



SPECIAL EDITION

Global Tourism TechEDU Conference '25
"Advanced Technologies in Tourism Education"

ISSN: 2183-0800

Volume 24 • Número 1 • 36.ª edição
Volume 24 • Number 1 • 36th edition
Volumen 24 • Numero 1 • 36ª edición

revistas.rcaap.pt/thij



ISCE - INSTITUTO SUPERIOR DE LISBOA E VALE DO TEJO
ISCE - HIGHER INSTITUTE OF LISBON AND TAGUS VALLEY
Presidente/President: Prof. Doutor/PhD Luís Picado



Departamento de Turismo
Tourism Department

Diretor/Director: Prof. Doutor/PhD Nuno Abranja
nuno.abranja@isce.pt

Endereço para correspondência do THIJ

Mailing adress of THIJ

Rua Bento de Jesus Caraça, 12, Serra da Amoreira
2620-379 Ramada – Odivelas – Portugal

Contactos/Contacts

Tel.: +351 219 347 135

Email: thijournal@isce.pt

URL: <https://revistas.rcaap.pt/index.php/thij/index>

THIJ – TOURISM AND HOSPITALITY
INTERNATIONAL JOURNAL

ISSN: 2183-0800

V. 24, nº 1 (April 2025) | Special Edition

CONSELHO EDITORIAL EDITORIAL BOARD

Editor Executivo | Editor-in-Chief

Nuno Abranja – ISCE, Portugal

Editores | Editors

Ana Leal-Solís – ISCE, Portugal

Edgar Bernardo – ISCE Douro, Portugal

Tiago Rodrigues – ISCE, Portugal

Alexandra Lavaredas – ISCE, Portugal

CONSELHO EDITORIAL CONSULTIVO EDITORIAL ADVISORY BOARD

Donária Coelho Duarte – Univ. de Brasília, Brazil

Gilson Zehetmeyer Borda – Univ. of Brasília,
Brazil

Jaime Serra – ECS, Univ. of Évora, Portugal

Luiz Moutinho – Univ. of Suffolk, UK, and
Univ. of the South Pacific, Fiji

Natasha Luzhkova – V. B. Sochava Institute of
Geography SB RAS, Russia

Noémi Marujo – Univ. of Évora, Portugal

Pauline Sheldon – STIM, Univ. of Hawai'i, Hawai

Richard Butler – Strathclyde University, UK

Rosário Borges – Univ. of Évora, Portugal

COMISSÃO CIENTÍFICA SCIENTIFIC BOARD

Abraham Pizam RCHM, Univ. Central Florida, USA

Alan A. Lew DGPR, Northern Arizona Univ., USA

Alcina Sousa Univ. da Madeira, Portugal

Alfonso Vargas Sánchez Univ. of Huelva, Spain

Amador Durán Sánchez, Univ. of Extremadura

Ana Maria Ferreira Univ. of Évora, Portugal

André Perinotto Univ. Federal do Delta do Parnaíba
- Brazil

Antónia Correia Univ. of Algarve, Portugal

António Sérgio Almeida ESTM – IPL, Portugal

Bonifácio Rodrigues IPLuso, Portugal

Carlos Cardoso Ferreira Univ. of Coimbra, Portugal

Cátia Malheiros Ferreira ESTM – IPL, Portugal

Charles Arcodia Griffith Business School, Griffith
University, Australia

Chris Cooper Oxford Brookes University, UK

Christof Pforr SM-CBS, Curtin University, Australia

Cláudia R. de Almeida ESGHT-UALG, Portugal

Conceição Gomes ESTM – IPL, Portugal

David Airey Univ. of Surrey, UK

Dimitrios Buhalis ST, Bournemouth University, UK

Dulcineia Ramos ESTM – IPL, Portugal

Donaji Jiménez Islas Higher Technological Institute
of Huichapan, Mexico

Edgar Bernardo ISCE, Portugal

Eduardo Moraes Sarmento ULHT, Portugal

Eduardo Yázigi Univ. of São Paulo, Brazil

Eunice Lopes ESGT, IP Tomar, Portugal

Eva Corrêa ISCE, Portugal

Fernando Moreira ESHT, Portugal

Isabel Vaz de Freitas Univ. Portucalense Infante D.
Henrique, Portugal

John Fletcher ST, Bournemouth University, UK

Jordi Tresserras Juan Univ. of Barcelona, Spain

Jorge Marques Univ. Portucalense Infante D.
Henrique, Portugal

Jorge Simões Instituto Politécnico de Tomar,
Portugal

Jorge Umbelino ESHT, Portugal

José Álvarez García Univ. of Extremadura, Spain

José António Figueiredo Univ. Lusíada, Portugal

José d'Encarnação Univ. of Coimbra, Portugal

José Jiménez Quintero Univ. of Málaga, Spain

José Ramón Cardona Univ. of Islas Baleares, Espanha

Júlio Mendes Universidade do Algarve, Portugal

Luís Lima Santos IPLeiria, Portugal

Luís Picado ISCE, Portugal

Manuel Salgado ESHTS - IPG, Portugal

Margarida Abreu Morais Griffith Business School,
Griffith University, Australia

María de la Cruz del Río Univ. of Vigo, Spain

Marina Godinho Antunes ISCAL, Portugal

Mário Passos Ascensão HAAGA-HELIA, Finland

Michael Schön ESTM – IPL, Portugal

Michelle Lins de Moraes Univ. Europeia, Portugal

Miguel d'Abreu Varela INP/ISG, Portugal

Miguel Moital ST, Bournemouth University, UK

Nuno Gustavo ESHT, Portugal

Paula Farinho ISCE, Portugal

Paulo Jorge Almeida ESTM – IPL, Portugal

Pedro Mucharreira ISCE | IE, Univ. of Lisboa, Portugal

Ricardo Martins ISCE, Portugal

Tomasz Napierała IUGTS, Faculty of Geographical
Sciences, Univ. of Lodz, Poland

Teresa Palrão ULHT, Portugal

Themudo Barata Univ. of Évora, Portugal

Vasco Ribeiro Santos ISLA Santarém, Portugal

Vítor Ambrósio ESHT, Portugal

Xerardo Pereiro UTAD, Portugal

ÍNDICE | INDEX

Índice Index.....	4
Editorial.....	7
<i>Nuno Abranja</i>	
Integrating Digital Storytelling into Tourism Education.....	9-15
<i>Milica Solarević</i> , Univeristy of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia	
Integrating Digital Well-being into Tourism Education.....	16-18
<i>Uglješa Stankov</i> , Univeristy of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia	
Innovations in Sustainable Tourism Research: Current Trends and Future Research Agenda.....	19-26
<i>Lina Pileliene & Rasa Pranskuniene</i> , Vytautas Magnus University, Lithuania	
Education and Sustainability: New Perspectives and Challenges for University Education.....	27-31
<i>Ing. Iveta Hamarneh</i> , Faculty of Entrepreneurship and Law, Pan-European University, Czechia	
Using Artificial Intelligence in Teaching (Example of SMARTapp).....	32-33
<i>Sebastian Kopera & Ewa Wszendybył-Skulska</i> , Jagiellonian University in Krakow, Poland	
New Technologies in Tourism Education: Towards Accessibility in Higher Education.....	34-35
<i>Magdalena Sawczuk & Beata Paliś</i> , Jagiellonian University in Krakow, Poland	
Modern Technologies in Tourism Education - Exclusion or Inclusion?.....	36-42
<i>Barbara Osóch, Agnieszka Sawińska, & Aleksandra Werner</i> , University of Szczecin, Poland	
Technology, Education in Emergencies, and Epistemic Justice: the ACADEMICS4GAZA Case.....	43-46
<i>Fabio Carbone</i> , University of Northampton, UK	
Ensino à Distância na Oferta Educativa do Curso de Gestão de Turismo: Melhores Práticas no uso das Tecnologias no Ensino do Turismo.....	47-52
<i>Arsília Anastácio Maiela, Elísio Eduardo Romão dos Santos, Assa Esperança João Nhambio Mondlane</i> , Universidade Aberta – ISCED, Mozambique	
A Comparative Study Between the Tourism Sector in Portugal and Angola. A Creative Model for the Circular Tourism Sector.....	53-56
<i>Ana Cristina Horta Corvo Dias Pego</i> , CICS Nova, Universidade Nova de Lisboa, Portugal, CINTurs, Universidade do Algarve, Portugal	

Capacitação Digital no Ensino Superior em Angola: O Impacto da Tecnologia no Ensino de Turismo.....	57-60
<i>Sebastião Rodrigues Pedro</i> , Universidade Agostinho Neto, Angola	
Training Seriously with Serious Games: Modern Boardgames Application to Tourism Training in Príncipe.....	61-63
<i>Edgar Bernardo</i> , ISCE Douro - Instituto Superior de Ciências Educativas do Douro, Portugal	
PISTA Digital as a Tool (also) to Enhance Teaching and Learning: An Application of Problem-Based Learning to Identify Sustainable Tourism Practices in Hotels.....	64-70
<i>Jaime Serra; Maria do Rosário Borges & Noémi Marujo</i> , Universidade de Évora, CIDEHUS, Portugal	
COIL as a Means to Enhance International Tourism Education in Universities.....	71-77
<i>Emese Panyik</i> , Faculty of Philosophy and Social Sciences, Catholic University, Portugal & <i>Callum Morrison</i> , Coventry University London, UK	
Territories and Hospitality - Two Pedagogical Approaches within the Technological Frame.....	78-83
<i>Ana Pereira Neto & Madalena Corte-Real</i> , CHAM, FCSH, Universidade NOVA de Lisboa, CEIA, ISEC Lisboa, Portugal	
Shaping the Future of Tourism Education with Digital Technologies and Tools.....	84-89
<i>Célio Marques, Vasco Santos & Inês Araújo</i> , Polytechnic University of Tomar, Portugal	
A utilização da Inteligência Artificial Generativa pelos estudantes de Turismo: Estudo de caso.....	90-94
<i>Ana Elisa Sousa & Paula Cardoso</i> , Politécnico de Leiria, CiTUR - Centro de Investigação, Desenvolvimento e Inovação em Turismo, Portugal	
Between Virtual and in-Person: Academic Decision-Making in the Era of Hybrid Events.....	95-102
<i>Jorge Marques</i> , REMIT - Portucalense University, CEGOT - University of Coimbra & <i>Joana A. Quintela</i> , CICEE - Research Center in Business & Economics, Portugal	
Balancing Technological Proficiency and Soft Skills in Tourism Education: A Study on Pedagogical Needs in the Digital Age.....	103-108
<i>Catarina Nadais</i> , ISLA Gaia, Centro de Estudos de Geografia e Ordenamento do Território da Universidade de Coimbra, Portugal & <i>Nuno Ricardo Mateus Coelho</i> , Universidade Lusófona, NRMCTPTARIS2-JournalLAPI2S, Portugal	
Strategic Models and Current Trends in Tourism Business Management.....	109-113
<i>Nuno Gustavo, Miguel Belo & Catarina Nunes</i> , Escola Superior de Hotelaria e Turismo do Estoril, CiTUR - Polo Estoril, Portugal	
Learning Design in Tourism Higher Education: Pedagogical Sharing based on Examples from IPBeja.....	114-121
<i>Victor Figueira, João Rodrigues, Ana Isabel Rodrigues, Maria João Ramos</i> , Polytechnic Institute of Beja, Portugal	

Significance of Laboratories and Technologies in Teaching Tourism: Case Studies in the Area of Tourism and Leisure.....	122-127
<i>Manuel Salgado & Fernando Florim de Lemos</i> , Polytechnic University of Guarda, Portugal	
Turismo Virtual: Tecnologias de Informação e Comunicação e Inovações no Ensino.....	128-133
<i>Frederico Couto Marinho</i> , Universidade Federal de Minas Gerais, Brazil	
Teaching Tourism in the Age of ChatGPT: Active Methodologies and Solutions for Real-World Challenges.....	134-138
<i>Simone de Lira Almeida, Viviane Santos Salazar, Alexandre César Batista da Silva & Luís Henrique de Souza</i> , Universidade Federal de Pernambuco, Brazil	
O Videogame como Instrumento Didático-Pedagógico no Turismo.....	139-146
<i>Éder Danilo Bezerra</i> , Universidade Federal de Alagoas, Brazil	
Tecnologias e Museus Interativos para Educação Patrimonial e Turismo.....	147-150
<i>Fabiana de Oliveira Lima</i> , Universidade Federal de Alagoas, Brazil	
Desafios para os Estudos em Tecnologia no Turismo: Formação Técnica e Superior no Brasil.....	151-158
<i>Juliana Medaglia</i> , Universidade Federal do Paraná, <i>Sérgio Rodrigues Leal</i> , Universidade Federal de Pernambuco & <i>Carlos Eduardo Silveira</i> , Universidade Federal do Paraná, Brazil	
Echoes of Tourism: Interinstitutional Lives of Academic Interaction in the Teaching-Learning of Tourism.....	159-164
<i>Noslin de Paula Almeida</i> , Universidade Federal de Mato Grosso do Sul, Brazil	
A Extensão Universitária como Educação Continuada, Transferência de Tecnologia, Inovação e Engajamento Social no Ensino do Turismo.....	165-170
<i>Erick Pusch Wilke, Fábio Orlando Eichenberg, Luciana Correia Diettrich & Lilian da Silva Paiva</i> , Universidade Federal de Mato Grosso do Sul, Brazil	
Hybrid Learning in Tourism and Hospitality: Integrating Field Practices and Collaborative Classroom Experiences.....	171-179
<i>Carolina Guerrero Reyes & Katheryne Aldana Villalobos</i> , Universidad Pedagógica Nacional, Colombia	
La Creación de Contenido Digital como Herramienta Metodológica de Enseñanza de Turismo, Caso: Universidad de Guayaquil.....	180-185
<i>José Alonso Hidalgo León</i> , Universidad de Guayaquil, Facultad de Administración, Ecuador	

EDITORIAL

The tourism sector has undergone significant transformations over the years, primarily driven by technological innovation. From online booking platforms to immersive experiences with virtual reality, technology is not only reshaping the industry but also redefining teaching and learning in this field. Tourism education, in particular, has benefited from a range of advanced technologies, creating new opportunities for the development of highly skilled professionals who are prepared for a dynamic and ever-evolving market.

