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**TheSustainImpact International Forum
23 July 2025 | Online Edition**

BOOK OF ABSTRACTS

Inaugural Edition

Voices and Visions for a More Sustainable World

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Driving Sustainability Forward: Innovation, Education & Circular Impact

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TheSustainImpact
A PLATFORM FOR CHANGE

Founded in Portugal, TheSustainImpact was created from the belief that sustainability must be more than a conversation; it must drive action. From our base in Europe, we operate as a global catalyst for collaboration, innovation, and measurable impact. We connect thinkers and doers, researchers, industry leaders, policymakers, and communities, to design and deliver solutions that address the world's most urgent environmental and societal challenges. Our initiatives range from international forums and peer-reviewed publications to youth engagement projects and cross-sector partnerships, each driven by a shared commitment to lasting change.

The 2025 International Forum

On 23 July 2025, TheSustainImpact International Forum convened voices from across the globe in a fully virtual gathering under the theme *Driving Sustainability Forward: Innovation, Education & Circular Impact*. This was more than a conference, it was a meeting point for diverse disciplines and perspectives, united by the pursuit of systemic change. Over the course of the day, four keynote speakers and nineteen presenters shared cutting-edge research, practical strategies, and inspiring stories of transformation. From renewable energy transitions to AI-enabled education, and from community resilience to circular economy practices, the discussions reflected both the complexity and the opportunity of building a sustainable future.

THIS
BOOK OF
ABSTRACTS

captures the essence of the Forum's contributions. Each entry reflects not only a research project or case study, but also a step toward the collective vision that brought us together. Within these pages are ideas tested in classrooms, innovations ready to scale, and strategies that bridge science and society. This volume stands both as the official record of the Forum and as an open invitation to explore, connect, and join us in advancing sustainability from Portugal to the world.

Editorial Note

All abstracts included in this book have been lightly edited by the editorial team to ensure clarity, consistency, and adherence to TheSustainImpact International Forum 2025 formatting guidelines. Edits were strictly limited to grammar, spelling, punctuation, formatting, and minor rephrasing for readability. No substantive changes were made to the research content, results, or interpretations provided by the authors.

Editorial Team

Assoc. Prof. Dr. Sarfraz Aslam; Co-Editor-in-Chief, UNITAR International University, Malaysia

Dr. Sharareh Shahidi; Co-Editor-in-Chief, UNITAR International University, Malaysia

Shervin Hamedani; Founder & Forum Director, TheSustainImpact

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Welcome Message

SHERVIN HAMEDANI
Founder & Forum Director, TheSustainImpact

It is my pleasure to welcome you to TheSustainImpact International Forum 2025 and to present this official Book of Abstracts. Held virtually from Portugal on 23 July 2025, the Forum brought together an inspiring community of academics, industry leaders, policymakers, and practitioners from across the globe. Our shared theme, Driving Sustainability Forward: Innovation, Education & Circular Impact, reflects the urgent need for creative, interdisciplinary solutions to address the complex challenges of our time.

This year's Forum featured four distinguished keynote speakers and nineteen diverse presentations from multiple disciplines and regions. Together, they offered fresh perspectives on renewable energy, sustainable education, circular economy strategies, digital transformation, and community-driven change. It was especially rewarding to recognize the four Best Presentation Awards, which highlight not only academic excellence but also the ability to connect research with real-world impact.

I extend my sincere thanks to our Scientific and Organizing Committees, our Co-Editors-in-Chief, keynote speakers, presenters, and participants. Your dedication and collaboration made this event possible and enriched the quality of the discussions.

This Book of Abstracts is more than a record of the Forum; it is an invitation to continue the conversations and collaborations that began here. May these pages inspire you to explore new ideas, forge meaningful partnerships, and take action toward a more sustainable and inclusive future.

FORUM HIGHLIGHTS

- Date: 23 July 2025 (Virtual – Microsoft Teams)
- Theme: Driving Sustainability Forward: Innovation, Education & Circular Impact
- 4 Keynote Speakers
- 19 Abstracts Presented
- 4 Best Presentation Awards

COMMITTEE MEMBERS

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University of Limerick, Ireland

DR. AMJAD ISLAM AMJAD
The University of Lahore, Pakistan

SHERVIN HAMEDANI
Founder & Forum Director, TheSustainImpact

PROGRAMME OVERVIEW

Driving Sustainability Forward: Innovation, Education & Circular Impact
Wednesday, 23 July 2025 – Virtual (Microsoft Teams)

09:00 – 09:30 (LISBON, UTC+1)
EARLY LOGIN & NETWORKING

09:30 – 09:40 (LISBON, UTC+1)
WELCOME & OPENING REMARKS
Shervin Hamedani – Founder & Forum Director, TheSustainImpact

