphasizes the disparities in infrastructure, access, and implementation of technology across all socio-economic contexts, demonstrating the implications of educational technology in fostering inclusive education while identifying significant gaps that remain. The principal findings stress that efficacious technology-driven education requires more than just access. It mandates wide-ranging teacher training, equitable policies, and a reflective methodology for implementation. This meta-analysis affords expertise on how the reflections of COVID-19 can influence future educational decisions and strategies in developing and developed nations, contributing to recommendations for bridging the digital divide in a post-pandemic world.

Keywords: digital divide, technology in education, inclusive education, COVID-19 and education, developing countries, developed countries, educational disparities, marginalized groups, teacher training

Navigating Education in Island Spaces: Insights From Italian Minor Islands

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Abstract

Island Studies in Education is an interdisciplinary field that examines how geographic isolation, cultural heritage, and educational practices intersect to create unique learning environments. This conceptual paper explores the educational landscapes of Italy's minor islands, such as the Aeolian Islands and Pantelleria, focusing on how the concept of *islandness* shapes both formal and informal educational practices. Islandness, as outlined by Baldacchino (2006), refers to the distinctive characteristics of island life—including isolation, community cohesion, and ecological sensitivity—that inform the social and educational dynamics on islands. Stratford (2011) expands on this by exploring the spatial and relational dimensions of archipelagic settings, offering critical insights into the unique educational challenges faced by island communities. Drawing from the theoretical framework of place-based education (Gruenewald, 2003), this paper argues that educational practices on islands are deeply tied to local environments, history, and cultural identity. Place-based education leverages the physical and cultural context of a location, making learning more relevant to the student's lives and communities. On islands, this involves integrating local ecological knowledge, maritime traditions, and cultural practices into the curriculum, creating a learning environment that fosters not only academic knowledge but also environmental stewardship and cultural continuity. Italian minor islands present an intriguing case for understanding how schools function as hubs for community cohesion. Schools on these islands face challenges such as limited resources, geographic isolation, and pressures related to out-migration. However, they also provide opportunities to foster innovative, context-specific educational models. These models, deeply rooted in the local culture and environment, offer adaptive strategies that respond to the unique needs of island communities. For instance, multi-grade classrooms and community-engaged learning approaches, common in island schools, demonstrate how resource constraints can lead to creative educational solutions (Azzopardi & Grech, 2012). A key focus of this paper is the potential transferability of these insular educational models to other marginalized or peripheral regions globally. The challenges faced by island communities—such as geographic isolation and resource scarcity—mirror those of rural or underdeveloped areas worldwide. Educational strategies developed in island contexts, such as the integration of local knowledge into the curriculum and the use of adaptive teaching methods, can provide valuable lessons for other regions facing similar challenges. Moreover, the focus on sustainability and community engagement in island education can serve as a blueprint for addressing the global challenges of environmental degradation and cultural erosion (Savo et al., 2014). Through a critical examination of Italian island education, this paper demonstrates how island-based educational practices can inform global debates on sustainability, resilience, and cultural continuity. The unique characteristics of island communities offer rich insights into how education can serve as a tool for fostering not only academic success but also social and environmental well-being.

Keywords: island studies, islandness, place-based education, insular pedagogy, cultural heritage, community cohesion, environmental stewardship, sustainability in education, marginalization, adaptive curricula

References

- Baldacchino, G. (2006). Islands, island studies, island studies journal. *Island Studies Journal*, 1(1), 3-18.
- Gallia, A., & Malatesta, S. (2022). Le Isole Minori italiane nelle Missioni del PNRR. Una visione sul futuro. *Documenti geografici*, (1), 161-174.
- Gruenewald, D. A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*, 32(4), 3-12.
- Savo, V., Caneva, G., & McClatchey, W. (2014). Combining environmental factors and agriculturalists' observations of environmental changes in the traditional terrace system of the Amalfi Coast (Southern Italy). *Ambio*, 43, 297-310.
- Stratford, E., Farbotko, C., Harwood, A., McMahon, E., & Baldacchino, G. (2011). Envisioning the archipelago: Writing (island) spaces into new archipelagic thinking. *Island Studies Journal*, 6(2), 113–130.

The World Bank's New Approach to Human Capital Model and Education

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Abstract

The human capital approach, introduced in 1960, has been used by economists to establish connections between education, skills, and personal income. It resulted in a redistribution of public expenditure by viewing education not only as a cost but also as an economic input, a way to increase revenue in the medium and long term. Human capital theory highlights the crucial role of education in the economy. With the rise of the knowledge society, scientists have debated the potential end of poverty, inequality, and social exclusion. They envisioned a new knowledge economy and a more egalitarian society. The significant increase in socioeconomic inequality and social exclusion in the post-pandemic United States has shaken the perfect world of work envisioned for the future. Human capital is closely related to gross domestic product and population per capita. The uncertainty caused by the COVID-19 outbreak in 2020 had a significant negative impact on both high-income and middle- and low-income countries. “During and after the pandemic, remote work has become increasingly common. Universities need to prepare individuals to be adaptable and capable of working alongside artificial intelligence to support the growth of remote work.” The World Bank is the richest development finance institution influencing countries' education reforms and policies. This study will assess the significance of education in supporting the future workforce. It involves a time series analysis of World Development Reports from 1978 to 2024 and a comparative analysis of human capital perspectives between the World Bank and the OECD.