This special edition publishes an extended set of abstracts of communications presented at the Global Tourism TechEDU Conference'25, held by partner institutions from 18 countries, which co-organise the event, coordinated by the Department of Business Sciences at ISCE – Instituto Superior de Lisboa e Vale do Tejo (Portugal). These institutions include: Escola de Hotelaria e Turismo da Universidade Agostinho Neto (Angola), The University of Newcastle (Australia), Universidade Federal de Pernambuco, Universidade Federal do Delta do Parnaíba, Universidade Federal de Alagoas, Universidade Federal de Mato Grosso do Sul, Universidade Federal de Minas Gerais (Brazil), Universidade do Mindelo (Cape Verde), Pan-European University (Czechia), Universidad Pedagógica Nacional (Colombia), Universidad de Guayaquil (Ecuador), University of Northampton (England), Dr Babasaheb Ambedkar Marathwada University (India), Ritsumeikan Asia Pacific University (Japan), Vytautas Magnus University (Lithuania), Universidad Santander (Mexico), UnISCED (Mozambique),

Faculty of Management and Social Communication – Jagiellonian University, Institute of Spatial Management and Socio-Economic Geography, University of Szczecin (Poland), CIDEHUS, Universidade de Évora, CiTUR – Centre for Tourism Research, Development and Innovation, Estoril Higher Institute for Tourism and Hotel Studies, Instituto Politécnico de Beja, Instituto Politécnico da Guarda, Instituto Politécnico de Tomar, ISCE – Instituto Superior de Lisboa e Vale do Tejo, ISCE Douro – Instituto Superior de Ciências Educativas do Douro, ISEC Lisboa – Instituto Superior de Educação e Ciências, ISLA – Instituto Politécnico de Gestão e Tecnologia, Universidade Portucalense, Faculdade da Filosofia e Ciências Sociais da Universidade Católica Portuguesa – Centro Regional da Braga (Portugal), Faculty of Sciences – University of Novi Sad (Serbia), Universidade de Santiago de Compostela, Facultad de Ciencias Empresariales y Turismo – Universidad de Vigo (Spain), and Department of Hospitality, Hotel Management & Tourism at Texas A&M University (USA).

The use of emerging technologies in tourism education goes beyond the simple adoption of digital tools. E-learning platforms and learning management systems allow students from different parts of the world to access high-quality content, with the flexibility to study at their own pace. The integration of digital collaborative tools, such as group work platforms and social networks, has encouraged collective learning, promoting the exchange of experiences among students from diverse regions. This

collaboration not only enriches the academic experience but also prepares future professionals for a globalised and interconnected environment.

The introduction of artificial intelligence, augmented reality, virtual reality, gamification, machine learning, big data, etc., in teaching allows for the personalisation of learning, adapting to the individual needs of each student and providing a unique educational experience. Such innovations also have the potential to create more interactive and dynamic curricula, reflecting the needs of the industry and preparing students for real-world challenges aligned with market realities.

The future of tourism education is undoubtedly intrinsically linked to technological innovation. By investing in advanced technologies, educational institutions have the opportunity to train more prepared, creative, and adaptable professionals who can lead and innovate in one of the most vibrant and challenging sectors of the global economy. It is under this premise that ISCE organised the Global Tourism TechEDU Conference'25 and engaged 34 partners from around the world to showcase their best practices in the use of technology in tourism education, which are published here.

Nuno Abranja
Editor-in-Chief

INTEGRATING DIGITAL STORYTELLING INTO TOURISM EDUCATION

9

Milica Solarević¹

Univeristy of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management
Serbia

¹ Milica Solarević, PhD is an Associate professor at the Faculty of Sciences, University of Novi Sad. She is expert in social geography with emphasis on demography, ageing, population policy, social and population trends in tourism development. She is also dealing with the application of spatial information systems, digital tools and information technologies within social sciences and education. She actively participates in several EU projects related to digital learning and education, digital and AI tools, educational digital upskilling and games, ageing, older adults, social innovations.

Abstract

Digital storytelling (DST) is a powerful teaching and pedagogical tool that enhances tourism education by creating engaging narratives. It fosters creativity, critical thinking and digital literacy, equipping students with essential skills for the modern tourism industry. This study explores DST integration into tourism education to enhance student digital literacy, engagement and creativity. The main objective is to examine how DST, supported by digital tools, can develop essential competencies such as storytelling, multimedia communication and critical thinking - crucial for careers in tourism marketing, destination management and customer engagement. A structured methodology for implementing DST is outlined, consisting of four key phases: content selection, narrative development, multimedia integration and iterative refinement. Digital tools such as interactive storytelling platforms (for example StoryMaps) and concept mapping applications play a central role in this process. These tools enable students to create dynamic, visually engaging narratives that effectively convey tourism concepts, supporting structured storytelling and helping students organize ideas and collaborate effectively. By engaging students in the creation of interactive case studies, virtual travel experiences or digital marketing projects, DST bridges theoretical knowledge with real-world applications. This approach fosters interdisciplinarity, integrating cultural, historical and technological elements within tourism. Active learning is emphasized as students co-create content using relevant digital tools, gaining practical experience essential for professional success. Embedding DST into the curriculum transforms tourism education into an interactive, student-centered experience. This ensures that students acquire hands-on expertise, preparing them for the evolving demands of the tourism sector and the broader digital economy.

Keywords

Digital storytelling (DST), Tourism education, Engaging content, Multimedia integration, Storymaps

Introduction

The integration of digital storytelling (DST) in tourism education has emerged as a transformative approach to teaching and learning. DST combines multimedia elements—such as images, videos, audio, and text—to create engaging and interactive narratives. This approach enhances student engagement, fosters creativity, and improves comprehension by making complex tourism concepts more accessible and relatable. This study explores how DST can be seamlessly incorporated into tourism curricula using a structured methodology supported by digital tools. The primary objective is to examine how DST can enhance student learning outcomes while equipping them with storytelling, digital literacy, and critical thinking skills—essential for careers in tourism marketing, destination management, and customer engagement.

Traditional storytelling has long been a powerful tool in education, helping learners understand concepts through narratives. However, with the digital transformation of the tourism industry, it is crucial to integrate digital storytelling methods that reflect real-world applications. DST goes beyond passive learning by actively involving students in content creation, promoting critical thinking, and allowing for the co-construction of knowledge. The transition from traditional storytelling to DST enhances visual learning by engaging multiple senses. DST enables students to explore tourism-related topics through interactive and multimedia-rich experiences, aligning with contemporary pedagogical approaches that emphasize active learning and student engagement.

Implementing Digital Storytelling in Tourism Education

To effectively integrate DST into tourism education, a structured approach consisted of four key phases is essential.

1. Content selection

- Identifying relevant tourism-related themes, case studies, or real-world scenarios.
- Ensuring alignment with course learning objectives.
- Encouraging students to explore diverse storytelling perspectives, such as cultural heritage, sustainable tourism, or digital marketing strategies.

2. Narrative creation

- Structuring compelling storytelling frameworks that include a clear beginning, middle, and end.
- Developing story arcs that align with tourism industry practices, such as customer journey narratives or destination branding stories.
- Using digital tools to enhance storytelling techniques, including voiceovers, animations, and interactive elements.

3. Multimedia integration

- Utilizing digital storytelling tools
- Interactive storytelling platforms: StoryMap (for crafting location-based narratives).

- Concept mapping applications: Coggle, MindMeister (for structuring and organizing tourism-related storytelling projects).
 - Ensuring accessibility by using tools that support captions, alternative text, and multiple language options.
4. Iterative refinement
- Encouraging peer review and collaborative feedback sessions to enhance storytelling effectiveness.
 - Revising digital stories based on student and instructor feedback.
 - Analyzing storytelling impact through engagement metrics, student reflections, and performance assessments.

Digital storytelling in tourism education relies on a range of digital tools that enhance content creation, organization, and presentation. Video editing tools enable students to produce engaging narratives by integrating text, voiceovers, and animations, creating dynamic and visually appealing tourism-related content. Interactive platforms allow for the development of location-based stories, linking multimedia elements to geographic data to provide immersive experiences. Concept mapping applications help structure narratives, ensuring logical flow and coherence in storytelling projects. Additionally, animation and visualization tools support the creation of animated stories that illustrate tourism scenarios in an engaging and dynamic way. By incorporating these digital tools, students develop practical skills in multimedia production, improving their ability to communicate complex tourism concepts effectively.

The integration of DST into tourism education offers numerous benefits for students. One of the key advantages is the increased engagement it fosters. Multimedia-rich narratives captivate students, making the learning process more interactive and immersive, especially in an online environment where attention can be harder to maintain. Moreover, DST enhances critical thinking skills. When creating digital stories, students are required to analyze data, organize their ideas, and present information in a logical and coherent manner. This process encourages deeper understanding and the ability to think critically about various aspects of tourism.

Digital storytelling also promotes collaboration and communication. Group projects centered around storytelling encourage teamwork, enabling students to work together to create a cohesive narrative. This not only strengthens their communication skills but also prepares them for the collaborative nature of the tourism industry. It helps students develop industry-relevant digital competencies. By working with various digital tools to craft their stories, students gain essential skills in digital marketing, content creation, and destination branding, all of which are valuable assets in the rapidly evolving tourism sector.

Co-Creation of Case Studies and Projects Using Storymaps

Digital Storytelling has become an increasingly valuable tool in the tourism sector, promoting destinations, cultural experiences or engaging audiences. Through case studies, students can explore the diverse ways DST is applied, from destination marketing campaigns and community-based tourism initiatives to cultural heritage preservation and responsible travel awareness. These examples offer insights into how storytelling can shape perceptions, foster engagement, and build connections with audiences, making it an essential strategy for both tourism education and industry practice.

StoryMaps: is a powerful digital tool that combines maps with multimedia elements like text, images, and videos to create interactive, narrative-driven experiences. It allows users to tell stories by geographically mapping out locations and providing context through rich, visual content. In tourism education, StoryMaps can be used to create engaging, location-based narratives that guide students through historical sites, cultural landmarks, or tourism destinations, offering an immersive learning experience that blends geography with storytelling. This tool enhances understanding by visualizing connections between places and events, making it an effective tool for both educators and learners. Here are some examples of using StoryMaps in tourism education.

Destination marketing: students can analyze how digital stories have been used to create compelling narratives about a place, whether highlighting its history, culture, natural beauty, or local experiences. For example, a case study might examine how a destination marketed itself through a series of digital stories featuring locals sharing their favorite spots, or how digital storytelling was used to promote a new tourism initiative or attraction.

Community-based tourism initiatives: students could explore how community members have created digital stories to share their traditions, crafts, or ways of life, with the goal of attracting responsible tourists and preserving cultural heritage. These case studies often focus on the empowerment of local populations and the role DST plays in creating authentic, community-driven tourism experiences.

Cultural heritage preservation through digital storytelling: students can examine how DST has helped document and bring awareness to cultural practices that might otherwise be at risk of being forgotten. Such case studies often include how museums, cultural organizations, or heritage sites have used digital storytelling to engage visitors and educate them about their history and significance.

Tourism education and awareness campaigns: these case studies examine how DST has been used to educate potential travelers on responsible tourism practices, sustainable travel, or environmental conservation. Students can analyze how DST helps to communicate the importance of ethical travel behavior and how tourism organizations create digital stories to raise awareness about environmental issues, wildlife conservation, or social impact.

Traveler and local experience narratives: these case studies focus on how personal stories of travelers or locals are used to build narratives that inspire others to visit. Examples might include the sharing of individual travel experiences, journeys, or the discovery of lesser-known destinations. These types of case studies help students

understand how personal storytelling fosters a connection with the audience and can make a destination feel more approachable and authentic.