09:40 – 09:55 (LISBON, UTC+1)
KEYNOTE 1 – WOMEN IN SUSTAINABILITY
Dr. Sharareh Shahidi – UNITAR International University, Malaysia

09:55 – 10:10 (LISBON, UTC+1)
KEYNOTE 2 – CIRCULAR ECONOMY & EMERGING TRENDS
Assoc. Prof. Dr. Sarfraz Aslam – UNITAR International University, Malaysia

10:10 – 11:30 (LISBON, UTC+1)
PRESENTATIONS – BLOCK 1

11:30 – 11:45 (LISBON, UTC+1)
MID-SESSION BREAK

11:45 – 12:00 (LISBON, UTC+1)
KEYNOTE 3 – EDUCATION & SUSTAINABLE INNOVATION
Dr. Atif Saleem – University of Limerick, Ireland

12:00 – 12:15 (LISBON, UTC+1)
KEYNOTE 4 – SUSTAINABLE EDUCATION & CAPACITY BUILDING
Dr. Amjad Islam Amjad – The University of Lahore, Pakistan

12:15 – 13:55 (LISBON, UTC+1)
PRESENTATIONS – BLOCK 2

13:55 – 14:05 (LISBON, UTC+1)
BEST PRESENTATION ANNOUNCEMENT
Assoc. Prof. Dr. Sarfraz Aslam – UNITAR International University, Malaysia

14:05 – 14:10 (LISBON, UTC+1)
CLOSING SESSION
Shervin Hamedani – Founder & Forum Director, TheSustainImpact

KEYNOTE SPEAKERS

INSIGHTS AND PERSPECTIVES FROM DISTINGUISHED EXPERTS

Dr. Sharareh Shahidi

Keynote Topic: Women in Sustainability
Affiliation: UNITAR International University, Malaysia

Bio:
Dr. Sharareh Shahidi is a senior academic with expertise in sustainability, Society 5.0, gender equity, and the circular economy. Her work focuses on integrating inclusive leadership and innovative technologies into sustainable business and development strategies, with a strong emphasis on empowering women as key drivers of systemic change.

Session Summary:
Dr. Sharareh's keynote explored the pivotal role of women in advancing sustainability and circular economy agendas. She presented case studies from various sectors, highlighting how women-led initiatives foster innovation, strengthen community engagement, and accelerate transitions toward resource-efficient, future-ready systems.

Assoc. Prof. Dr. Sarfraz Aslam

Keynote Topic: Circular Economy & Emerging Trends
Affiliation: UNITAR International University, Malaysia

Bio:
Assoc. Prof. Dr. Sarfraz Aslam is a specialist in the circular economy, sustainable business models, and strategic innovation. His work focuses on identifying global trends and translating them into practical strategies for embedding circular principles in business operations. He collaborates with industry and policy-makers to promote resource efficiency, resilience, and value creation in the global sustainability transition.

Session Summary:
Dr. Sarfraz's keynote examined global shifts in the circular economy, from emerging trends to innovative practices in leading industries. He outlined pathways for overcoming barriers to circular adoption, emphasized cross-sector collaboration, and showcased examples where circular strategies delivered both economic and societal benefits.

Dr. Atif Saleem

Keynote Topic: Education & Sustainable Innovation
Affiliation: University of Limerick, Ireland

Bio:
Dr. Atif Saleem's research spans educational leadership, sustainability literacy, and policy innovation. He has worked extensively on leadership models, sustainable curriculum design, and integrating sustainability into technical, vocational, and higher education. His work focuses on equipping education systems with the tools to foster innovation, develop future-ready skills, and advance sustainability goals.

Session Summary:
Dr. Saleem's keynote explored education as a driver of sustainable innovation. He presented models for embedding sustainability into teaching, institutional strategies, and policies, highlighting collaborative approaches that bridge the gap between knowledge generation and real-world application.

Dr. Amjad Islam Amjad

Keynote Topic: Sustainable Education & Capacity Building
Affiliation: The University of Lahore, Pakistan

Bio:
Dr. Amjad's research focuses on brain-based learning, inclusive education, and technology-enhanced teaching. He has published extensively on improving student motivation, fostering self-efficacy, and integrating neuroscience into classroom practice. His work also addresses digital equity and innovative teaching methods to strengthen institutional capacity and promote educational sustainability.

Session Summary:
Dr. Amjad's keynote explored strategies for building resilient education systems through sustainable teaching practices and capacity development. He emphasized the role of inclusive pedagogy, evidence-based learning approaches, and technology integration in creating equitable, future-ready learning environments.