Keywords: human capital, education, health, skilled workforce, World Bank, OECD, life-long learning, economic resilience, social cohesion

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A Magical Journey: Online Teaching Measures Adopted by Kindergartens During COVID-19 in Taiwan

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Abstract

This study employed a qualitative research approach, interviewing directors or principals from four kindergartens about their online teaching strategies during the nationwide school closure in 2021 due to the pandemic. The results revealed that the kindergartens responded swiftly with overall contingency measures, with administrative teams actively providing support and resources to teachers. Teachers involved in online teaching were able to plan and allocate work during the closure period. Additionally, the study found that collaboration between kindergarten teachers and parents became a crucial source of learning for children during the pandemic, making communication with parents and the provision of resources highly important. In designing the curriculum (whether through synchronous online sessions or recorded materials), teachers had to consider children's learning characteristics and abilities, as well as the materials and resources available at home. Despite the many challenges faced during the closure, the combined efforts of the administrative teams, teachers, and parents ensured that children had a unique remote learning experience at home. The difficulties in execution included the significant time required for online learning preparation and post-production, and the need for parents to take on the role of proxy teachers to assist with learning at home. This online learning experience may serve as a foundation for future online learning for young children.

Keywords: learning never stops, COVID-19 pandemic, preschool, online instruction

Investigating the Role of International Collaborative Online Learning Platforms in Supporting Multilingual Students

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Abstract

This paper investigates the role of international collaborative online learning platforms, such as Padlet, in supporting students from diverse linguistic backgrounds. With the increasing globalization of education, these platforms play a critical role in fostering inclusive learning environments for multilingual learners (MLs). This study evaluates the effectiveness of these platforms in enhancing language acquisition and fostering intercultural competence among learners. Employing a quasi-experimental design, the research compares traditional teaching methods with technology-integrated approaches to measure their impact on student engagement and performance. Findings reveal that interactive and collaborative tools significantly enhance language learning outcomes by promoting active participation, peer feedback, and cultural exchange. Despite limitations related to internal validity and generalizability, the study underscores the transformative potential of digital tools in adapting educational practices to the needs of a globalized, multilingual society.

Keywords: padlet, multilingual learners, instructional technology, educational technology, collaborative learning

Teaching Design and Application of Recitation of Chinese Classic Poetry

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Abstract

From the perspective of human empathy, what details should be paid attention to, and how to solve the problems encountered in the teaching process of reciting Chinese classic poetry in terms of material selection, teaching process, emotional inspiration, and teaching difficulties? This study adopts the “discovery teaching method” proposed by contemporary American educator Bruner to explore the application of theme-based teaching in poetry recitation and conducts case analysis, focusing on learning effectiveness, teaching process arrangement, and other aspects to present how students discover and correct emotional expression and pronunciation skills during poetry recitation through guidance and continuous self-practice throughout the learning process, appreciate the mysteries of Chinese literature, and achieve the teaching goals of inspiring emotions, learning both language and culture and integrating education with entertainment.

Keywords: thematic teaching, nostalgia, friendship, Chinese classic poetry

Analyzing the Impact of Diversity-Oriented Leadership on Faculty Knowledge-Sharing Behavior in Business Schools

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Abstract

This empirical research study intends to analyze the impact of diversity-oriented leadership on faculty knowledge-sharing behavior through the mediating role of job autonomy and psychological safety. For this purpose, survey responses from faculty of various higher educational institutions in Lahore, Pakistan will be collected and analyzed. The results of structural equation modeling testing indicate that diversity-oriented leadership significantly contributes to increasing faculty members' knowledge-sharing behavior. Furthermore, the results of the study also confirmed the intervening role of job autonomy and psychological safety in the relationship between diversity-oriented leadership and faculty's knowledge-sharing behavior. The practical implications are that this study helps to understand how diversity-oriented leadership influences faculty members' behavior to share knowledge more and promote knowledge-sharing culture. This study will also help to understand how supportive an organization's environment stimulates the knowledge-sharing behavior of faculty members by providing job autonomy and psychological safety. This research study contributes significantly to the existing body of knowledge by empirically examining the impact of diversity-oriented leadership on faculty's knowledge-sharing behavior through the mediation of job autonomy and psychological safety in higher education institutions of Pakistan.