Challenges

While DST offers significant benefits, its implementation also comes with challenges that need careful consideration. One of the primary challenges is technological barriers. Some students may have limited access to advanced digital tools or may not be familiar with multimedia software. To address this, educators can provide access to free or open-source tools and offer technical training to ensure all students can fully participate in DST activities.

Another consideration is the time-intensive nature of the process. Creating high-quality digital stories demands considerable time for scripting, editing, and refining the content. Educators must be mindful of this and allocate sufficient time for students to complete their DST projects effectively, ensuring they are not rushed in their creative process.

Assessment and evaluation also pose challenges in DST. Evaluating digital stories can be complex due to the variety of elements involved, such as creativity, technical execution, and storytelling effectiveness. To ensure fair and meaningful assessment, educators should develop a structured rubric that evaluates these aspects, while also considering how well the stories relate to tourism themes and learning objectives.

Future Steps and Conclusions

The future of Digital Storytelling (DST) in tourism education holds significant potential for further innovation and development. One key direction is the integration of emerging technologies, such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI)-generated narratives, which can elevate DST applications by creating more immersive and interactive learning experiences. Additionally, expanding industry collaboration can provide students with valuable real-world opportunities by partnering with tourism enterprises, travel agencies, and digital marketing firms, allowing them to apply their storytelling skills in authentic contexts. Finally, the development of DST-focused Massive Open Online Courses (MOOCs) could broaden access to cutting-edge storytelling techniques, enabling learners from around the world to engage with innovative approaches to tourism education. These advancements will help shape the future of DST in tourism, making it more accessible, engaging, and aligned with industry needs.

Digital storytelling is a transformative approach that enhances tourism education by making learning more engaging, interactive, and industry-relevant. By implementing DST through a structured methodology—supported by digital tools—students develop critical competencies essential for careers in tourism marketing, destination management, and digital tourism promotion.

The integration of DST into tourism curricula fosters creativity, interdisciplinary learning, and hands-on experience with multimedia production, preparing students for the evolving demands of the digital tourism industry. As technological advancements continue

to shape tourism education, DST will remain a key strategy for enhancing storytelling, communication, and digital literacy skills among future tourism professionals.

INTEGRATING DIGITAL WELL-BEING INTO TOURISM EDUCATION

16

Uglješa Stankov²

Univeristy of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management
Serbia

² Full Professor at the University of Novi Sad

Abstract

The rapid proliferation of digital technologies has exerted a profound influence on both the tourism industry and educational sectors. As future tourism professionals are destined to navigate a technologically enriched landscape, the imperative integration of digital well-being, defined as the strategic management of technology usage to bolster mental, emotional, and physical health, into tourism education becomes paramount. This curriculum enhancement ensures that students not only safeguard their own digital health but also advocate for responsible technological practices among travellers. In the professional realm, tourism workers frequently employ digital tools for marketing, customer engagement, and operational functions, which may precipitate digital fatigue, stress, and burnout. Additionally, an over-reliance on technology can detract from the authenticity and mindfulness that travel ideally promotes. Consequently, tourism education must equip students with the skills to manage their digital habits and foster healthier practices within the industry. A comprehensive educational strategy should provide a solid theoretical foundation regarding the psychological and social repercussions of excessive digital use, complemented by practical experiences such as creating digital-detox travel itineraries. Furthermore, the education must include instruction in technology management skills, such as the effective utilization of time-management applications, to prevent digital burnout. The advantages of integrating digital well-being into tourism education are extensive, preparing students to design travel experiences that enhance genuine engagement and mindfulness, thus improving customer satisfaction and promoting a sustainable, people-centric tourism industry.

Keywords

Digital mental health, Digital well-being, Mindful tourism, Technology management, Tourism education.

The rapid rise of digital technologies has profoundly impacted both the tourism industry and education. With smartphones, social media, and online platforms and AI now integral to travel experiences, the concept of digital well-being — the conscious management of technology use to support mental, emotional, and physical health — has become increasingly important. As future tourism professionals will navigate a world deeply intertwined with technology, integrating digital well-being into tourism education is essential. It ensures that students not only manage their own digital health but also promote mindful and responsible technology use among travelers.

Tourism professionals rely heavily on digital tools for marketing, customer engagement, and operational tasks, which can lead to digital fatigue, stress, and burnout. Likewise, travelers often find themselves during travel. This over-reliance on technology can diminish the authenticity and mindfulness that travel is meant to foster. Therefore, tourism education must address these issues by preparing students to manage their own digital habits while encouraging healthier practices within the industry.

Integrating digital well-being into tourism curricula requires a multi-faceted approach. First, students should gain a solid theoretical foundation, learning about the psychological and social impacts of digital overuse. This includes exploring how constant notifications, screen time, and social media pressures can affect mental health. Practical applications are equally important. Students can engage in hands-on projects, such as designing wellness-focused travel itineraries that encourage digital detox or creating marketing campaigns promoting mindful tourism experiences. These activities help future professionals understand how to implement digital well-being principles in real-world settings. Tourism education should emphasize technology management skills, teaching students how to use digital tools efficiently without compromising their well-being. This involves strategies like using time-management apps effectively, and recognizing signs of digital burnout.

The benefits of integrating digital well-being into tourism education are far-reaching. Students who learn to manage their own digital habits are less likely to experience burnout, leading to better academic performance and long-term career satisfaction. They are also better equipped to design travel experiences that promote mindfulness and authentic engagement, enhancing customer satisfaction and loyalty. On an industry level, fostering a workforce attuned to digital well-being contributes to a more sustainable and people-centered tourism sector.

INNOVATIONS IN SUSTAINABLE TOURISM RESEARCH: CURRENT TRENDS AND FUTURE RESEARCH AGENDA

19

Lina Pilelienė³

Vytautas Magnus University
Lithuania

Rasa Pranskūnienė⁴

Vytautas Magnus University
Lithuania

³ Dr. Lina Pilelienė is a professor at the Faculty of Economics and Management, Vytautas Magnus University. She holds a PhD in business administration and specializes in marketing. She has published numerous scientific papers in various journals and serves as an expert for several national and international scientific organizations. Her areas of interests include marketing, advertising, consumer behavior, neuromarketing, and tourism marketing.

⁴ Dr. Rasa Pranskūnienė is an assoc. prof. dr. at the Department of Business and Rural Development Management, Faculty of Bioeconomy Development and Researcher at Bioeconomy Research Institute, Vytautas Magnus University and the head of Vytautas Magnus University Agriculture Academy museum. Her areas of interests include museum education, overtourism, nature tourism, sustainable tourism management, heritage, grounded theory, qualitative research methods.

Abstract

The worldwide growing concerns towards the environmental issues encourage businesses to revise their strategies by adapting sustainability perspective. Changes in the business environment encourage also scientists and researchers to engage. Application of sustainability practices in business strategies requires constant changes and search for innovations. Considering the topicality of the issue, this research aims to indicate the existing trends in application of innovations for the enhancement of tourism sustainability and point out the main research vectors to be considered in the future. By adapting systematic literature review perspective, we identify the main areas of attention, suggest topics and sub-topics to be considered and further developed by researchers. Based on the thorough analysis of titles and keywords, seven research trends were detected. The analysis of the most-cited publications revealed the existence of three research trends: (1) management-focused, (2) sustainability-focused, and (3) smart/ITCs-focused. Moreover, the main future research themes were outlined and named under the area/scope the papers were focussing on the most: (1) tourism in general, (2) sustainability in general, (3) management, (4) scope, (5) innovation, (6) smart, and (7) method. Theoretical identifications may serve as a substantial background for tourism businesses endeavouring relying their strategies on innovations in order to gain sustainability-based competitive advantages.

Keywords

Innovation, Smart tourism, Sustainability, Sustainable tourism, Tourism managements

Introduction

Tourism is considered to be an important sector in many countries. A pivotal role played by the tourism industry results in economic growth and environmental preservation (Chen & Liu, 2025). Moreover, tourism industry has a profound historical impact on global sustainable development (Huang & Leung, 2025) driven by rapid technological advancements (Liasidou & Pipyros, 2025). As sustainability increasingly gains principal positions in the development of the economy and society (Antolini et al., 2024), determining and employing practices that enable ensuring sustainability in a long-run becomes essential (Chen & Liu, 2025).

Previous research enabled the determination of intersections between innovations and sustainable development (Pilelienė & Jucevičius, 2023) analysed in the scientific literature. Growing researchers' interest indicates that being more sustainable results in higher competitiveness (Bayrak, 2013). Moreover, sustainability is often considered as a key driver of innovation for companies (Wilkerson & Trellevik, 2021). Considering the growing importance of sustainability issues in tourism and innovations as a way of their management, mapping the field by identifying the existing trends in application of innovations for the enhancement of tourism sustainability and point out the main research directions to be considered in the future becomes an important goal this paper achieves to accomplish.

The provided systematic literature analysis will benefit the field of knowledge in three ways. First, the triad of tourism, sustainability, and innovations will be presented and scientifically grounded; second, the key intersecting scopes relating the elements of this triad will be explained; finally, further possible expansions of the research based on the suggested triad will be determined.

Theoretical Substantiation

Intersection between Tourism and Sustainability. Tourism is defined as “a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes” (United Nations World Tourism Organization, 2008). It contributes to the economic development of countries (Morales-Murillo et al., 2023). However, despite the positive contributions of the tourism sector to economic growth, its development also impacts the environmental quality and sustainability in a negative way (Ali et al., 2023). Tourism stimulates climate change and undermines achieving Sustainable

Development Goals (SDGs) (Lochman & Vagner, 2024), and tourist activities may harm the environment (He et al., 2024).

The planet Earth is the only planet people have, and it is losing its biological, physical, and chemical capabilities for human to habituate (Omoogun et al., 2016) and environmental challenges threaten the health and well-being of both the planet and humanity (He et al., 2024). Therefore, environmental issues become relevant as never before (Khakimova et al., 2019, Pranskuniene and Perkumiene, 2020).

Scientific literature suggests that sustainable tourism means a sector that operates and is operated in a framework of the principles of sustainable development (Torres- Delgado & Saarinen, 2014). Despite the many decades of implementation of sustainability practices in the tourism industry, “the greening of tourism seems to be slow, fragmented, and marginal” (Carić, 2018).

Intersection between Sustainability and Innovation. The increasing environmental pressure on businesses has driven a global shift toward sustainability (Worakittikul et al., 2025). Sustainability encompasses the ability to persist and prosper in the long run while minimizing adverse effects on the environment, society, and economy (Tajpour et al., 2025) and is increasingly gaining principal positions in the development of the economy and society (Antolini et al., 2024).

Innovation has emerged as a critical factor in the business world, and management of innovation is recognized for enhancing the competitiveness of the companies (Tajpour et al., 2025). Moreover, innovation has become ubiquitous, influencing nearly every sector (Abdelfattah et al., 2025). Sustainability is increasingly identified as a key driver of innovation for companies (Wilkerson & Trellevik, 2021), while the technological advancements are inducing changes in terms of market development, management practices, or new competitive strategies (Shafiee et al., 2019). From the sustainability perspective, developing and adopting environmentally friendly products, services, processes, or business models that minimize negative environmental impacts while promoting sustainability is called green innovation (Abdelfattah et al., 2025).

Intersection between Tourism and Innovation. While technology is a major force in creating flexibility in the tourism industry (Hall et al., 2020), seven key technological advancements characteristic to innovation can be found in the literature (Buhalis et al., 2019): fifth-generation (5G) mobile networks; artificial intelligence (AI); radio frequency identification (RFID); mobile devices, smartphones, and wearables; applications or apps (along with APIs); cryptocurrency; and blockchain.

To enhance travel experiences, destinations are increasingly adopting smart technologies (Sustacha et al., 2023). Moreover, the tourism industry is pursuing successful tourism strategies through website development, e-commerce, and related governance (S. Sharma & Rishi, 2022).

Innovations in Sustainable Tourism. An increased consumers’, local inhabitants’, and authorities’ environmental concern provoked innovative actions within the tourism

industry (Hjalager, 1997). Scientific literature emphasizes that using information technology, the tourism sector has adapted itself to operate in the form of smart tourism (Suanpang et al., 2022). Smart tourism means tourism using advanced information technologies to make travel experiences more enriching, efficient, and sustainable (S. Sharma & Rishi, 2022). A recent study by Tran (2025) highlighted the profound potential of the metaverse-driven sustainable tourism and identified its key components, i.e., immersive experiences, artificial intelligence integration, blockchain and collaborative platforms, facilitating global collaboration, cultural exchange and community engagement. AI, the Internet of things (IoT), and technologies relating to location, navigation, drones, and robotics can promote flexible thinking within the tourism industry (G. D. Sharma et al., 2021). E.g., a significant paradigm shift might be envisioned in the integration of AI within the tourism sector, as it enables increasingly personalized, efficient, and environmentally sustainable experiences (Siddik et al., 2025). Finally, innovations should be implemented to orient the global tourism industry in a “sustainable” way, focussing more on inclusive development, rather than the abstract notion of “growth” (G. D. Sharma et al., 2021).