BEST PRESENTATION AWARDS

TheSustainImpact International Forum
23 July 2025 | Online Edition

IN RECOGNITION OF OUTSTANDING CONTRIBUTIONS TO THE FORUM, THE BEST PRESENTATION AWARDS CELEBRATE EXCELLENCE IN RESEARCH QUALITY, INNOVATION, CLARITY, AND RELEVANCE TO SUSTAINABILITY AND CIRCULAR ECONOMY GOALS. THE AWARDS ACKNOWLEDGE THE ABILITY OF PRESENTERS TO INSPIRE, ENGAGE, AND CONTRIBUTE TO ADVANCING SUSTAINABILITY KNOWLEDGE AND PRACTICE.

Award Criteria:

- Originality and relevance of the research topic
- Quality and clarity of presentation
- Potential impact on sustainability practices and policies

THE FOLLOWING PAGES SHOWCASE THE CERTIFICATES OF THE FOUR JOINT WINNERS OF THIS FORUM'S AWARDS.

DR. ELIZABETH IFEOMA ANIEROBI

Inclusive Education: The Catalyst for Achieving the Sustainable Development Goals Through Capacity Building Among Diverse Learners

DR. DJATMIKO DJATMIKO

Rethinking Teaching with Technology: Building Sustainable Education in the Digital Age

DR. SANA JAVAID

Organisational Culture vs Change Management Process in Higher Education Institutions: Context of a Developing Country

MAO YANYI

Building Sustainable Educational Competencies in Environmental Design through AI: Pathways and Challenges

ABSTRACTS

TheSustainImpact International Forum
23 July 2025

THIS SECTION PRESENTS THE COLLECTION OF ABSTRACTS ACCEPTED FOR PRESENTATION AT THE THESUSTAINIMPACT INTERNATIONAL FORUM 2025. EACH ABSTRACT REFLECTS ORIGINAL WORK AND PERSPECTIVES THAT ALIGN WITH THE FORUM'S THEME, DRIVING SUSTAINABILITY FORWARD: INNOVATION, EDUCATION & CIRCULAR IMPACT.

THE ABSTRACTS ARE ORGANIZED TO SHOWCASE THE DIVERSITY OF TOPICS AND APPROACHES DISCUSSED DURING THE EVENT, REPRESENTING RESEARCH, CASE STUDIES, AND INITIATIVES FROM MULTIPLE DISCIPLINES AND REGIONS. TOGETHER, THEY FORM A RECORD OF THE IDEAS AND CONTRIBUTIONS SHARED IN THIS FORUM.

Inclusive Education: The Catalyst for Achieving the Sustainable Development Goals Through Capacity Building Among Diverse Learners

Elizabeth Ifeoma Anierobi[1,*]**; Ursula Ifeoma Oparaugo**[1]

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ABSTRACT

This paper examines the critical role of inclusive education in advancing Sustainable Development Goal 4 (Quality Education), Sustainable Development Goal 5 (Gender Equality), Sustainable Development Goal 8 (Decent Work and Economic Growth), and Sustainable Development Goal 10 (Reduced Inequalities) through capacity building. Inclusive education, implemented in Nigeria under the Zero Reject Policy, is a fundamental human right and a transformative educational practice aimed at ensuring that every child, regardless of disability, learning needs, or social status, has access to quality education alongside peers with limited or no disabilities. Through inclusive practices, children learn in the same environment and benefit from modified curricula and special provisions that support holistic development across cognitive, affective, and psychomotor domains, thereby fostering capacity building and enabling effective societal participation. Capacity building through inclusive education is essential for sustainable development, equipping every child with the skills and empowerment needed for self-development and contribution to societal progress. By providing equal access to education, inclusive education reduces inequality, fosters social inclusion, and strengthens human capital, creating positive ripple effects across multiple SDGs. This paper discusses the concepts of capacity building, sustainable development, and inclusive education; explores strategies for promoting inclusive education in support of the SDGs; and addresses the benefits, challenges, and recommendations for policymakers and educators to advance inclusive education and facilitate progress toward achieving these global goals.