Keywords: diversity-oriented leadership, knowledge sharing, faculty members, business schools

Racially Minoritized Trailblazers (RMTs) Hierarchy of Needs in UK Universities

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Abstract

This qualitative study draws on Foucault's (2000) concept of heterotopia, which represents cultural, institutional, and complex discursive spaces, often described as a 'world within a world'. In alignment with Read's (2023) principles on heterotopia, and the social precarity of academic contracts in Higher Education (HE), the study positions HE as a complex, contested, cultural counter-space characterized by unequal practices in the motivation and promotion of Racially Minoritized Trailblazer's (RMT's). The study makes a significant contribution to the field of motivational theory by proposing a new framework grounded in an evaluation of existing philosophies. Brown's Framework of Community Motivation and Actualization (B-FCMA), inspired by African-Caribbean collective living, offers an innovative perspective. This framework builds on key concepts from the Blackfoot (Siksika) Nation's community model of Needs (Ravilochan, 2021) and Maslow's Hierarchy of Needs framework (1943) to form the basis of a revised model that addresses the specific challenges faced by RMTs. Brown's community model is informed by insights from interviews with four RMTs working across three UK universities. Their shared educational experiences, from Early Years to Higher Education, are central to the model's development. The cultural context provided by the Blackfoot Nation (Ravilochan, 2021) enriches the framework by incorporating familial structures, belief systems, and ancestral teachings, which resonate deeply with the participants. The model incorporates five stages: Heterotopia; socio-physiological mechanisms of community; diasporan values; spiritual strivings and community actualization. These stages reflect the collective cultural influences that drive self-determination and success among RMTs despite the systemic barriers they regularly encounter. The poster presentation invites the audience to engage with Brown's Framework of Community Motivation and Actualization (B-FCMA) and contemplate its implications within diverse Higher Education contexts.

Keywords: blackfoot nation, brown's community model, heterotopia, Maslow, racially minoritized academics

References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Foucault, M. (2000). *Different Spaces*. In: J.D. Faubion (ed.) *Aesthetics, Essential Works of Foucault 1954–1984*, Vol. 2. London: Penguin Press.
- Maslow, A. (1943). *A Theory of Human Motivation*. Wilder Publications
- Ravilochan, T. (2021). *The Blackfoot Wisdom that Inspired Maslow's Hierarchy*. Esperanza Project
- Read, B. (2023). *The university as heterotopia? Space, time and precarity in the academy*. Access: *Critical Explorations of Equity in Higher Education*, 11(1). Retrieved from <https://novaajs.newcastle.edu.au/ceehe/index.php/iswp/article/view/192>

Elevating the Online Learners' Experience by Cultivating Social Presence in the Online Learning Environment

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Abstract

The online learning environment does not inherently offer opportunities for learners to experience the benefits of enhanced social presence. The lack of social presence can negatively impact students, the primary group of stakeholders that influence institutional success. On the contrary, research on the Community of Inquiry model, specific to social presence, has been shown to pay positive dividends. There has been an increase in online course offerings; therefore, an intentional push toward elevating the online learning experience is worthy of consideration. Virtual learning environments, if not deliberately cultivated, may be void of authentic relationships and opportunities to connect. In the current paper, the authors hope to address a need for ongoing discussions on the topic of ways to support the quickly growing constituency of online students who want or perhaps need the flexibility of a virtual learning space yet still desire to experience the relational side of learning they most likely experienced previously. Traditional, on-campus learning environments organically foster opportunities for social presence to flourish; however, higher education institutions must intentionally implement such opportunities for online learners. Two program directors will share best practices for consideration at the planning and implementation phases so that the tenets of social presence are felt at the instructor and student levels. The authors suggest espousing social presence coupled with the adoption of cohort model learning, effective communication conventions, and compassionate teaching to enhance each learner's overall educational experience. When simple strategies such as those mentioned in this paper are put into action, the organization and the participants can thrive.

Keywords: social presence, community of inquiry, cohort model, online learning

Integrating Sustainable Development Goals Into Education Through Gamification and Digital Brand Development: The Role of Digital Ambassador Elyx

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Abstract

Created by French digital artist Yacine Ait Kaci, Elyx serves as a digital ambassador for the United Nations. Elyx plays a key role in promoting the Sustainable Development Goals (SDGs), especially SDG 4, “Quality Education,” by using innovative methods to make education more accessible and engaging. Combining gamification and storytelling techniques, Elyx simplifies complex global issues and presents them to students in a captivating way. In education policies, Elyx stands out as a universal figure who transcends cultural and linguistic barriers with her visual narratives. Incorporating gamification elements into educational content, Elyx effectively instills sustainability values in a fun way by increasing student engagement with activities such as planting virtual trees and exploring recycling points. Through storytelling, students follow Elyx’s adventures, learning about global challenges such as climate change and economic inequality, and developing problem-solving and critical thinking skills. Elyx’s use of digital platforms contributes to a more inclusive and equitable education. Interactive applications and virtual experiences provide access to quality content for students from diverse backgrounds. Elyx also supports corporate social responsibility (CSR) initiatives by raising sustainability awareness and serving as an effective tool in projects and campaigns. Elyx’s multi-faceted approach is transforming areas from education to marketing by raising awareness and inspiring action for global sustainability.