Conclusions

The search in the Scopus database regarding the title, abstract, and keywords: TITLE-ABS-KEY (“sustainable tourism” AND innovation* OR smart) AND (LIMIT- TO (LANGUAGE, “English”)) resulted in 689 documents published in English language between 1996 and 2024. According to the search results, the first article published in the field of innovations in sustainable tourism called “Tourism and the Environment: The Innovation Connection” (Hjalager, 1996), announced that increased environmental awareness is a driving force for innovation in the tourist industry; however, at that time innovation in tourism was a matter of limited research and political consideration (Hjalager, 1997).

Almost thirty years have passed since this first attempt of relating tourism, sustainability and innovation. The growing pattern of researchers’ interest in the field can be envisioned only starting with 2010, and the highest number of documents (162) was published in 2024.

Based on the thorough analysis of titles and keywords, seven research trends were detected. The analysis of the most-cited publications revealed the existence of three research trends: (1) management-focused, (2) sustainability-focused, and (3) smart/ITCs-focused. Moreover, the main future research themes were outlined and named under the area/scope the papers were focussing on the most: (1) tourism in general, (2) sustainability in general, (3) management, (4) scope, (5) innovation, (6) smart, and (7) method.

References

- Abdelfattah, F., Dahleez, K., Halbusi, H. A., & Salah, M. (2025). Strategic green alliances: Integrating green dynamic capabilities, AI, and electronic entrepreneurial innovation for sustainability. *Sustainable Futures*, 9, 100433. <https://doi.org/10.1016/j.sftr.2025.100433>
- Ali, S., Hamid, A. B. B. A., Ya'akub, N. I. B., & Iqbal, S. (2023). Environmental impacts of international tourism: Examining the role of policy uncertainty, renewable energy, and service sector output. *Environmental Science and Pollution Research*, 31(34), 46221–46234. <https://doi.org/10.1007/s11356-023-28377-0>
- Antolini, F., Terraglia, I., & Cesarini, S. (2024). Integrating multiple data sources to measure sustainable tourism in Italian regions. *Socio-Economic Planning Sciences*, 95, 101959. <https://doi.org/10.1016/j.seps.2024.101959>
- Bayrak, G. Ö. (2013). Sustainable Tourism. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of Corporate Social Responsibility* (pp. 2483–2489). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_654
- Buhalis, D., Harwood, T., Bogicevic, V., Viglia, G., Beldona, S., & Hofacker, C. (2019). Technological disruptions in services: Lessons from tourism and hospitality. *Journal of Service Management*, 30(4), 484–506. <https://doi.org/10.1108/JOSM-12-2018-0398>
- Carić, H. (2018). Perspectives of greening tourism development – the concepts, the policies, the implementation. *Tourism*, 66(1), 78–88.
- Chen, T., & Liu, G. (2025). Global perspectives on environmental policy innovations: Driving green tourism and consumer behavior in circular economy. *Journal of Environmental Management*, 374, 124138. <https://doi.org/10.1016/j.jenvman.2025.124138>
- Hall, C. M., Scott, D., & Gössling, S. (2020). Pandemics, transformations and tourism: Be careful what you wish for. *Tourism Geographies*, 22(3), 577–598. <https://doi.org/10.1080/14616688.2020.1759131>
- He, X., Ye, C., Huang, S. (Sam), & Su, L. (2024). The “Green Persuasion Effect” of Negative Messages: How and When Message Framing Influences Tourists’ Environmentally Responsible Behavior. *Journal of Travel Research*, 00472875241289571. <https://doi.org/10.1177/00472875241289571>
- Hjalager, A.-M. (1996). Tourism and the Environment: The Innovation Connection. *Journal of Sustainable Tourism*, 4(4), 201–218. <https://doi.org/10.1080/09669589608667268>
- Hjalager, A.-M. (1997). Innovation patterns in sustainable tourism. *Tourism Management*, 18(1), 35–41. [https://doi.org/10.1016/S0261-5177\(96\)00096-9](https://doi.org/10.1016/S0261-5177(96)00096-9)

- Huang, H., & Leung, X. Y. (2025). Experimental design for sustainable tourism: A horizon 2050 paper. *Tourism Review*, 80(1), 286–298. <https://doi.org/10.1108/TR-12-2023-0867>
- Liasidou, S., & Pipyros, K. (2025). Introduction to the thematic issue: Transformative relationships between tourism and technology. *Worldwide Hospitality and Tourism Themes*. <https://doi.org/10.1108/WHATT-12-2024-0313>
- Lochman, J., & Vagner, J. (2024). Assessing International Tourism's Global Environmental Impact of Food and Beverages. *Problemy Ekorozwoju*, 19(1), 296–307. <https://doi.org/10.35784/preko.5425>
- Morales-Murillo, V. G., Gómez-Adorno, H., Pinto, D., Cortés-Miranda, I. A., & Delice, P. (2023). LKE-IIMAS team at Rest-Mex 2023: Sentiment Analysis on Mexican Tourism Reviews using Transformer-Based Domain Adaptation. *CEUR Workshop Proceedings*, 3496. <https://ceur-ws.org/Vol-3496/restmex-paper14.pdf>
- Omoogun, A. C., Egbonyi, E. E., & Onnoghen, U. N. (2016). From Environmental Awareness to Environmental Responsibility: Towards a Stewardship Curriculum. *Journal of Educational Issues*, 2(2), 60. <https://doi.org/10.5296/jei.v2i2.9265>
- Pilelienė, L., & Jucevičius, G. (2023). A Decade of Innovation Ecosystem Development: Bibliometric Review of Scopus Database. *Sustainability*, 15(23), 16386. <https://doi.org/10.3390/su152316386>
- Pranskūnienė, R., Perkumienė, D. (2020). Debating the right to travel. *The overtourism debate*/Oskam, J.A. (Ed.). Bingley: Emerald Group Publishing. ISBN 9781838674885, p. 27-42. doi:10.1108/978-1-83867-487-820201004
- Shafiee, S., Rajabzadeh Ghatari, A., Hasanzadeh, A., & Jahanyan, S. (2019). Developing a model for sustainable smart tourism destinations: A systematic review. *Tourism Management Perspectives*, 31, 287–300. <https://doi.org/10.1016/j.tmp.2019.06.002>
- Sharma, G. D., Thomas, A., & Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. *Tourism Management Perspectives*, 37, 100786. <https://doi.org/10.1016/j.tmp.2020.100786>
- Sharma, S., & Rishi, O. P. (2022). IoT Enabled Smart Tourism (IoTeST): Tourism Service Dimensions. In V. S. Rathore, S. C. Sharma, J. M. R. S. Tavares, C. Moreira, & B. Surendiran (Eds.), *Rising Threats in Expert Applications and Solutions* (Vol. 434, pp. 643–654). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-1122-4_67
- Siddik, A. B., Forid, Md. S., Yong, L., Du, A. M., & Goodell, J. W. (2025). Artificial intelligence as a catalyst for sustainable tourism growth and economic cycles. *Technological Forecasting and Social Change*, 210, 123875. <https://doi.org/10.1016/j.techfore.2024.123875>

- Suanpang, P., Niamsorn, C., Pothipassa, P., Chunhapataragul, T., Netwong, T., & Jermstittiparsert, K. (2022). Extensible Metaverse Implication for a Smart Tourism City. *Sustainability*, 14(21), 14027. <https://doi.org/10.3390/su142114027>
- Sustacha, I., Baños-Pino, J. F., & Del Valle, E. (2023). The role of technology in enhancing the tourism experience in smart destinations: A meta-analysis. *Journal of Destination Marketing & Management*, 30, 100817. <https://doi.org/10.1016/j.jdmm.2023.100817>
- Tajpour, M., Dekamini, F., SafarMohammadluo, S., Movahed, M. N., & Madadpour, F. (2025). The impact of innovation management on the sustainability of small and medium enterprises with the role of entrepreneurship mediation. *International Entrepreneurship and Management Journal*, 21(1), 1. <https://doi.org/10.1007/s11365-024-01016-x>
- Torres-Delgado, A., & Saarinen, J. (2014). Using indicators to assess sustainable tourism development: A review. *Tourism Geographies*, 16(1), 31–47. <https://doi.org/10.1080/14616688.2013.867530>
- Tran, L. T. T. (2025). Metaverse-driven sustainable tourism: A horizon 2050 paper. *Tourism Review*, 80(1), 349–359. <https://doi.org/10.1108/TR-12-2023-0857>
- United Nations World Tourism Organization. (2008). In *Glossary of tourism terms*. <https://www.unwto.org/glossary-tourism-terms>
- Wilkerson, B., & Trellevik, L.-K. L. (2021). Sustainability-oriented innovation: Improving problem definition through combined design thinking and systems mapping approaches. *Thinking Skills and Creativity*, 42, 100932. <https://doi.org/10.1016/j.tsc.2021.100932>
- Worakittikul, W., Srisathan, W. A., Rattanpon, K., Kulkaew, A., Groves, J., Pontun, P., & Naruetharadhol, P. (2025). Cultivating Sustainability: Harnessing Open Innovation and Circular Economy Practices for Eco-Innovation in Agricultural SMEs. *Journal of Open Innovation: Technology, Market, and Complexity*, 100494. <https://doi.org/10.1016/j.joitmc.2025.100494>

EDUCATION AND SUSTAINABILITY: NEW PERSPECTIVES AND CHALLENGES FOR UNIVERSITY EDUCATION

27

Ing. Iveta Hamarneh⁵

Faculty of Entrepreneurship and Law, Pan-European University
Czechia

⁵ Head of Department of Tourism, Faculty of Business, Vice-Dean of Faculty of Entrepreneurship and Law, Pan-European University

Abstract

The nexus between education and sustainability has garnered increasing significance amid global challenges such as climate change, social inequality, and resource depletion. Universities stand at the forefront, pivotal in cultivating knowledge, innovation, and leadership to foster sustainable solutions. This paper delves into the critical role of higher education institutions in addressing contemporary environmental, social, and economic challenges through sustainability. It underscores the necessity for a transformative approach in integrating sustainability into university curricula, faculty development, and institutional policies. Highlighting successful case studies and innovative practices, the discussion aims to galvanize educators, policymakers, and university leaders towards adopting sustainable academic frameworks. The traditional model of university education, often compartmentalized and discipline-specific, is juxtaposed against the need for holistic, interdisciplinary learning essential for tackling sustainability challenges. The paper advocates for a paradigm shift towards integrated, experiential learning models and outlines strategies for embedding sustainability principles across various academic disciplines. Furthermore, it emphasizes the role of universities as catalysts for societal change, extending their influence beyond academia to policymaking, research, and community engagement. By embedding sustainability as a core institutional value and through proactive policy implementation, universities can lead by example, fostering a culture of responsibility and innovation that aligns with sustainable development goals.

Keywords

Institutional policies, Interdisciplinary learning, Societal change, Sustainability in education, University curricula

The relationship between education and sustainability has become increasingly significant in the context of global challenges such as climate change, social inequality, and resource depletion. Universities play a crucial role in fostering knowledge, innovation, and leadership that can drive sustainable solutions. However, integrating sustainability into higher education requires a transformative approach that redefines traditional learning models, institutional policies, and pedagogical frameworks. This paper explores the vital link between education and sustainability, emphasizing the role of universities in addressing pressing environmental, social, and economic issues. It presents new perspectives and challenges in embedding sustainability in university curricula, faculty development, and institutional policies. By showcasing successful case studies and innovative practices, this discussion aims to inspire educators, policymakers, and university leaders to take proactive steps toward sustainable academic structures.

The traditional university education model is often compartmentalized, focusing on specialized knowledge rather than holistic, interdisciplinary learning. Sustainability challenges, however, require a comprehensive approach that integrates diverse disciplines, including environmental science, economics, social sciences, and engineering. To effectively address sustainability issues, universities must embrace a paradigm shift toward holistic, interdisciplinary, and experiential learning models. To foster sustainable education, universities should revise their curricula to incorporate sustainability principles across all disciplines. This integration can take multiple forms, such as interdisciplinary courses that bridge environmental science, policy, economics, and social justice, offering sustainability majors and minors, and engaging students in community projects, internships, and fieldwork related to sustainability to provide hands-on experience in tackling real-world challenges.

Universities are not only centers of learning but also key drivers of societal change. Their influence extends beyond the classroom into policy-making, research, and community engagement. By adopting sustainability as a core institutional value, universities can lead by example and foster a culture of responsibility and innovation. Academic research plays a critical role in developing sustainable technologies, policies, and practices. Universities can contribute to sustainability through research initiatives focused on renewable energy, sustainable agriculture, waste management, and climate adaptation. They can also facilitate cross-departmental research initiatives to tackle sustainability challenges from multiple perspectives and establish collaborations with industries and governments to translate research into practical, scalable solutions.

To embody sustainability principles, universities must implement policies that reflect their commitment to sustainable development. These can include green campus initiatives, such as energy-efficient buildings, waste reduction programs, and sustainable transportation options, sustainable procurement by prioritizing eco-friendly materials and ethical supply chains in university operations, and setting targets to reduce greenhouse gas emissions and achieve carbon neutrality. Education for sustainability extends beyond knowledge acquisition—it requires cultivating critical thinking, problem-solving, and ethical decision-making skills. Universities can prepare students for sustainable careers by embedding sustainability in general education, encouraging innovation and entrepreneurship by

supporting student-led sustainability initiatives and startups, and developing leadership and advocacy skills to train students to become effective sustainability advocates in their future professions.