Rethinking Teaching with Technology: Building Sustainable Education in the Digital Age

Djatmiko Djatmiko[1,*]; Khusnul Khotimah[1]; Adhitya Amarulloh[1]; Mochamad Kamil Budiarto[1]; Rico Eko Andrianto[1]; Arsyananda Rabbani[1]; Iwan Maulana[1]; Favian Avila Syahmi[1]; Ilham Laksana[1]

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ABSTRACT

The pursuit of sustainable development in education requires a fundamental rethinking of how teaching and learning are designed, delivered, and assessed. In the context of the digital age, educational technology plays a critical role in shaping sustainable classrooms that are inclusive, resource-efficient, and future-oriented. This study explores how the integration of digital tools and pedagogical innovation can contribute to the development of sustainable classrooms, particularly in line with Sustainable Development Goal 4 (Quality Education). Utilizing a quantitative research approach, survey data were collected from educators and school leaders in both urban and rural settings to examine current practices, challenges, and perceptions related to technology-enhanced sustainable teaching. The results indicate that while access to technology has improved, its pedagogical application for sustainability remains uneven. Teachers who adopt student-centered, collaborative, and project-based approaches using digital tools are more likely to foster sustainability competencies such as critical thinking, global awareness, and environmental responsibility. Statistical analysis further highlights significant differences based on factors such as teaching experience, school location, and level of digital literacy. This paper proposes a framework for rethinking teaching with technology that emphasizes ecological responsibility, digital inclusion, and curriculum alignment with sustainability goals. It argues for a shift from technology-as-tool to technology-as-transformative-partner in education. The findings have implications for curriculum designers, teacher education programmes, and policymakers seeking to promote sustainable education through meaningful EdTech integration. By reimagining the classroom as a dynamic, connected, and conscious space, educators can better prepare learners for the complexities of a rapidly changing world.

Keywords: Sustainable Education; Educational Technology; Digital Inclusion; Digital Pedagogy

Organisational Culture vs Change Management Process in Higher Education Institutions: Context of a Developing Country

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ABSTRACT

This qualitative research study seeks to explore in depth the impact of culture within higher education institutions on change management processes. The overarching focus is on the influence of organizational culture on the success of change management initiatives in these unique settings. The research population consists of individuals directly involved in change management processes within a diverse selection of higher education institutions, including administrators and faculty members. Through purposive sampling, diverse and representative participants were selected to ensure a holistic understanding of the subject. Semi-structured interviews were conducted as the primary means of data collection, allowing for open-ended discussions with participants. These interviews examined the underlying cultural elements, values, norms, and beliefs that either facilitate or hinder the success of change management initiatives. The interview data were transcribed, organized, and analyzed systematically. The use of thematic analysis enabled the identification of recurrent themes and patterns influencing organizational culture during change management. This research aims to provide valuable insights into the dynamic interplay between change management processes in higher education and institutional culture, offering practical implications for leaders and administrators seeking to navigate the challenges of change in educational settings. By highlighting strategies to align culture with change goals, this study contributes to the development of more effective change management practices in higher education institutions.

Building Sustainable Educational Competencies in Environmental Design through AI: Pathways and Challenges

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ABSTRACT

As the world strives to meet the Sustainable Development Goals (SDGs), higher education institutions are under increasing pressure to integrate sustainability into their curricula, particularly in fields such as environmental design. While interdisciplinary collaboration and technological advancements have improved educational outcomes, little research has explored the role of artificial intelligence (AI) in developing students' sustainable design competencies. This study addresses that gap by examining practical methods for embedding AI technologies into environmental design education and identifying related challenges. A mixed-methods approach was employed, incorporating literature analysis, classroom observations, and interviews and surveys with third-year Environmental Design students at Sichuan Technology and Business University. Findings show that AI can enhance students' skills in spatial design, systems thinking, and visual communication. AI-driven data analysis, in particular, can strengthen decision-making and problem-solving, making them more sustainable and data-informed. However, challenges remain, including disparities in instructors' technological proficiency and difficulties aligning existing curricula with AI-driven approaches. The study proposes a competency-building framework for environmental design education that leverages AI tools, offering practical guidance for curriculum reform and faculty development. It highlights the transformative potential of AI in advancing sustainability education as higher education undergoes rapid digitalisation.

Exploring a Virtue Oriented Integrated Model of Teaching and Competition: A Pilot Study

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ABSTRACT

This paper takes the choreography teaching of aerobics in the public physical education course at Sichuan Business College as an example. It employs research methods such as literature review, questionnaire surveys, video analysis, mathematical statistics, and experimental teaching to analyze in depth the actual situation of students enrolled in elective aerobics courses. Through structured teaching methods, students not only learn how to choreograph aerobics routines but also incorporate their creative works into the course assessment. Additionally, by leveraging the joint efforts of the University Youth League Committee and the Aerobics Association to organize campus fitness aerobics competitions, the study promotes an integrated teaching model of "teaching and competition." The pilot and practical implementation of this model have made aerobics choreography teaching more targeted, clarified students' learning directions, and strengthened the purposefulness of education. Through the pilot study and practice of the "teaching and competition" integrated model, there has been a significant enhancement in students' teamwork spirit, innovation ability, self-learning capacity, and proactive attitude towards progress. The course also demonstrates strong ideological and political education, making it highly replicable.