Keywords: sustainable development goals, quality education, gamification, digital learning, sustainable marketing, brand awareness

Training in Ecological Thinking: Narrative Practices for Educational Professionals

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Abstract

Since the 1970s, the issue of environmental education has assumed relevance in the context of a theory of training towards new forms of sustainability education. Literary ecology, a discipline born from the contamination of ecology and literature, proposes itself as a critical response to environmental distress, enhancing the implicit dialogue and interconnections between the text and the circumstances of the environment. The literary heritage constitutes a precious resource for promoting, in educational contexts from early childhood, dimensions that range from the cognitive to the emotional and for activating sustainable processes, through ecological paths that develop a civic conscience, capable of taking care of the beauties that Nature offers. It is necessary that educational professionals lead students, citizens of tomorrow, in the acquisition of emotional stability through the creation of a dimension, that allows an approach to ecological education in a creative way toward the creation of dynamic paths that combine ethical principles and cognitive development. Here we propose the results of projects carried out within the University of Catania, as part of the *Green Education lab*, a space for research and experimentation that aims to develop and direct models and practices of education for the promotion of a culture of sustainability. The recipients of these courses were university students and teachers of nursery, primary, and secondary schools, who had the opportunity to explore the practice of narration as a pedagogical device, through the observation of texts belonging to different literary genres: fairy tales, poems, illustrated books and silent books; and to develop narrative skills in order to promote the objectives of the 2030 Agenda and ecological training for the diffusion of educational models capable of regenerating learning processes.

Keywords: sustainability, education, literature

Transforming Education for a Greener Future: Virtual Reality in Sustainable Tourism Training for Hotel Staff

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Abstract

Sustainable tourism practices are gaining increasing importance in the hotel industry (Bruyn et al., 2023). In this context, it has become essential to enhance hotel employees' understanding of sustainability and apply this knowledge in practice. While virtual reality (VR) technology holds great potential in practical training, its impact on hotel employees has not been sufficiently explored. Thus, this study aims to fill this gap and examine how VR-based training programs shape hotel employees' awareness of food waste and their thoughts on its practical application. Kolb's Experiential Learning Theory (1984) suggests that individuals learn knowledge and skills through experience. This study is based on employees experiencing situations they may encounter in real work life through VR simulations. Employees actively participate by solving food waste-related problems in VR scenarios. When they make incorrect choices or perform incomplete actions, the feedback provided by the simulation becomes part of the learning process. This process supports the four stages of Kolb's theory—concrete experience, reflective observation, abstract conceptualization, and active experimentation. Additionally, the Theory of Planned Behavior (Ajzen, 1985) is used to understand the factors that influence individuals' behaviors, intentions, and the likelihood of performing these behaviors. Within the framework of this theory, it is expected that employees' attitudes, beliefs, and behavioral intentions regarding sustainability and food waste will be shaped through VR-based training. In this context, it can be stated that the study will be shaped based on these two theories. Within this scope, participants will receive hands-on training through two scenarios in a virtual hotel kitchen aimed at reducing food waste. The scenarios will include practices related to proper waste separation and resource optimization, and these processes will contribute to raising awareness and influencing participants' knowledge and behaviors regarding sustainability, waste management, and food waste. The development of VR simulations is planned with support from experts in sustainability and VR software. The scenarios will be grounded in real-world applications and validated through reviews by tourism scholars and pilot tests with hotel staff, with feedback subsequently incorporated to enhance their effectiveness. In the simulation to be developed regarding waste management, participants will encounter various types of waste, including organic, recyclable, and non-recyclable materials, in a virtual hotel kitchen. However, in this scenario, the waste will be intentionally placed in the wrong containers, and participants will need to identify and correct these mistakes to improve the waste management process. Through the VR headset/glasses, participants will see trash bins with incorrectly placed waste and pop-up messages explaining the environmental impacts of these errors. For example, if a participant places paper in the compost bin instead of food scraps, the system will issue a warning and explain how this action could increase methane emissions. Animations and visuals will assist participants in understanding the importance of correctly sorting waste by showing the environmental consequences of misplacement. This process is designed to raise participants' awareness about waste management and encourage them to reduce their environmental impact by applying the correct practices. In the inventory management simulation, participants will encounter