Several universities worldwide have successfully integrated sustainability into their education models, serving as exemplary cases for others to follow. Arizona State University established the first School of Sustainability in the United States, offering interdisciplinary degree programs that emphasize real-world sustainability challenges. The University of Cambridge offers sustainability leadership programs that train professionals in integrating sustainability into business and policy. Wageningen University & Research in the Netherlands specializes in sustainable food systems, agriculture, and environmental sciences, collaborating with industries and governments to develop innovative solutions for food security and climate resilience. Lund University in Sweden prioritizes sustainability in both its academic programs and campus operations, running extensive research projects on renewable energy, sustainable urban planning, and climate policy while implementing green initiatives on campus. The University of Economics, Prague (VŠE), through its Faculty of International Relations, has launched a new master's program in Sustainable Transformation and European Competitiveness. This program aims to combine knowledge of European Union policies with a strong focus on sustainable transformation, engaging professionals from both the private and public sectors and integrating modern teaching methods in unique courses taught primarily in English. This initiative represents a significant step forward in advancing sustainability education in Central Europe.

In addition to established universities, emerging institutions and alternative educational platforms are also contributing to sustainability education. Online universities, open educational resources, and digital learning platforms are making sustainability knowledge accessible to a global audience. MOOCs (Massive Open Online Courses) on sustainability topics have seen a surge in enrollment, demonstrating the growing interest in sustainable development among students worldwide. These platforms provide an opportunity to reach individuals in developing regions who may not have access to traditional university education, thereby democratizing sustainability knowledge and fostering a global community of learners committed to sustainable practices.

Despite the growing emphasis on sustainability in education, universities face several challenges in fully embedding these principles into their structures. Some of these challenges include institutional resistance to change, as traditional academic structures and disciplinary silos can hinder interdisciplinary collaboration and curriculum reform; resource constraints, as implementing sustainability programs and infrastructure upgrades requires financial investment, which may be limited in some institutions; balancing sustainability with academic freedom to ensure that sustainability does not become a rigid, prescriptive framework that limits academic exploration; and measuring impact by developing effective metrics to assess the success of sustainability initiatives in education and research. Moving forward, universities must adopt dynamic, flexible approaches to integrating sustainability while fostering a culture of continuous learning and adaptation. Strategies for overcoming challenges include leveraging digital learning by utilizing online platforms and virtual

simulations to expand access to sustainability education, strengthening international collaboration by engaging in global partnerships to share best practices and research findings, and engaging with policymakers to shape national and international sustainability education agendas.

Furthermore, universities should develop long-term sustainability roadmaps that align with global sustainability goals, such as the United Nations Sustainable Development Goals (SDGs). This would involve setting measurable objectives, establishing cross-sector partnerships, and continuously evaluating progress. The inclusion of sustainability indicators in university rankings could also serve as an incentive for institutions to prioritize sustainability education and research.

The integration of sustainability into university education is not just an option—it is an imperative for shaping a sustainable future. By adopting holistic learning models, fostering research-driven solutions, and implementing institutional sustainability policies, universities can play a transformative role in addressing global sustainability challenges. As universities rethink their academic structures and pedagogical approaches, they have an opportunity to empower the next generation of leaders, innovators, and change-makers. The journey toward sustainable education requires commitment, collaboration, and innovation, but the rewards—a more resilient, equitable, and sustainable world—are well worth the effort. By embracing sustainability at the core of their mission, universities can truly become catalysts for meaningful change in society and the environment.

USING ARTIFICIAL INTELLIGENCE IN TEACHING (EXAMPLE OF THE SMARTAPP APPLICATION)

Sebastian Kopera⁶

Jagiellonian University in Krakow
Poland

Ewa Wszendybył-Skulska⁷

Jagiellonian University in Krakow
Poland

⁶ Sebastian Kopera, Ph.D. is an Assistant Professor at the Faculty of Management and Social Communication at the Jagiellonian University in Cracow, Poland. As a lecturer and researcher, he specializes in various aspects of e-business and e-entrepreneurship, particularly in the tourism industry. He is also active in the field of smart tourism/smart destination topics, recently in the context of sustainability. He lectures e-Tourism and e-Business courses, runs seminars and Design thinking workshops for students.

⁷ Ewa Wszendybył-Skulska is an Associate Professor (Ph.D., habilitation) of Economic Sciences in Management at the Jagiellonian University in Krakow, Poland. Her main areas of the research interests are orientation on human resources management, management of competencies, quality management, innovation and modern management in hotel and tourism enterprises. She lectures Strategic Human Resource Management, Tourism Marketing, Hotel Management and seminars for students. Author and co-author of research works published as journal articles, books and book chapters. A member of several professional bodies. Repeatedly awarded for scientific achievements. Actively engaged in professional consultancy for hotel entities.

Abstract

Technological development, climate change, and growing uncertainty caused by constantly emerging crises are putting increasing pressure on adapting university education processes to changing market and social conditions. In the current situation, these programs should equip students with a set of smart skills and competencies, which are a combination of both soft and hard aspects. The aim of this article is to present an innovative tool, the SMARTapp application, which was developed within the SMARTBUS project, performed by universities from Slovakia, Poland, and the Czech Republic in cooperation with the company Pelikan, the leader of the Slovak OTA market. This application uses AI-based solutions and was designed to improve the smart business skills and competencies of students of tourism university programs necessary to succeed in the international tourism market, which previously had been identified within this project. The article uses both qualitative and quantitative approaches. The article describes in detail an innovative tool for developing students' competencies, i.e., the SMARTapp application (qualitative analysis). It also presents the results of research on the opinions of both students and lecturers who used the SMARTapp application in the teaching and learning process. The results of the presented research and analyses show that the application meets the intended functions, as it has allowed the students who have tested it so far to develop intelligent skills and to learn in practice the possibilities that the use of AI offers in both learning and work. The results also allow us to recognize the challenges related to the use of AI in both the teaching and learning processes.

Keywords

AI, Development, Improve, Intelligent skills, SMART app application, Tourism education

NEW TECHNOLOGIES IN TOURISM EDUCATION: TOWARDS ACCESSIBILITY IN HIGHER EDUCATION

Magdalena Sawczuk⁸

Jagiellonian University in Krakow
Poland

Beata Paliś⁹

Jagiellonian University in Krakow
Poland

⁸ Magdalena Sawczuk has a PhD in Management (2023, Jagiellonian University in Krakow, Poland); Assistant Professor at the Jagiellonian University in Krakow (Poland). Her research interests include experience creation, innovative approaches in museum management and the evolving social role of museums in communities.

⁹ Beata Paliś has a PhD in the field of social sciences and the discipline of economics and finance (2021, Krakow University of Economics, Poland); Assistant Professor at the Jagiellonian University in Krakow (Poland). Her research focuses on tourism, including business tourism, shopping tourism, sustainable tourism, territorial marketing, project management, and EU funds.

Abstract

The article aims to verify the use of modern technologies at universities in tourism education for people with disabilities and to determine recommendations for universities to implement and use modern technologies in the field of accessibility of education in tourism. The research was conducted using a case study approach and methods such as desk research, the analysis of websites, and interviews with people who are experts in the field of accessibility at universities. The research included the following stages: verification of the subject literature, verification of websites, and conducting structured interviews with university employees responsible for accessibility, including the area of education of people with disabilities. Findings revealed that universities implement various tools in tourism education for people with disabilities. There are university centers that aim to create conditions for ensuring full accessibility for all students and other people. Their activities aim to ensure that the physical and digital environment, organized processes, or methods do not constitute a reason for excluding anyone, e.g., from education. The implemented tools also include modern technologies. They are also used in the field of education of people with disabilities. However, there are still areas that need to be improved in this context. Modern technologies should be implemented more widely in university tourism education, considering the growing importance of accessibility and creating appropriate educational conditions for everybody - including people with disabilities. Implementing modern technologies should be preceded by an exploration of the expectations and needs of people to which such solutions will be addressed.

Keywords

Accessibility, New technologies, Recommendations, Special needs, Tourism education

MODERN TECHNOLOGIES IN TOURISM EDUCATION - EXCLUSION OR INCLUSION?

Barbara Osóch¹⁰

University of Szczecin
Poland

36

Agnieszka Sawińska¹¹

University of Szczecin
Poland

Aleksandra Werner¹²

University of Szczecin
Poland

¹⁰ Barbara Osóch – an employee of the Institute of Spatial Management and Socio-Economic Geography, Szczecin University. She graduated geography and received PhD in Earth Sciences. She completed several scientific internships abroad and constantly cooperates with the University of Greifswald and Eberswalde/Germany. She is a member of the Polish Geographical Society. Scientific interests focus on: development of geographical space for the water tourism needs, recreational sailing, social structure of participants in various forms of tourist activity, natural heritage tourism, exploring heritage through outdoor games activities, nature tourism in protected areas, cross-border tourism, tourist potential of regions, tourism development.

¹¹ Agnieszka Sawińska – research and teaching employee of the Institute of Spatial Management and Socio-Economic Geography, University of Szczecin. She obtained a PhD in economics (specialization: Economics of tourism, marketing of services). Author of over 45 Polish and English-language scientific articles and co-author of several scientific monographs on contemporary problems in the development of tourism and recreation. Specializes in silver tourism, health tourism, tourism marketing and tourism market research. Contractor of research projects regarding, among others, cooperation of local governments and the tourism industry, use of EU funds in the development of the regional and local tourism economy, tourist and recreational activity of residents of cross-border communes. She has many years of experience in creating education programs in the field of Tourism and Recreation, for many years he has been a student supervisor and supervisor of over 100 diploma theses.

¹² Aleksandra Werner – an employee of the Institute of Spatial Management and Socio-Economic Geography, University of Szczecin and PhD candidate at the same university. She is currently working on her doctoral dissertation on the concept of creating tourism products adapted to the needs of people with disabilities. Her scientific interests focus on the idea of tourism for all, with particular emphasis on the needs of tourists with disabilities, the creation of a tourism product, universal design in tourism, inclusive leisure activities and tourism service.

Abstract

Modern technologies play a key role in tourism education, enabling future professionals (students) to learn about the needs of tourists with special needs. The article points to the use of technologies such as VR goggles with preloaded scenarios, age simulators or other simulation platforms that foster the development of empathy and barrier awareness in students. It also highlights the importance of educational field games, especially in the context of the Covid-19 pandemic, as tools to raise awareness of sustainability and cultural heritage. An example of practical implementation is the “Accessibility Zone” project implemented at the University of Szczecin, one of the results of which is the introduction of subjects related to universal design and accessible tourism into the curriculum. The article also points out the risks of digital exclusion and oversimplification of social interactions. The goal is to identify tools and practices that support the inclusion of groups at risk of exclusion from tourism activities, and to assess whether modern technologies promote inclusion or exclusion in tourism education. The conclusion is the need for a balanced approach to the implementation of modern technologies in tourism education to minimize the risk of exclusion and create an educational model that promotes diversity and accessibility.

Keywords

Modern technologies, Tourism education, Accessible tourism, Tourism for all, Digital exclusion

Modern Technologies in Tourism Education - Exclusion or Inclusion?

Modern technologies play a special role in the functioning of modern society, based on Internet, GPS navigation systems, VR, AI, chatbots, mobile applications, geolocation, simulators or the Internet of Things, among others. One of the markets affected by the rapid growth in their use is the tourism market. This sector is characterized not only by the development of online booking platforms, which are an increasingly important channel for the distribution of tourist services and are displacing traditional forms of sales, but also by the transfer of certain activities related to the organization of travel, seeking information on available offers, values to the virtual world. The use of modern technological solutions in tourism most often refers to younger generations of users, which is naturally related to the characteristics and IT skills of younger people. Among the trends that will affect the functioning of the tourism market in the near future are also demographic changes, manifested by an aging population.

As Morato et al (2021) point out, the exponential development of technology and the growth of the elderly population are phenomena that will interact with increasing frequency in the near future. In addition, the growing democracy of leisure is also noted, meaning that tourism also involves other groups that were previously excluded from it.

The dynamic development of modern technology has had a significant impact on tourism education, introducing innovative tools to enrich the teaching process. Simulation technologies play a special role, enabling tourism students to gain a deeper understanding of the needs of tourists with special needs. Tools such as VR goggles with predefined scenarios, a wheelchair simulation platform or an old age simulator support the development of empathy among students and awareness of the barriers faced by diverse groups of tourists. The use of these technologies is part of the implementation of the 'tourism for all' concept, preparing future professionals to design more inclusive tourism products and services.