Identifying Key Obstacles to the Sustainable Development of Urban Green Space: An Empirical Study of Chengdu, China

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ABSTRACT

In the context of advancing ecological civilization and achieving high-quality economic development of sustainability, urban green spaces (UGSs) have emerged as crucial ecological infrastructure, receiving growing attention regarding their sustainable development. This study takes Chengdu as a case and analyzes data on UGSs and economic performance over the past 15 years to examine their interactive relationship and the degree of coordinated development. An entropy-weight method and a coupling coordination degree model (CCDM) were employed to reveal the trends and dynamics of coordination between UGSs development and economic growth in Chengdu. Furthermore, an obstacle degree model was used to identify the key factors hindering the sustainable development of UGSs. The findings indicate an overall upward trend in the composite index of UGS and economic development, with mutually reinforcing, yet indirect, effects. The coordination degree has steadily improved, reaching a coordinated development level since 2013. However, the coupling relationship remains dynamic and partially unstable. Key obstacles identified include: "industrial solid waste generation," "per capita park green space," "total green space area," and "industrial sulfur dioxide emissions." Based on these findings, the study recommends that Chengdu strengthen solid waste control and reuse, enhance the adaptability of UGSs to population dynamics, and adopt diversified strategies to better realize the ecological service functions of UGSs. These efforts are essential to advancing the sustainable development of urban green spaces in the context of economic growth.

Keywords: Urban Green Space; Sustainable Development; Coupling Coordination; Obstacle Factors

Renewable Energy Cooperative and Energy Sustainability in Anambra State, Nigeria

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ABSTRACT

Particularly in Anambra State, where access to consistent and inexpensive power is constrained, energy sustainability continues to be a major issue in many areas of Nigeria. This paper looks at how renewable energy cooperatives (RECs) might help the state become more energy sustainable. Community-driven programmes that fund and run renewable energy initiatives, RECs provide an inclusive, distributed way to combat energy poverty and support local economic growth. This study evaluates the viability, community involvement, financial models, and policy support required for effective REC implementation by means of qualitative and statistical analysis. The results imply that in rural and peri-urban areas, using solar and biomass resources via cooperatives could greatly enhance energy access and resilience. The study underlines obstacles such as regulatory ambiguity, financial constraints, and technical capacity, as well as suggested legislative changes and capacity-building initiatives to assist REC expansion. In Anambra State, renewable energy cooperatives could be important for attaining long-term energy sustainability.

Keywords: Renewable Energy Cooperatives; Energy Sustainability; Anambra State; Solar and Biomass Resources

The Effect of Social Media Marketing on Consumer Purchase Decisions in Klang Valley: The Mediating Role of Brand Awareness

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ABSTRACT

In Malaysia, social media marketing (SMM) has become a key tool for helping businesses engage and attract consumers, which can lead to purchase decisions. Platforms such as TikTok, Instagram, YouTube, and Facebook are widely used for product discovery, engagement, and purchasing. This study examines the influence of SMM on consumer purchase decisions (CPD) among consumers in Klang Valley, with brand awareness (BA) as a mediating factor. A quantitative approach was used, and data were collected from 404 respondents through a structured questionnaire. The findings indicate that components of SMM, particularly content quality and influencer collaborations, significantly influence CPD, with BA serving as a mediating factor in these relationships. However, BA does not mediate the relationship between brand interactivity and CPD. Overall, BA can still lead to CPD and improve the sales performance of a company. Future research could explore other geographical regions, adopt qualitative methods, and investigate additional factors such as economic and psychological influences, as well as the role of Artificial Intelligence (AI) and chatbots in enhancing the effectiveness of SMM.

Transitioning Towards Circular Construction in China: Breaking Barriers and Unlocking Sustainable Growth

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ABSTRACT

In response to the growing challenges of global climate change and resource depletion, China's construction sector, one of the most resource-intensive industries, has become a central focus of national sustainability reforms. Characterised by high energy and material consumption, the industry has been targeted with policies promoting green building practices, reusing construction materials, and reducing waste. However, from policy design to implementation, challenges remain, including fragmented standards, weak regulatory mechanisms, and limited monitoring. This study evaluates the operational performance of China's circular building policies, drawing on experiences from the EU and Nordic countries to propose improvements. A qualitative approach was used, combining content analysis of policy documents with comparative case studies from three pilot cities. Findings show that despite progress, institutional barriers persist, such as inconsistent standards, limited enforcement capacity, and the absence of comprehensive regulatory mechanisms. Compared with international examples, China still faces gaps in life-cycle thinking, cross-sector governance, and market incentives. The study recommends incorporating life-cycle assessment tools into mandatory frameworks, creating a unified building data platform, and strengthening the Extended Producer Responsibility system to improve policy coherence, enforcement, and long-term sustainability.