perishable overstocked items and incorrect storage methods in a virtual kitchen. In this scenario, products that have spoiled or improper storage conditions will be highlighted with flashing indicators. Participants will be guided to optimize stock rotation and appropriate storage temperatures. By reorganizing storage and applying stock rotation techniques, participants will address spoilage issues. This process will provide practical experience in reducing food spoilage and using resources more efficiently. The views of hotel staff participating in the training program using the “VR-based sustainability training simulation” platform were gathered through semi-structured interviews, adopting a qualitative research method. A focus group discussion will be conducted, and data will be examined using content analysis within the framework of action research (Lewin, 1946). The purposive sampling method, specifically criterion sampling, will be applied in this study, selecting participants from kitchen staff working in a 5-star hotel where VR-based training can be implemented. This criterion ensures that participants are chosen from a hotel capable of conducting VR-based training, are directly involved in kitchen operations, and will receive food waste-related training. This approach facilitates an effective examination of the knowledge and behavior changes of hotel kitchen staff regarding waste management and sustainability. In this context, the data obtained from the transcriptions of in-depth interviews with these participants will be analyzed using the NVivo 10 software package. This study aims to enrich the existing literature on the use of VR technology in sustainability training and provide significant insights for the development of sustainability training courses in the hotel sector. It is expected to make a significant contribution to the literature on the use of Virtual Reality (VR) in hotel staff training within the context of sustainable tourism. While there is existing research on the use of VR in various educational fields (Ronaghi & Forouharfar, 2024; Zhu, 2024), the application of VR in sustainable tourism training has not been sufficiently explored. On the other hand, virtual reality technology can be used as a modern method in environmental and sustainability education, offering an interactive and personalized learning experience (Hao, et al., 2024; Negi, 2024). Additionally, such emerging technologies can provide experiential learning opportunities by simulating real-world business scenarios, reflecting the complexities that trainee will encounter in their professional careers (Luong, 2024). Virtual reality applications have increasingly found a place in research focused on the tourism sector (Yung & Khoo-Lattimore, 2019; Wei, 2019). In this context, this study aims to offer valuable recommendations on how VR technology can be effectively utilized to facilitate sustainability learning within the hotel industry. Hotel managers are also expected to support the implementation of VR-based sustainability training programs, which could contribute to raising awareness of sustainability among hotel staff. The study will propose the integration of VR simulations into existing training modules, providing an interactive experience that not only increases staff participation but also enhances the retention of sustainability knowledge. For instance, hotels could incorporate VR training into orientation processes, sustainability workshops, or periodic courses. Through this, the use of VR is likely to strengthen the commitment of hotel employees to sustainability and foster an environmentally conscious organizational culture. Furthermore, the research may highlight the potential of VR to impact not only hotel employees but also guests. As VR technology becomes more widespread, hotels could use it to educate guests interactively about their sustainability practices. This would enrich the guest experience and contribute positively to the hotel’s reputation as a sustainable destination.

Keywords: sustainable tourism, hotel staff, VR-based training, experiential learning theory, theory of planned behavior

References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11-39). Springer.

- Bruyn, C.d., Said, F. B., Meyer, N., & Soliman, M. (2023). Research in tourism sustainability: A comprehensive bibliometric analysis from 1990 to 2022. *Heliyon*, 9(18874).
- Hao, F., Ng, W., Aman, A. M., & Zhang, C. (2024). Technology for sustainability: The impact of avatar-led green training on OCBE and green creativity. *International Journal of Contemporary Hospitality Management*.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall, Inc. Englewood Cliffs.
- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2(4), 34-46.
- Luong, B. V. (2024). Transforming tourism and hospitality education: Immersive technologies for ethical leadership, sustainability, and responsible management development. <https://ssrn.com/abstract=4970745> or <http://dx.doi.org/10.2139/ssrn.4970745>
- Negi, S. K. (2024). Exploring the impact of virtual reality and augmented reality technologies in sustainability education on green energy and sustainability behavioral change: A qualitative analysis. *Procedia Computer Science*, 236, 550-557.
- Ronaghi, M. H., & Forouharfar, A. (2024). Virtual reality and the simulated experiences for the promotion of entrepreneurial intention: An exploratory contextual study for entrepreneurship education. *International Journal of Management in Education*, 22(2), 100972.
- Wei, W. (2019). Research progress on virtual reality (VR) and augmented reality (AR) in tourism and hospitality. *Journal Hospitality Tourism Technology*, 10(4), 539-570.
- Yung, R., & Khoo-Lattimore, C. (2019). New realities: A systematic literature review on virtual reality and augmented reality in tourism research. *Current Issues in Tourism*, 22(17), 2056-2081.
- Zhu, D. H. (2024). Introducing immersive virtual reality in a marketing practical training course: Qualitative evaluation with undergraduates. *The International Journal of Management Education*, 22, 101058.

Scientometric Analysis of AI and ML-Based Routing for Satellite Terrestrial Integrated Network

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Abstract

The backbone of satellite-terrestrial integrated networks (STINs) is to provide seamless integration of terrestrial and satellite links to meet the ever-growing demands for connectivity in the 5G and beyond eras. The routing algorithms have attracted much attention as one of the critical elements for effective data transmission across the STINs. In this paper, we present a scientometric analysis of the research landscape about routing algorithms for STINs, which comes with the objective of their chronological development, emerging trends in them, geographical contributions, and key venues for publication. Our bibliometric data assembled from leading research databases will allow us to identify some emerging prominent research challenges, areas of future directions, and opportunities for further breakthroughs in the field. Therefore, the findings of this research provide not only a comprehensive and holistic understanding of the evolution of routing algorithms in satellite-terrestrial networks but also actionable insights for researchers looking to address unresolved challenges in this domain. The study aims to identify and chronologically establish the evolution of the area; find recent research trends; find out the collaborative countries; analyze the types of publications and the most powerful journals in the country; and discuss the primary challenges and future research directions.