This approach prioritizes accessibility, inclusion and embracing diversity, ensuring that everyone has the opportunity to explore and benefit from travel. In order for this approach to be effective, the diverse needs, constraints and preferences of tourists must be taken into account. The concept encompasses and manifests various forms of tourism, such as: barrier-free tourism (Frasch, 2006; Eichhorn, et al, 2008; Piramanayagam, Seal, & More, 2019), disabled/disability tourism (Burnett, & Baker, 2001; Shaw, & Coles, 2004; Bizjak, Knezević, & Cvetreznik, 2011; Lee, Agarwal, & Kim, 2012; Dominiguez Vila, Darcy, & Alen Gonzalez, 2015; Qiao, et al, 2022), easy access tourism (Gillovic, et al, 2018), inclusive tourism (Yates, 2007; Serra, Metrolho, & Riberio, 2017; Silveiro, Eusebio, & Teixeira, 2019; Suárez Henríquez, et al, 2022), tourism for all (Baker, 1989; Wilken, 1997; Rubio-Escuderos, et al, 2024), universal tourism (Migliaccio, 2018; Silva, Sousa, & Albuquerque, 2022), abilities tourism (Ray, & Ryder, 2003).

The summary of the above trends determined the aim of the article, which is to identify tools and practices that support the inclusion (tourism inclusion) of selected groups that have so far been at risk of exclusion from tourist activity and which will also enrich the teaching process. Additionally, the question was asked: Do modern technologies used in tourism

education facilitate the inclusion or exclusion of groups that have previously been considered excluded from participation in tourism. The answer to this question was defined as an additional goal of the article. Based on the literature, it was assumed that groups susceptible to exclusion are people with special needs. This group includes people (Dązbłaż, 2022):

- in a wheelchair, on crutches, using a walker,
- having other difficulties in moving,
- they cannot see or are visually impaired,
- they are deaf or hard of hearing,
- have mental illness,
- have an intellectual disability,
- who are seniors,
- who are pregnant women,
- who are parents or guardians with a stroller or small children,
- sick,
- have difficulty communicating,
- have unusual height,
- they are children,
- are travelers with heavy luggage.

One of the manifestations of the use of modern technologies in tourism education are outdoor games. They may be dedicated not only to students whose compulsory curriculum allows for this type of practical activities, but also to other target groups, e.g. the previously mentioned families with children. It is a unique way to engage participants in tourism education, offering a fun and interactive way to learn about nature, the environment, teamwork and local history. In tourism education, these activities can help students experience first-hand the importance of outdoor spaces, cultural heritage and sustainable tourism practices. Outdoor educational games have gained importance during the Covid-19 pandemic. Tourism education had to adapt to new conditions as well as health safety restrictions. In the face of lockdowns, travel restrictions and the need to comply with social distancing rules, they have become an effective tool in tourism education.

Below are some examples of outdoor games that can be incorporated into tourism education:

- i. Geocaching
- ii. Questing
- iii. Scavenger Hunt/ Location based games
- iv. Educational games about environmental protection
- v. Use of mobile applications
- vi. Tourist role-playing games.

These games not only enhance learning experiences, but also foster deeper connections with the external environment, sustainable practices and the tourism industry as a whole. The use of a wide range of props related to tourism, i.e. paper map, e-map, compass, allows you to develop navigation skills, increases ecological awareness, and emphasizes the importance of sustainable development in tourism. Additionally, they promote knowledge about local

heritage, geographical locations, cultural facts and teamwork (Tzima, et al., 2021; Gómez-Ruiz, Morales-Yago, & de Lázaro-Torres, 2021). They encourage creativity, teach public speaking and understand how stories told orally or on paper can improve the tourist experience. During the Covid-19 epidemic, tourism education has become more flexible, enabling both individual and group forms of activity in new realities.

Simulation technologies play a special role as they enable tourism students to gain a deeper understanding of the needs of tourists with special needs. Tools such as VR glasses with predefined scenarios, a simulation platform with a wheelchair or an old age simulator support the development of empathy among students and awareness of the barriers faced by various groups of tourists.

An example of a solution aimed at introducing the above practices in the educational process at the University of Szczecin is the implementation project "Accessibility Zone", implemented in 2022-23. The main goal of the project was to increase the competence of teaching staff in the field of teaching skills in the area of universal design. As part of the project, 53 US employees took part in a number of training sessions and study trips, during which they used modern technological solutions (VR glasses, simulators) and became familiar with modern solutions introduced in the country and abroad. The effect of the project was the introduction of the university subject of "basics of universal design" in the education programs of selected fields, including Tourism and Recreation. This project indirectly contributed to the introduction of other subjects in the study program applicable from the 2024/25 academic year, such as "silver tourism", "accessible tourism" and "integrative recreation". In these subjects, conducted in the form of laboratories, students will use old age simulators and VR glasses. The development of laboratory infrastructure for TiR is also planned, so that the widest possible use of modern technologies is possible.

Nevertheless, their use is also associated with potential risks, including the risk of digital exclusion. Limited access to advanced learning tools, both on the part of students and institutions, can lead to educational inequalities. In addition, over-reliance on simulations, without complementing them with experiences from real-life situations, can lead to simplification of complex social interactions and accessibility challenge.

For travel education to effectively promote inclusion, a balanced and thoughtful approach to the use of modern technology is required. Such an approach will make it possible to minimise the risk of digital exclusion and create a more inclusive educational model that prepares future professionals to professionally serve the diverse needs of tourists.

To sum up, the tools and practices we have identified simultaneously enrich the teaching process and increase the awareness of future tourism industry employees about the need to take into account the special needs of tourists.

References

Baker, M. (1989). *Tourism for all: A report of the working party chaired by Mary Baker*. English Tourist Board and Holiday Care Services.

- Bizjak, B., Knezević, M., Cvetreznik, S. (2011). Attitude change towards guests with disabilities. Reflections from tourism students. *Annals of Tourism Research*, 38 (3), 842-857.
- Burnett, J. J., Baker, H. B. (2001). Assessing the travel-related behaviors of the mobility-disabled consumer. *Journal of Travel Research*, 40 (1).
- Dązbłaż, B. (2022). Jak korzystać z prawa do dostępności-poradnik. PSONI.
- Dominiguez Vila, T., Darcy, S., & Alen Gonzalez, E. (2015). Competing for disability tourism market. *Tourism Management*, 47, 261-272.
- Eichhorn, V., Miller, G., Michopoulou, E., Buhalis, D. (2008). Enabling access to tourism through information schemes?. *Annals of Tourism Research*, 35 (1), 189-210.
- Frasch, G. (2006). Optimal routing for barrier-free tourism. *Geo-Information-Systems*, 2005 (4), 22-25.
- Gillovic, B., McIntosh, A., Darcy, S., & Cockburn-Wootten, C. (2018). Enabling the language of accessible tourism. *Journal of Sustainable Tourism*, 26 (4), 615-630.
- Gómez-Ruiz, M. L., Morales-Yago, F. J., & de Lázaro-Torres, M. L. (2021). Outdoor education, the enhancement and sustainability of cultural heritage: Medieval Madrid. *Sustainability*, 13(3), 1106. <https://doi.org/10.3390/su13031106>
- Lee, B. K., Agarwal, S., & Kim, H. J. (2012). Influences of travel constraints on the people with disabilities' intention to travel: an application of Seligman's helplessness theory,. *Tourism Management*, 33 (3), 569-579.
- Migliaccio, G. (2018). Accessible museums in Italy: An overview. *African Journal of Hospitality, Tourism and Leisure*, 7(6), 1-16.
- Morato, J., Sanchez-Cuadrado, S., Iglesias, A., Campillo, A., & Fernández-Panadero, C. (2021). Sustainable technologies for older adults. *Sustainability*, 13, 8465. <https://doi.org/10.3390/su13158465>.
- Piramanayagam, S., Seal, P. P., & More, B. (2019). Inclusive hotel design in India: A user perspective. *Journal of Accessibility and Design for All*, 9 (1), 41-65.
- Qiao, G., Ding, L., Zhang, L. Yan, H. (2022). Accessible tourism: A bibliometric review (2008-2020). *Tourism Review*, 77 (3), 713-730.
- Ray, N. M., & Ryder, M. E. (2003). Eibilities tourism: An exploratory discussion of the travel needs and motivations of the mobility-disabled. *Tourism Management*, 24(1), 57-72.
- Rubio-Escuderos, L., Garcia-Andreu, H., Michopoulou, E., & Buhalis, D. (2024). Perspectives on experiences of tourists with disabilities: Implications for their daily lives and for the tourist industry. *Tourism Recreation Research*, 49(1), 48-62.
- Serra, R., Metrolho, J. C., & Ribeiro, F. R. (2019). App for inclusive tourism: A case study. In *Proceedings of the 14th Iberian Conference on Information Systems and Technologies (CISTI)* (pp. 1-6). IEEE. Coimbra.
- Shaw, G., & Coles, T. (2004). Disability, holiday making and the tourism industry in the UK: A preliminary survey. *Tourism Management*, 25 (3), 397-403.
- Silva, F. M., Sousa, C., & Albuquerque, H. (2022). Analytical model for the development strategy of a low-density territory: The Montesinho Natural Park. *Sustainability*, 14(7), Article 2214. <https://doi.org/10.3390/su14072214>
- Silveiro, A., Eusebio, C., & Teixeira, L. (2019). Are Portuguese travel agencies prepared to satisfy the accessible tourism market? *Revista Turismo & Desenvolvimento*, 33, 151-168.

- Suárez Henríquez, C., Ricoy Cano, A. J., Hernández Galán, J., & de la Fuente Robles, Y. M. (2022). The past, present, and future of accessible tourism research: A bibliometric analysis using the Scopus database. *Journal of Accessibility and Design for All*, 12(1), 26-60.
- Tzima, S., Styliaras, G., & Bassounas, A. (2021). Revealing hidden local cultural heritage through a serious escape game in outdoor settings. *Information*, 12(1), 10. <https://doi.org/10.3390/info12010010>
- Wilken, U. (1997). Tourism and disability—Advances in travel and holiday mainstreaming. *Rehabilitation*, 36(2), 121-125.
- Yates, K. (2007). Understanding the experiences of mobility-disabled tourists. *International Journal of Tourism Policy*, 1(2), 153-166.

TECNOLOGIA, EDUCAÇÃO EM EMERGÊNCIAS E JUSTIÇA EPISTÊMICA: O CASO ACADEMICS4GAZA

Fabio Carbone¹³

University of Northampton,
UK

43

¹³ Fabio Carbone é especialista na relação entre gestão do património cultural, turismo e desenvolvimento sustentável. Atualmente, é Professor Auxiliar (*Senior Lecturer*) em Gestão e Marketing do Turismo na University of Northampton, UK. A sua pesquisa foca-se na interação entre turismo e a promoção do diálogo intercultural, compreensão global e paz, tendo publicado diversos artigos científicos e livros sobre os temas. Em 2017, foi nomeado Global Ambassador do International Institute for Peace through Tourism (IIPT) e enviado especial do IIPT no Irão. Carbone está também envolvido em projetos humanitários de Educação em Emergência em zonas de conflito e crise no Médio Oriente.

Abstract

In times of armed conflict, access to education is severely disrupted, exacerbating epistemic inequalities and deepening knowledge gaps among affected populations. In the worst case, epistemicide is a deliberate act, and a crime. This work explores ACADEMICS4GAZA, an ongoing Education in Emergency intervention designed for students in Gaza, leveraging digital technologies to provide educational continuity in the midst of crisis. The initiative aligns with broader efforts in epistemic justice and the SDG4, as well as with a series of chart defining the right to education, including the Universal Declaration of Human Rights (1948), ensuring that learners in conflict zones are not excluded from global knowledge systems, on the one side, and on the other side, guaranteeing that their own system of knowledge is protected and preserved. Supported by international institutions, including the London House of Consultants, and currently under consideration by the United Nations and Digital Dubai as a Project of Interest mixing technology, education and humanitarian intervention, and integrated into a forthcoming publication by the Italian government on cultural heritage and education in conflict areas, this project offers a compelling case of how technology can be harnessed to mitigate the epistemic consequences of war. By examining its design, implementation, and early impact, this talk will contribute to discussions on digital education, inclusion, and the role of technology in protecting the right to learn in emergencies.

Keywords

Education in emergencies, Educational technology, Global solidarity, Epistemic justice, Gaza

Resumo

Em tempos de conflito armado, o acesso à educação é gravemente interrompido, aprofundando desigualdades epistémicas e ampliando lacunas de conhecimento entre as populações afetadas. Esta apresentação explora uma intervenção de Educação em Emergências atualmente em curso para estudantes em Gaza, utilizando tecnologias digitais para garantir a continuidade educacional em meio de crise. A iniciativa está alinhada com esforços mais amplos de justiça epistémica, garantindo que os alunos em zonas de conflito não sejam excluídos dos sistemas globais de conhecimento. Apoiado por instituições internacionais, incluindo as Nações Unidas e o Digital Dubai, e integrado numa futura publicação do governo italiano sobre património cultural e educação em áreas de conflito, este projeto oferece um estudo de caso significativo sobre como a tecnologia pode ser utilizada para mitigar as consequências epistémicas da guerra. Ao analisar seu desenho, implementação e impacto inicial, esta apresentação contribuirá para os debates sobre educação digital, inclusão e o papel da tecnologia na defesa do direito à aprendizagem em emergências.