Keywords: Circular Economy; Green Building Governance; Policy Implementation; Institutional Reform

Exploring the Impact of ITEF on Sustainable Learning Motivation in the Context of Intelligent Manufacturing

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ABSTRACT

In the era of intelligent manufacturing, the education sector is undergoing a profound transformation that requires teachers to rethink how to stimulate and sustain students' learning motivation. This study aims to explore the Interactive Transfer Expectation Framework (ITEF), a comprehensive model that integrates constructivist theory, learning transfer theory, and expectation theory, and examines its impact on the intrinsic drive for learning in the context of sustainable development. The ITEF framework emphasizes enhancing teacher–student interaction and peer-to-peer interaction, promoting knowledge transfer ability, and managing learners' expectations to improve learning motivation. This study adopts a quantitative research approach, collecting data through questionnaire surveys to assess the influence of the interaction, transfer, and expectation dimensions of the ITEF framework on intrinsic learning drive. Descriptive statistics, correlation analysis, and regression analysis are used to examine the relationships among these dimensions and demonstrate the framework's effectiveness in fostering intrinsic learning drive for sustainable development. The findings aim to provide valuable insights for educational reform in the context of intelligent manufacturing, helping students develop sustainable learning motivation and establish a strong foundation for their future careers.

Keywords: Intelligent Manufacturing; Internal Drive for Learning; Interactive Transfer Expectation Framework (ITEF); Sustainable Development

Navigating the Digital Classroom: Challenges, Benefits, and Ethical Concerns

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ABSTRACT

The integration of technology in education has transformed teaching and learning by enhancing engagement, accessibility, and efficiency. However, despite its benefits, challenges such as technological barriers, digital inequality, insufficient teacher training, and ethical concerns continue to hinder effective adoption. This study explores the benefits, challenges, and ethical considerations of technology integration in private and international schools in Johor Bahru. Using a qualitative approach, semi-structured interviews were conducted with ten teachers to gain in-depth insights into their experiences with technology in the classroom. Findings reveal that teachers perceive technology as a valuable tool for improving teaching efficiency, student engagement, and administrative management. However, limited infrastructure, work-life balance concerns, and lack of Information and Communication Technology (ICT) training remain significant barriers. Ethical concerns such as privacy risks, unequal access, plagiarism, and online misconduct further complicate technology adoption. The study underscores the need for enhanced teacher training, institutional support, and clear policies to address these challenges. Recommendations include improving technical infrastructure, implementing ethical guidelines, balancing digital and traditional teaching methods, and ensuring better work-life balance for educators. Future research should explore technology adoption across different school types, larger teacher samples, and comparative studies between primary and secondary education levels. Addressing these gaps will contribute to a more effective and ethical integration of technology in education.

Keywords: Technology Integration; Digital Equity; Ethical Concerns; Education Policy

Leadership for Equity: Financial Decision-Making as a Pathway to Sustainable Digital Transformation in K-12 Education

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ABSTRACT

Fair access to high-quality education remains a global concern in the pursuit of sustainable development, particularly in regions disadvantaged by limited digital technology. This study examines the important yet often overlooked role of financial leadership in driving long-term digital transformation in K-12 educational systems. It investigates how school administrators' financial decisions, such as allocating funds for teacher training, digital infrastructure, and student support services, affect academic outcomes and long-term digital equity in Malaysia. Using case studies of urban and rural schools, development indicators, and secondary data from education ministries, the study highlights systemic gaps in digital access and identifies strategic resource allocation approaches to address them. It argues that building robust, inclusive systems that enable all children to thrive in a technologically advanced world is as vital to sustainability in education as environmental responsibility. The study aligns with Sustainable Development Goal 4 (Quality Education), Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure), and Sustainable Development Goal 10 (Reduced Inequalities), offering a framework for school leaders to strengthen their capacity to promote innovation and inclusivity by linking finance, education, and sustainability. The findings have implications for policymakers, school administrators, and development partners, presenting practical strategies to create fiscally responsible yet equity-centered education systems that are both sustainable and future-ready.