Keywords: satellite-terrestrial integrated networks (STIN), routing algorithms, scientometric analysis, research trends, country collaboration, emerging challenges, future directions

Teaching Fraud Detection and Prevention: Strategies for Integrating Real-World Insights Into Accounting Education

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Abstract

The prevalence of financial fraud highlights the urgent need to integrate fraud detection and prevention methods into accounting education. As organizations face increasingly sophisticated fraudulent schemes, educators must prepare students to tackle these challenges with a blend of theoretical knowledge, practical skills, and ethical judgment. This paper delves into effective strategies for teaching fraud-related topics by bridging the gap between academic concepts and real-world cases. Central to this approach is the use of active learning techniques, such as case studies, and hands-on practice integrated with data analytics tools. These methods engage students more deeply, allowing them to analyze actual fraud scenarios, understand underlying motivations, and evaluate the efficacy of detection techniques. By involving students in realistic situations, educators can foster critical thinking, decision-making, and an appreciation for the complexities of fraud prevention. Incorporating insights from industry professionals further enhances the learning experience. Guest lectures, panel discussions, and mentorship opportunities expose students to the latest trends and challenges in fraud prevention, providing a window into the ethical dilemmas and practical constraints faced by practitioners. Real-world fraud case studies serve as valuable teaching tools, demonstrating how theoretical concepts are applied in practice. This study emphasizes the importance of a multidisciplinary approach to fraud education. By combining core accounting principles with internal control tools, behavioral analysis, and ethical reasoning, students gain a holistic understanding of fraud and its implications. This integrated approach not only prepares future accountants to detect and prevent fraud but also instills a commitment to upholding organizational integrity and financial transparency. Ultimately, this paper argues that transforming accounting education to include robust fraud detection, internal control tools, and prevention frameworks is essential for asset protection and safeguarding financial reporting systems. As the business world continues to grapple with sophisticated fraud schemes, empowering students with the knowledge, skills, and tools to combat these challenges will contribute significantly to building trust and accountability in global commerce.

Keywords: fraud education, student, transparency

Internal Controls, and Asset Misappropriation in the Lodging Industry: Challenges and Recommendations

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Abstract

Occupational fraud poses a significant risk to various industries, particularly the lodging sector, where the prevalence of cash and credit card transactions, labor-intensive operations, and decentralized structures heighten susceptibility. According to the Association of Certified Fraud Examiners (ACFE), occupational fraud costs businesses globally billions of dollars annually, with the hospitality industry being particularly vulnerable due to its operational characteristics (ACFE, 2022). Researchers argue that the hospitality industry faces a greater fraud risk compared to other sectors due to its extensive supply chains, interactions with thousands of customers, and reliance on seasonal employees, all of which create multiple points of vulnerability (Pearson & Saunders, 2020). The lodging industry also faces challenges related to employee collusion and the mishandling of financial transactions, making internal controls critical. To reduce fraud in the lodging industry, researchers have emphasized the importance of implementing robust policies focused on the segregation of duties, inventory control, and cash reconciliation as essential measures to mitigate fraud risks (Gerrish, 2021). Implementing robust internal control policies and procedures not only safeguards organizational assets but also fosters a culture of accountability and transparency. This study investigates occupational fraud in the lodging industry by analyzing 20 media-published cases, assessing the effectiveness of internal control measures, and providing actionable recommendations to mitigate asset misappropriation. Through a detailed examination of case studies and relevant industry literature, the research identifies practical strategies to minimize risks, including the design of robust internal control policies, the adoption of advanced technologies such as automated accounting systems, and the routine use of forensic audits. Additionally, the potential application of AI in detecting fraudulent activities is explored. These measures enhance oversight, reduce opportunities for fraud, and promote the financial health and long-term sustainability of lodging organizations.

Keywords: internal control, fraud, asset misappropriation, lodging industry

References

- ACFE. (2022). Report to the Nations: 2022 Global Study on Occupational Fraud and Abuse. Association of Certified Fraud Examiners.
- Gerrish, H. (2021). Fraud Prevention in the Hospitality Industry: Strategies and Best Practices. *Hospitality Management Journal*, 15(3), 45-56.
- Pearson, J., & Saunders, L. (2020). Internal Control Challenges in the Hospitality Sector. *Journal of Fraud Studies*, 12(4), 289-310.

Digital Transformation in Higher Education

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Abstract

Higher education institutions have a critical need to attain institutional sustainability in light of the global attention that is being placed on achieving sustainable development goals across nations. Universities, as key players in the process, are compelled to urgently include digital transformation as a means of fulfilling and sustaining university operations, especially in today's dynamic business environment. Vital to this sustainability thrust is the inclusion of digital transformation in higher education administration. Evidence suggests that without digital knowledge, applications, skills, and capabilities, higher education administration will undoubtedly encounter obstacles to better organizational performance within a dynamic and digitally transformed environment. This research, therefore, seeks to explore the use of artificial intelligence among university administrators within Jamaica, in the context of institutional sustainability efforts. Jamaica is recognized as a developing country within the Western Caribbean. The country's higher education sector comprises two categories of higher education institutions. One is a localized group of universities that are home-bred, and the other group constitutes a set of offshore institutions with home-bases in other countries. For the purpose of this research, attention will be given to the institutions that are localized to the Jamaican context, based on the fact that these institutions are comparable, as they belong to the same geographical and localized regulatory context. Additionally, they have all engaged with digital transformation within the past five years.