Keywords:

Educação em emergências, Tecnologia educacional, Solidariedade global, Justiça epistémica, Gaza

A tecnologia tem-se mostrado uma ferramenta fundamental para a educação em emergências, permitindo que académicos transcendam fronteiras geográficas e ofereçam suporte educacional a estudantes em situações de crise. Este estudo investiga as perceções e motivações de professores universitários envolvidos na iniciativa ACADEMICS4GAZA (A4G), um projeto inteiramente baseado em tecnologia digital para fornecer suporte académico remoto a estudantes na Faixa de Gaza após os eventos de 7 de outubro de 2023.

Através de uma análise qualitativa, este estudo examina como a participação na A4G reflete um ato de solidariedade global e um possível modelo de inovação social de base digital. A iniciativa depende integralmente de plataformas de videoconferência, aprendizagem *online* e ferramentas colaborativas, permitindo que os académicos ofereçam mentorias, orientação académica e apoio psicológico a estudantes em Gaza. No entanto, a falta de acesso confiável à internet e a destruição de infraestruturas educacionais representam desafios significativos para a continuidade da aprendizagem.

Do ponto de vista teórico, o estudo integra as perspetivas de solidariedade mecânica e orgânica de Émile Durkheim e a ética da responsabilidade profissional de Max Weber, para explorar os desafios enfrentados por académicos que se decidem envolver em ações humanitárias mediadas por tecnologia. A pesquisa revela que a A4G opera dentro de uma lógica de solidariedade mecânica, pois os participantes se identificam com valores comuns e uma causa compartilhada. No entanto, a ausência de apoio institucional ou político mais amplo pode impedir que essa mobilização se torne uma inovação social de impacto duradouro.

A metodologia inclui entrevistas qualitativas com 21 voluntários da A4G, análise documental e observação participativa das interações entre tutores e estudantes palestinos. Os resultados mostram que os voluntários são motivados por um senso de dever moral, altruísmo e desejo de contribuir para a resistência académica em Gaza. Contudo, também surgem preocupações sobre autocensura, pressões institucionais e riscos de represálias por se envolverem em questões políticas sensíveis.

O estudo também levanta questões sobre o impacto das influências políticas na liberdade académica e na solidariedade global. As universidades não são imunes a pressões políticas que moldam as suas respostas a crises internacionais, criando um ambiente onde académicos podem hesitar em expressar apoio a iniciativas como a A4G por medo de represálias institucionais ou dano à reputação profissional.

A pesquisa conclui que a academia precisa reconsiderar o seu papel como agente de mudança social. Se a educação é um direito humano fundamental, então académicos deveriam assumir um papel mais ativo na defesa da justiça epistémica, especialmente em contextos de crise. Iniciativas como a A4G demonstram que a tecnologia pode ser uma ferramenta poderosa na mitigação das desigualdades educacionais, permitindo que os académicos colaborem remotamente e garantam acesso ao conhecimento em cenário de conflitos. No entanto, para que tais iniciativas sejam sustentáveis, é essencial que haja um compromisso institucional mais amplo em apoiar a educação digital e a inclusão académica em contextos de emergência.

ENSINO À DISTÂNCIA NA OFERTA EDUCATIVA DO CURSO DE GESTÃO DE TURISMO: MELHORES PRÁTICAS NO USO DA TECNOLOGIAS DIGITAIS NO ENSINO DO TURISMO

47

Arsília Anastácio Maiela

Universidade Aberta ISCED

Moçambique

Elísio Eduardo Romão dos Santos

Universidade Aberta ISCED

Moçambique

Assa Esperança João Nhambio Mondlane

Universidade Aberta ISCED

Moçambique

Abstract

Distance learning is characterized by the physical separation of teachers and students, utilizing a computerized network for the distribution of educational content. It differs from self-study and private tutoring due to its structured educational organization and bidirectional communication between students, teachers, and other stakeholders in the learning process. In Mozambique, distance learning is regulated by Law No. 1/2023, which aligns the legal framework of the Higher Education Subsystem with the country's educational development dynamics. The Universidade Aberta ISCED is recognized for its distance education model, incorporating digital platforms and competency-based learning. The Tourism Management course, offered through this model, aims to equip students with technical skills and knowledge necessary for the country's tourism sector. However, implementing this course through distance learning presents challenges such as infrastructure requirements, faculty training, and digital literacy among students. This research examines how distance learning can serve as an alternative educational approach for the Tourism Management course. A qualitative, exploratory research approach was employed, utilizing semi-structured interviews, bibliographic research, and content analysis. Findings indicate that distance education effectively meets the training needs of tourism professionals, providing accessible and cost-effective education. However, challenges remain, including limited employment opportunities in the tourism sector and the need for greater alignment between curricula and industry demands. The study suggests that virtual teaching methodologies can enhance professional training in tourism management, promoting workforce development in Mozambique's tourism industry.

Keywords

Distance learning, Tourism management, Higher education, Universidade Aberta ISCED, Mozambique

Ensino à distância se caracteriza pela separação física de professores e alunos, pela utilização de uma rede computarizada para distribuição de conteúdos educativos. É influenciada por uma organização educativa que se distingue assim do autoestudo e das tutorias particulares. Garante uma comunicação bidirecional, através da rede entre alunos, estes com professores e outros intervenientes no processo de ensino de aprendizagem (PEA). Em Moçambique, o ensino à distância rege-se pela Lei n.º 1/2023, que estabelece o regime jurídico do Subsistema do Ensino Superior, por forma a adequá-la à dinâmica do desenvolvimento do Ensino Superior em Moçambique. Esta modalidade de ensino tem sido a estratégia adotada pelas instituições de Ensino Superior em Moçambique em resposta aos desafios que se colocam em relação aos estudantes que se encontram em lugares distantes dos centros urbanos assim como conciliar as atividades académicas com a atividade profissional.

A Universidade Aberta ISCED tornou-se reconhecida por ser um ensino à distância com perspetivas de ensino baseado nas plataformas digitais e ensino baseado em competências. O curso de Gestão de Turismo é um curso de formação de nível superior para atribuir competências técnicas aos estudantes e uma vasta capacidade de conhecimentos para responder as necessidades do país em quadros e técnicos capacitados para o sector de turismo. O curso é leccionado no modelo à distância para formar estudantes com capacidades e habilidades de gerir os recursos turísticos do País.

É neste contexto que a pesquisa procura perceber como o ensino à distância pode ser uma nova oferta educativa ao Curso de Gestão de Turismo? A pesquisa teve como objectivo geral: Analisar o Ensino à *distância* na perspectiva de uma nova oferta educativa para o curso de Gestão de Turismo. A pesquisa se revela importante porque o curso em Gestão de Turismo é um curso de actividades práticas e técnicas, que exige uma comunicação flexível no ambiente de trabalho com diferentes segmentos. Para a implementação do Curso de Gestão de Turismo no modelo de ensino à distância, as instituições do ensino superior se deparam com a necessidade de encontrar um conjunto de requisitos que respondem as necessidades da oferta educativa no processo de Ensino e Aprendizagem (PEA) tais como: infraestruturas de ensino e de apoio ao estudante que são equipadas com tecnologia de acesso às plataformas digitais, combinadas com formações para os docentes, assim como a inserção dos estudantes no PEA através de capacitações para se familiarizarem com as tecnologias digitais. Para o acesso dos estudantes em programas de ensino à distância, no curso de Gestão de turismo, as plataformas digitais disponibilizam o modelo pedagógico onde se faz constar o calendário académico, os testes, de avaliação, as actividades práticas, estágios e os exames. Ensino à distância é uma modalidade de ensino e aprendizagem em que professores e estudantes não estão necessariamente juntos fisicamente, mas podem estar conectados, interligados por tecnologias como a internet, e outras tecnologias semelhantes. Educação à distância é uma forma de ensino que possibilita a autoaprendizagem, com a mediação de recursos didáticos sistematicamente organizados, apresentados em diferentes suportes de informação, utilizados isoladamente ou combinados, e veiculados pelos diversos meios de comunicação.

O Governo de Moçambique apoia e incentiva o ensino à distância como forma de providenciar uma formação de ensino superior aos cidadãos, que por vários motivos não

conseguem fazer no ensino presencial. Daí que, o Plano estratégico da Educação a distância (PEED) (2014-2018) define a educação à distância como sendo “o modelo de ensino que se distingue pela separação entre aluno e professor, uso da tecnologia digital para mediar a aprendizagem, comunicação bidirecional que permite a interação entre alunos, professores e tutores e a possibilidade de encontros presenciais para tutorias.”

O curso de Gestão de Turismo é oferecido pela Universidade Aberta-ISCED, uma abordagem que combina a teoria e prática para preparar os estudantes para o mercado de trabalho na indústria do turismo. No ensino à distância, as aulas são leccionadas através das plataformas digitais, das ferramentas síncronas (videoconferência, canais de áudio, salas de *chat online*) e assíncronas (*e-mail*, fóruns de discussão). A plataforma digital é o local de acomodação do material configurado para o processo de ensino e aprendizagem (PEA), que permite a interação entre professores e alunos num modelo de aprendizagem de ensino à distância. Este tipo de ensino apresenta desafios para os usuários das plataformas digitais, que são os estudantes e tutores, que consiste em escolher de forma correcta o ambiente virtual que contribui não somente a exposição de conteúdo, mas a colaboração e a interação coletivas no PEA. As dificuldades encontradas pelos estudantes no uso da plataforma digital são resolvidas através de formações periódicas para o acesso à plataforma digital e de forma autónoma ao realizar as atividades configuradas na plataforma. Este exercício dificulta o uso da plataforma porque muitos estudantes não possuem um conhecimento básico na área de informática, apresentando uma série de dificuldades ao utilizar a plataforma digital.

Em Moçambique, os estudantes que vivem em zonas distantes das cidades, desprovidas do sinal da *internet*, ou com conexões lentas, deslocam-se para as cidades mais próximas para a possível utilização da *internet* e realização dos trabalhos na plataforma digital. Para isso, são os seguintes benefícios do ensino à distância: acessibilidade ao ensino e os custos reduzidos em relação ao ensino presencial, pois não requerem gastos com deslocamento, alimentação ou moradia. Isso possibilita que um maior número de pessoas tenha acesso à educação superior, contribuindo para a inclusão social e redução das desigualdades educacionais. Apesar dos benefícios do ensino à distância, é necessário ressaltar que o curso de Gestão de Turismo enfrenta desafios e limitações. Um dos principais desafios está relacionado à necessidade de autonomia e disciplina por parte dos estudantes para acompanhar as atividades do ensino à distância sem a supervisão constante de professores. Para além destes desafios, existem outros relacionados entre as metodologias de ensino e o processo de ensino aprendizagem, tais como: a investigação sobre o desenvolvimento e a adequação dos programas curriculares ao estudo de turismo é limitado e insuficiente; os programas curriculares são caracterizados pelo limitado peso de temáticas sociológicas e fisiológicas, assim como a reduzida interdependência entre os agentes de turismo e a academia, isto é, os empregadores devem ser consultados sobre as áreas de turismo, tanto económicas e sociais que devem ser abordadas nos programas curriculares, de modo a criar um perfil de profissional adequado para o sector. O curso de Gestão de Turismo leccionado no modelo de ensino à distância através das plataformas digitais ganhou destaque na economia global com a procura por destinos turísticos apetecíveis entre operadores turísticos