Keywords: Educational Leadership; Digital Equity; Sustainable Development; Resource Allocation

Assessment of Critical Thinking Skill of Secondary School Students for Sustainable Development and Capacity Building of Science Education in Anambra State

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ABSTRACT

As education moves from content memorization to skill development, critical thinking has become a core competency for student success in science subjects. It is an essential skill for the scientific and technological advancement of any society. This study assessed the critical thinking skills of secondary school students for sustainable development and capacity building in science education in Anambra State. The research was guided by three questions and three hypotheses, using a descriptive and predictive correlation design. The study population consisted of 23,247 Senior Secondary Two (SS 2) students in Anambra State, from which a sample of 670 was selected through simple random sampling. Data were collected using the Critical Thinking Questionnaire developed by Alihali et al. (2023), which had a Cronbach's alpha of 0.89. The instrument included 64 items on a seven-point Likert scale (0 = Never to 6 = Always) and was validated through confirmatory factor analysis. Data collection was supported by six research assistants and analyzed using mean, standard deviation, t-test, and multiple regression. Results showed that students generally demonstrated high critical thinking skills, with male and urban students scoring higher than female and rural students. Critical thinking skills had a significant influence on academic achievement in Physics, Chemistry, Biology, and Mathematics. Among the skill dimensions, analysis, evaluation, inference, and explanation showed significant influence, while self-regulation and interpretation did not. It is recommended that teachers actively help students develop critical thinking skills to strengthen science education in Anambra State.

Core Elements and Practical Strategies for Building Teacher Capacity in Sustainable Education System

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ABSTRACT

As a key driver of Education for Sustainable Development (ESD), teacher capacity building has attracted increasing attention. UNESCO emphasizes that teachers must be able to integrate ESD concepts into their teaching practice, yet there is limited research on leveraging UNESCO sites to promote such capacity building. This study examined the core elements and strategies for enhancing teacher capacity by observing teaching activities at 10 universities in China and conducting interviews with 30 lecturers and experts. The findings indicate that the core elements include a deep understanding of ESD concepts, the ability to connect with lifelong learning, and the ability to integrate these concepts into teaching practice. UNESCO sites can enhance teachers' sustainability awareness and practical skills, and promote knowledge sharing through environmental training, field visits, and interactive teaching. The study calls on policymakers and educational institutions to provide policy and resource support, encourage teacher participation in UNESCO heritage activities, and strengthen collaboration between UNESCO heritage sites and educational institutions.

Keywords: Sustainable Education; Teacher Capacity; Core Elements; Practical Strategies

Determinants of AI Driven Service Quality on Customer Satisfaction in Quick Service Restaurants: The Mediating Role of Perceived Value

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ABSTRACT

The integration of Artificial Intelligence (AI) technologies into the operations of the quick service restaurant (QSR) industry has transformed service delivery, customer engagement, and operational efficiency. Using the SERVQUAL model, this research examines the determinants of AI-driven service quality and their impact on customer satisfaction, with particular attention to the mediating role of perceived value. Key service quality dimensions, tangibility, reliability, and responsiveness, are analyzed. A quantitative research design with a simple random sampling technique was employed, involving 459 millennial respondents. Data were collected through structured questionnaires and analyzed using the Statistical Package for Social Sciences (SPSS v30). The findings reveal that tangibility, reliability, and responsiveness are essential determinants that significantly affect customer satisfaction, with perceived value serving as a mediator in this relationship. This study provides valuable insights for QSR operators to refine service strategies, pricing models, and brand messaging to enhance customer satisfaction and brand loyalty. It also offers a foundation for future academic research on customer satisfaction and service optimization in the QSR sector. Future studies could examine additional service quality dimensions such as empathy and assurance, as well as expand the respondent base to include other generational groups such as Generation X.

Leveraging AI for Teachers' Professional Growth: A Sustainable Model for Capacity Building in the Global South

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ABSTRACT

Teachers are central to the success of any educational system. In many parts of the Global South, educators are often the sole providers of knowledge and skills due to financial constraints, logistical barriers, and inadequate infrastructure that leave schools without sufficient learning resources. This challenge is compounded by the poor quality of teacher professional development, where novice teachers receive minimal support and continuing professional development (CPD) programmes are often generic, disconnected from contextual realities, and unsustainable. These issues hinder improvements in instructional quality and student learning outcomes. This study proposes a sustainable, technology-enabled model for teacher professional growth that harnesses the transformative potential of Artificial Intelligence (AI). Moving beyond conventional top-down training approaches, the model leverages AI to provide personalized learning pathways, real-time feedback, and on-demand access to professional resources, particularly in remote and under-resourced settings. It is built around three interconnected pillars: AI-powered professional learning environments, digital literacy empowerment, and intrinsically motivated teacher engagement. Grounded in emerging research and contextual analysis, the study examines how AI can be strategically utilized to address the unique needs of educators in the Global South, promoting a shift from episodic training toward sustainable, self-directed, and transformative learning experiences. The paper concludes with actionable policy recommendations, highlights potential implementation barriers, and suggests pathways for embedding AI-supported teacher development into broader educational reforms.