Keywords: digital transformation, artificial intelligence, higher education administration, change

Ethical Intelligence: Responsible AI Integration in Challenge-Based Learning

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Abstract

Challenge-Based Learning (CBL) is an increasingly popular approach in higher education, designed to help students integrate disciplinary knowledge with the development of transferable skills by engaging with real-world sociotechnical and societal challenges (Leijon et al., 2022). It is a collaborative, hands-on approach that encourages students to engage with peers, educators, and experts both locally and globally to ask meaningful questions, deepen their understanding of subject matter, tackle challenges, take action, and share their experiences (Gallagher & Savage, 2023). Integrating AI into CBL in higher education has the potential to be transformative, enabling personalized learning experiences, adaptive problem-solving, and real-time feedback. In this perspective, however, the use of AI should be made responsibly and ethically to make sure its deployment will align with academic values and principles of equity, transparency, and human-centered learning. This paper aims to provide a conceptual framework for the ethical and responsible integration of AI into CBL, focusing on higher education's unique demands and responsibilities. It elaborates on a higher education-focused framework for the responsible integration of AI into CBL, addressing ethical challenges and proposing actionable solutions. AI has the potential to augment CBL by making challenges more relevant to learners, simulating complex scenarios that learners might face, and offering data-driven insights. Ethical concerns include algorithmic bias, data privacy risks, and diminished pedagogical integrity. These issues are even more serious in higher education, where there is a diverse population of students, academic freedom, and institutional accountability. The growing complexity of global challenges requires education systems to prepare students with not only technical skills but also ethical reasoning and collaborative problem-solving abilities. AI's role in enabling personalized learning, real-time feedback, and scalable educational solutions makes it indispensable for advancing CBL in higher education. However, these opportunities are accompanied by ethical concerns that, if unaddressed, could undermine educational equity, institutional integrity, and public trust. The proposed framework addresses these challenges through the following pillars:

- ***Inclusive Access for Academic Equity:*** AI has to support institutional diversity, equity, and inclusion goals by mitigating algorithmic biases and providing universally accessible solutions designed for the higher education context (Moore & Piazza, 2023; Floridi & Cowls, 2019).
- ***Academic Data Ethics and Privacy:*** Higher education institutions should give priority to informed consent, anonymization, and ethics in using learning analytics in order to gain students, faculty members, and administrators' trust (Zhang et al., 2021; Florea & Florea, 2020).
- ***Augmenting Faculty Roles through Human-AI Collaboration:*** AI should facilitate the role of educators in higher education by taking over mundane activities while allowing faculty to concentrate on mentorship, critical engagement, and intellectual inquiry (Chen, 2022; Selwyn, 2021).
- ***Ethical AI Governance in Higher Education:*** It is crucial to develop institutional governance structures to oversee the responsible use of AI in learning environments, including developing interdisciplinary committees that can better align AI adoption with institutional values and

facilitate processes of accountability for unintended outcomes (Slimi & Carballido, 2023; Selwyn, 2021).

- ***Interdisciplinary Collaboration and Shared Ownership:*** The co-design approach engages faculty, students, administrators, and AI developers in the design process to align AI tools with academic goals and ethical standards. Collaboration brings shared ownership and contextual relevance into the implementation of AI in higher education (McAfee & Brynjolfsson, 2017).
- ***Iterative Ethics in Academic Contexts:*** Every institution should develop feedback mechanisms involving diverse stakeholders to update AI systems in response to dynamic educational needs (Bisconti et al., 2023; Crawford, 2021).
- ***Digital Literacy for Ethical AI Engagement:*** Higher education institutions must prioritize digital literacy initiatives to empower all stakeholders to understand AI's potential and limitations (Borekci & Celik, 2024; Rahman, 2020).

The integration of AI into challenge-based learning (CBL) in higher education offers numerous transformative outcomes. First, AI can significantly enhance student learning by providing personalized challenges and adaptive feedback, fostering deeper engagement, and improving learning outcomes. Scalable educational solutions are another key benefit; AI enables institutions to offer high-quality, CBL-driven experiences to larger and more diverse student populations. By addressing individual learning needs, AI can also contribute to greater equity and inclusion, helping close achievement gaps for underrepresented and marginalized groups. Moreover, AI has the potential to strengthen faculty capacities. By automating routine administrative tasks, AI allows educators to focus on higher-order teaching responsibilities, such as mentoring and facilitating collaborative, critical-thinking-focused discussions. Finally, AI-enabled CBL can prepare students to tackle complex, global challenges through interdisciplinary and team-based problem-solving, equipping them with essential skills for the 21st century and fostering global competency development. Despite its potential, the use of AI in CBL raises several ethical and practical concerns. One significant issue is the risk of algorithmic bias and inequity. AI systems, if inadequately designed, can perpetuate or even amplify biases, disadvantaging specific student groups and undermining inclusivity goals. Additionally, data privacy and security remain critical challenges. Inadequate governance and safeguards could lead to breaches of sensitive student information, eroding trust between stakeholders. Over-reliance on AI is another potential concern, as excessive dependence may diminish the role of human educators and compromise the relational aspects of learning, which are central to higher education. Finally, the lack of robust ethical accountability frameworks could result in the deployment of AI systems misaligned with academic values, creating a disconnect between the technology's capabilities and its ethical implications.