Keywords: Artificial Intelligence; Teacher Professional Growth; Global South; Sustainable Development

Beyond the Curriculum: Rethinking Sustainable Education as a Way of Life

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ABSTRACT

Sustainable education is often narrowly interpreted within the confines of formal schooling, structured curricula, and institutionalized learning. While these components are important, this paper argues that such a limited approach falls short of achieving the deep, lasting change required for genuine sustainability. Education for sustainability must move beyond content delivery to become a way of life, shaping values, attitudes, and behaviours across all stages of life and in all environments, both formal and informal. It should not be measured merely by the integration of environmental or development topics into syllabi, but by how it influences everyday decision-making, cultural practices, and societal norms. This paper examines how families, communities, religious institutions, and traditional knowledge systems serve as powerful yet often overlooked spaces for capacity building. When recognized and integrated, these avenues can significantly reinforce lifelong learning and responsible citizenship. The paper challenges education stakeholders to shift focus from curriculum design to lifestyle transformation, advocating for a holistic model that empowers learners not only to know but to live sustainably. Teachers, parents, community leaders, and policymakers all have a critical role in modelling and promoting sustainability as a shared value. A paradigm shift is needed, from teaching about sustainability to sustaining a culture of sustainability, so that societies can be built where sustainability is not just learned in school, but practiced in daily life.

Keywords: Sustainable Education; Lifelong Learning; Cultural Practices; Responsible Citizenship

Re-Modeling Social Studies Education Through Artificial Intelligence for Sustainability in Anambra State: Focus on Staff Capacity Building

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ABSTRACT

This study examined the re-modeling of social studies secondary education through Artificial Intelligence (AI) for sustainability, with a focus on staff capacity building in Anambra State. The objectives were to identify the current level of AI integration in social studies education; examine the impact of AI-powered tools and methods on students' sustainability literacy and competencies; determine specific staff capacity building needs; and explore challenges and opportunities for AI-enhanced social studies education. Four research questions guided the study. A descriptive survey design was adopted, with a population of 1,214 comprising 789 social studies teachers and 425 school administrators in the Anambra State Post Primary Education Commission. Using proportionate stratified random sampling, a sample of 120 respondents (80 teachers and 40 administrators) was selected. Data were collected using the researcher's self-designed questionnaire, duly validated by three experts in the Department of Educational Foundations, Nnamdi Azikiwe University, Awka. The instrument's reliability was confirmed with a Cronbach's alpha coefficient of 0.85, indicating high reliability. Descriptive statistics, including mean and standard deviation, were used for analysis. Findings revealed a low level of AI integration in social studies secondary education, despite the significant positive impact of AI-powered tools on students' sustainability literacy and competencies. There is a strong need for staff capacity building to address pedagogical, content knowledge, and technical gaps. Key challenges include resistance to change, limited funding, and inadequate infrastructure. The study recommends urgent intervention by the Anambra State government to support AI integration in social studies education for sustainability through targeted staff capacity building.

Keywords: Social Studies Education; Sustainability; Artificial Intelligence; Staff Capacity Building

The Role of Digital Innovations in Advancing Sustainability in University Educational Management and Administrative Practices

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ABSTRACT

Digital innovations have become increasingly central to advancing sustainability in higher education, yet challenges persist in integrating these technologies effectively within university management and administrative practices. This study investigates the role of digital technologies in promoting sustainability across four Nigerian universities, two private and two public, using a mixed-methods design combining quantitative surveys and qualitative interviews with university administrators and staff. Key findings reveal that digital platforms, including cloud-based management systems and virtual collaboration tools, significantly reduce resource consumption and enhance operational efficiency. However, inadequate infrastructure, digital equity gaps, and resistance to change hinder broader adoption. Best practices identified include leadership commitment, comprehensive staff training, and policy frameworks that support sustainable digital transformation. The study also examines barriers unique to different institutional contexts and offers tailored recommendations for overcoming them, leveraging digital innovations to strengthen sustainability outcomes. These findings align with global sustainability frameworks, including Sustainable Development Goal 4 (Quality Education) and Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure). By providing empirical insights from a developing country perspective, this research contributes to a deeper understanding of digital transformation strategies relevant to higher education institutions in the Asia-Pacific region and globally. The implications highlight the necessity for strategic planning, inclusive capacity building, and infrastructure investment to fully realize the potential of digital tools in sustainable university management and administration.

Keywords: Digital Innovation; Sustainability; University Management; Virtual Platforms

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Closing Remarks & Publication Information

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