Keywords: challenge-based learning, ethical AI, responsible AI

References

- Bisconti, P., Orsitto, D., Fedorczyk, F., Brau, F., Capasso, M., De Marinis, L., Eken, H., Merenda, F., Forti, M., Pacini, M. & Schettini, C. (2023). Maximizing team synergy in AI-related interdisciplinary groups: an interdisciplinary-by-design iterative methodology. *AI & Society*, 38(4), 1443-1452. <https://doi.org/10.1007/s00146-022-01518->
- Borekci, C., & Celik, O. (2024). Exploring the role of digital literacy in university students' engagement with AI through the technology acceptance model. *Sakarya University Journal of Education*, 14(2), 228-249. <https://doi.org/10.19126/suje.1468866>
- Chen, F. (2022). Human-AI cooperation in education: human in loop and teaching as leadership. *Journal of Educational Technology and Innovation*, 2(1), 14-25. <https://doi.org/10.61414/jeti.v2i1.34>

- Crawford, K. (2021). *The Atlas of AI: Power, politics, and the planetary costs of Artificial Intelligence*. Yale University Press.
- Florea, D., & Florea, S. (2020). Big Data and the ethical implications of data privacy in higher education research. *Sustainability*, 12(20), 8744. <https://doi.org/10.3390/su12208744>
- Floridi, L., & Cowls, J. (2022). A unified framework of five principles for AI in society. In S. Carta (ed) *Machine learning and the city: Applications in architecture and urban design*, 535-545. <https://doi.org/10.1002/9781119815075.ch45>
- Gallagher, S. E., & Savage, T. (2023). Challenge-based learning in higher education: an exploratory literature review. *Teaching in Higher Education*, 28(6), 1135-1157. <https://doi.org/10.1080/13562517.2020.1863354>
- Leijon, M., Gudmundsson, P., Staaf, P., & Christersson, C. (2022). Challenge based learning in higher education—A systematic literature review. *Innovations in Education and Teaching International*, 59(5), 609-618. <https://doi.org/10.1080/14703297.2021.1892503>
- McAfee, A., & Brynjolfsson, E. (2017). *Machine, platform, crowd: Harnessing our digital future*. WW Norton & Company.
- Moore, M. R., & Piazza, B. (2023). Inclusive access course materials: An analysis of Waukesha County Technical College's inclusive access program. *Journal of the Scholarship of Teaching and Learning*, 23(3), 58-73. <https://doi.org/10.14434/josotl.v23i3.34262>
- Rahman, A. (2020). Algorithms of oppression: How search engines reinforce racism. *New Media & Society*, 22(3), 575-577. <https://doi.org/10.1177/1461444819876115>
- Selwyn, N. (2019). *Should robots replace teachers?: AI and the future of education*. John Wiley & Sons.
- Slimi, Z., & Carballido, B. V. (2023). Navigating the ethical challenges of Artificial Intelligence in higher education: An analysis of seven global AI ethics policies. *TEM Journal*, 12(2), 590-602.
- Zhang, Y., Wu, M., Tian, G. Y., Zhang, G., & Lu, J. (2021). Ethics and privacy of artificial intelligence: Understandings from bibliometrics. *Knowledge-Based Systems*, 222, 106994. <https://doi.org/10.1016/j.knosys.2021.106994>

Quality Course Enhancements Impacts Achievement

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Abstract

This paper examined the impact of course quality improvements on student achievement in the Research in Educational Leadership I course at the University of Central Florida. The course, designed for doctoral students, underwent significant enhancements from 2021 to 2023 to progress from Quality to High Quality designation. These improvements included updated course materials, revised assessment strategies, and increased student support. A one-way ANOVA was conducted to analyze the course outcomes over the three years. The results indicated that while the signature assignment research proposal did not show a statistically significant difference, the final exam scores approached significance with a notable effect size, suggesting meaningful improvements. Additionally, a significant difference was found across the three years the course was taught for the Total Course Points, $F(2, 30) = 4.31, p < .05, \eta^2 = .22$. Total Course Points also produced the largest effect size, with 22% of the variance being explained by changes to the course. Pairwise comparisons between Q21 and HQP22 ($\Delta M = -8.28, p < .05, d = -1.24$) significantly differed, indicating the impact of the high-quality changes to the course. These findings underscore the effectiveness of structured quality improvement processes in enhancing student learning outcomes and support the continuous improvement of online course design.

Keywords: quality designation, high quality, instructional design, course improvement, educational leadership