e turistas, nos últimos anos do século XX, tornando a atividade primordial para a existência dos cursos de turismo. As universidades se aperceberam da importância do potencial turístico, começaram a criar cursos de turismo para melhorar a prestação de serviço para um mercado alvo específico e emergente. Daí que surge o ensino a distância considerado um diferencial na educação para o turismo, com estratégias de operacionalização digital para a materialização do curso de Gestão de turismo. Duas estratégias interactivas foram identificadas no curso de Gestão de Turismo, assíncronas e síncronas. As ferramentas assíncronas, independentemente de lugar e tempo permitem a interação entre tutores e alunos. Ex: *e-mail* – é considerada a ferramenta mais usada pela internet, permite a troca de mensagens e partilha de informações bem como o envio e a receção de textos em formatos de arquivos diversos, arquivos de áudio, planilhas, imagens etc.; enquanto que as ferramentas síncronas são importantes no processo de ensino-aprendizagem porque estabelecem uma relação entre o educador e o tutor ou entre os alunos e as instituições de ensino. Reduzem as distâncias na modalidade à distância entre tutores e alunos de forma geral. Elas são *Chat* ou salas de bate-papo – ainda são pouco utilizados nas atividades pedagógicas. Usadas para reuniões *online*. Essa ferramenta permite a comunicação entre distintas pessoas em determinado momento, para este caso entre alunos e professores. Videoconferência - é uma forma de comunicação interativa que permite duas ou mais pessoas encontrarem-se *face a face* com áudio e comunicação visual em tempo real. O uso proporciona a economia de tempo e economia financeira, não havendo gastos com viagens, etc.. Audioconferência funciona como um sistema de transmissão de áudio, recebido por um ou mais usuários simultaneamente. A interação entre os indivíduos ocorreria através de um canal de áudio onde pode ouvir e interagir. São bastante usados em cursos, palestras, etc. Esse tipo de ferramenta interativa proporciona vantagens sobre as outras ferramentas em função de não precisar de muitos elementos para que ela ocorra. Somente com um computador, caixas de som, microfone e conexão com a internet é possível que ela ocorra. Teleconferência é uma conferência à distância em tempo real. Ela envolve a transmissão e receção de informações utilizando-se dos diversos tipos de Mídias, com sons e imagens. O processo de ensino aprendizagem acontece nas plataformas digitais que são ambiente virtuais que facilitam a partilha de informação e a interação entre os alunos e tutores. Para responder ao objectivo geral da pesquisa foi usada uma abordagem qualitativa, que tem por objetivo o aprofundamento da compreensão de um fenómeno social por meio de entrevistas em profundidade e análises qualitativas de uma consciência articulada dos actores envolvidos no fenómeno a ser investigado, valorizando a diversidade. Foi uma pesquisa do tipo exploratória, que têm como principal finalidade desenvolver, esclarecer e modificar conceitos e ideias. Neste estudo a pesquisa exploratória constitui a primeira etapa de pesquisa com objetivo explorar o tema ou problema e procurar o seu entendimento. Exige um estudo aprofundado da revisão da literatura e discussão com especialistas sobre o assunto a ser tratado. Foi um estudo de caso para perceber de forma exaustiva e detalhada sobre aplicabilidade do ensino à distância no curso de Gestão de Turismo. Para a determinação dos participantes nesta pesquisa foram seleccionados dois critérios que são: a *diversidade e a saturação*. A diversidade se relaciona com a garantia de que a utilização das entrevistas se

faz tendo em conta a heterogeneidade dos sujeitos e a saturação quando novas entrevistas não adicionam informações adicionais ou relevantes ao estudo. Para a colecta de dados foram usadas as seguintes técnicas: entrevistas semiestruturadas, pesquisa bibliográfica, pesquisa documental e a observação directa. Para análise de dados foi usada a técnica de análise de conteúdo. Desta pesquisa se pode concluir que a nova oferta educativa de ensino à distância ao curso de Gestão de Turismo responde às necessidades de formação de profissionais na gestão de turismo. O curso de Gestão de Turismo é lecionado na UnISCED através de uma plataforma digital, constituída por salas de aulas virtuais organizadas para os estudantes do Curso de Gestão de Turismo. As aulas acontecem virtualmente onde o tutor configura o material na plataforma para ser disponibilizado aos estudantes. Na plataforma virtual os estudantes respondem às tarefas nos fóruns, chats, autoavaliações e avaliações. Os estudantes no curso de Gestão de Turismo são preparados para o mercado de trabalho, porque são dotados de conhecimentos, competências, habilidades e experiências necessárias para alcance dos objetivos do curso. Os desafios do curso de Gestão de Turismo são vários, que se associam a empregabilidade nas estâncias turísticas, como sendo a fraca demanda pelo facto de as estâncias hoteleiras estarem a registar um recrudescimento no que diz respeito à contratação de novos profissionais. Outro facto é o ambiente de negócios atual do país, que dificulta a entrada de turistas durante o ano, criando uma demanda apenas para a época de transição de ano, a estação alta. A escassez de oportunidades de emprego no sector do turismo em Moçambique, aliada à falta de profissionalização do sector, dificulta a sua capacidade de se tornar um sector atrativo para a força de trabalho. Daí que a pesquisa sugere que a nova oferta educativa de ensino à distância seja uma estratégia eficiente com metodologias de ensino virtuais para motivar e formar profissionais potenciais na área de turismo, para a gestão dos recursos turísticos.

A COMPARATIVE STUDY BETWEEN THE TOURISM SECTOR IN PORTUGAL AND ANGOLA. A CREATIVE MODEL FOR THE CIRCULAR TOURISM SECTOR

53

Ana Cristina Horta Corvo Dias Pego¹⁴

CICS Nova, Universidade Nova de Lisboa
Portugal

¹⁴ PhD in Geography and Territorial Planning, Master in Business Management, CICS Nova, Universidade Nova de Lisboa, Investigadora Integrada. CINTurs, Universidade do Algarve, Portugal, Investigadora colaboradora, professora convidada. <https://orcid.org/0000-0002-4161-7301> Science ID: 9316-EAD0-B411

Abstract

Over the last decade, the concept of the circular economy has promoted different types of analysis based on the tourism performance. In this sense, many authors have described the circular economy model as a new creative model where it is possible to indicate the value for the sector based on the value chain performance. However, the circular economy model for the tourism sector accomplished different types of analysis. A comparison of these approaches is the base for this research. A creative model is presented for Angola and Portugal based on the research in the last years to understand the future of tourism. The methodology will be a combination of recent studies and policy progress on this issue to Portugal and Angola. The findings will contribute to understanding the capacity of the tourism sector to create synergies in the economy in both countries. The study will add a substantial contribution to the tourism sector and will endorse the capacity for the circular economy business model.

Keywords

Circular economy, Tourism sector, Business evaluation

Today, the circular economy has an important impact on the economy. The tourism sector, as an industry in which there are complex links between actors, offers a co-operative opportunity to rethink traditional production. Tourism is one of the key sectors for the socio-economic development of many countries worldwide. Due to their high population density, tourism regions are characterised by high waste generation (Falcone, 2019). A circular economy transformation will give us the tools to tackle global challenges and the power to build resilience and increase prosperity.

The introduction of circular economy values and their implementation by the Angolan government will strengthen the sectors' capacity to innovate and apply a new methodology to analyse the sectors' output (https://fecongnd.org/pdf/usaki_economiadicircular_2023.pdf). The article shows how the tourism sector in Portugal promotes the circular economy (CE) and gives an overview of the impact of circular products in the tourism sector in both Angola and Portugal. In addition, based on the strategic plan for the circular economy in Angola, tourism practises and their performance in the tourism ecosystem can be discussed in the light of the rules proposed by the European Commission for 2021-2027.

Indeed, the circular economy in tourism occupies an important place in tourism policy and faces new challenges for the future. Recent work on the circular economy in the tourism sector (Rodríguez et al., 2020; Sørensen and Bærenholdt, 2020) provides an overview of the linkage with the tourism ecosystem, although it does not focus on a market perspective in a specific country.

The circular economy is a prerequisite for the development of the entire nature economy and is a driving force for the development of senior tourism. Today, the circular economy is a kind of economic growth model, the core of which is emission reduction, reuse and resource mobilisation, with low consumption, low emissions and high productivity (Zhang, 2023). The circular economy is a system in which materials never become waste and nature regenerates itself. In a circular economy, products and materials are kept in circulation through processes such as maintenance, reuse, refurbishment, remanufacturing, recycling and composting. The circular economy combats climate change and other global challenges such as biodiversity loss, waste and pollution by decoupling economic activity from the consumption of finite resources.

The circular economy and its connection with the tourism sector is not yet very well researched (Rodríguez et al., 2020), but it must be considered an important sector for the creation of circular value in the economy (Vargas-Sánchez, 2018). The tourism sector represents a new challenge for the circular economy as it is linked to other sectors and consumers. The relationship between the tourism sector and the circular economy can be shown through the services/products and tourism practises offered by the sector (Sørensen and Bærenholdt, 2020). The relationship between the circular economy and the tourism sector has been described by Jones and Wynn (2019) as sustainable management in organisations, with vectors such as water management, waste management, energy monitoring, natural capital management and resilience being the key factors for a systemic model. Another viewpoint presented by Zhang (2023) states that sustainable tourism should

be linked to environmental protection, social responsibility, economic viability and stakeholder collaboration and engagement.

As the circular tourism sector is not yet developed in Angola, this article presents the best practises for future sustainability in tourism based on European best practises. Namely, the relationship between the European Green Deal, the Sustainable Development Goals, the Circular Economy Action Plan, energy efficiency, water and wastewater management and finally waste management. Also, the ability to promote sustainable development, circular efficiency, decision-making process, market performance, circular ecosystem, resource optimisation. (Pego & Lourenço, 2022; Pego & Lourenço, 2024).

The method used is a comparison between Angola's strategic plan and Portugal's circular economy policy and its impact on social and economic indicators.

A comparison between the European circular economy sectors and Angola's potential circular economy market will be analysed in order to develop a new circular economy paradigm.

The results of this analysis will feed into a strategic analysis for Angola in the field of tourism, an expected paradigm for this sector.

References

- Falcone, P. M. (2019). Tourism-based circular economy in Salento (South Italy): A SWOT-ANP analysis. *Social Sciences*, 8(7), 216.
- Jones, P., & Wynn, M. G. (2019). The circular economy, natural capital and resilience in tourism and hospitality. *International Journal of Contemporary Hospitality Management*, 31(6), 2544-2563.
- Rodríguez, C., Florido, C., & Jacob, M. (2020). Circular economy contributions to the tourism sector: A critical literature review. *Sustainability*, 12(11), 4338.
- Sørensen, F., & Bærenholdt, J. O. (2020). Tourist practices in the circular economy. *Annals of Tourism Research*, 85, 103027.
- Pego, A., & Lourenço, J. (2022, September). An AI analysis on the circular economy value chain: A portuguese perspective of evaluation business models. In International conference on Multidimensional Sustainability: Transitions and Convergences (pp. 55-68). Cham: Springer Nature Switzerland.
- Pego, A., Lourenço, J. (2024). An AI analysis on the circular economy value chain: A portuguese perspective of evaluation business models. In F. L. Almeida, J. C. Morais, & J. D. Santos (eds), *Digital sustainability: Inclusion and transformation. ISPGAYA 2022*. Springer Proceedings in Earth and Environmental Sciences. Cham: Springer.
- Vargas-Sánchez, A. (2018). The unavoidable disruption of the circular economy in tourism. *Worldwide Hospitality and Tourism Themes*, 10(6), 652-661.
- Zhang, Y. (2023). Circular economy model for elderly tourism operation based on multi-source heterogeneous data integration. *Applied Artificial Intelligence*, 37(1).

CAPACITAÇÃO DIGITAL NO ENSINO SUPERIOR EM ANGOLA: O IMPACTO DA TECNOLOGIA NO ENSINO DE TURISMO

57

Sebastião Rodrigues Pedro¹⁵

Universidade Agostinho Neto
Angola

¹⁵ Doutorando em Inovação Educativa – Universidade Nova de Lisboa. Mestre em Gestão de Informação – Especialização em Gestão de Sistemas e Tecnologias de Informação, ORCID ID [0000-0002-3107-9466](https://orcid.org/0000-0002-3107-9466), Ciência ID: BD16-13BB-3E01. Assistente na Universidade Agostinho Neto, Angola.

Abstract

The digitalization of higher education has become a global necessity, especially after the COVID-19 pandemic exposed the limitations in digital competencies among many university professors. This study analyzes the digital training of university teachers in Angola, exploring challenges, opportunities, and strategies to enhance their digital skills. The research follows the Design-Based Research (DBR) methodology, enabling practical and adaptable solutions for complex educational problems. Conducted in three main cycles—design, implementation, and evaluation—the study aims to create a digital training program tailored to the needs of Angolan university professors. The key objectives include: (1) identifying teachers' training needs in Information and Communication Technologies (ICTs); (2) understanding teachers' self-efficacy beliefs regarding digital tools; (3) highlighting obstacles in ICT integration; (4) developing a context-specific training program; and (5) evaluating the program's effectiveness post-implementation. Angola's higher education system faces structural challenges, such as limited technological infrastructure, restricted access to digital resources, and a lack of specialized teacher training. Despite these barriers, initiatives like the Higher Education, Science, and Technology Project (TEST), approved in 2023 with a \$150 million investment, reflect efforts to modernize education. The study employs qualitative and quantitative methods, including interviews, surveys, classroom observations, and focus groups. Findings support a three-pillar training model: (1) technical literacy, (2) cognitive competencies, and (3) social literacy. This research provides practical solutions for digital teacher training in Angola and offers insights for other developing countries facing similar challenges, promoting a more inclusive and digitally prepared education system.

Keywords

Teacher digital training, Higher education, Angola, Digital competencies, Design-based research

A digitalização do ensino superior tornou-se uma necessidade global, especialmente após a pandemia da COVID-19, que revelou de forma clara as limitações nas competências digitais de muitos docentes. Este estudo foca-se na análise da capacitação digital dos professores universitários em Angola, explorando os desafios, as oportunidades e as estratégias para melhorar as competências digitais deste grupo fundamental para o desenvolvimento educacional.

A investigação baseia-se na metodologia Design-Based Research (DBR), uma abordagem que permite criar soluções práticas e adaptáveis para problemas educacionais complexos. O estudo foi desenvolvido em três ciclos principais de conceção, implementação e avaliação, com o objetivo de criar um programa de capacitação digital ajustado à realidade dos professores universitários em Angola.

Os principais objetivos deste trabalho incluem: (1) identificar as necessidades de formação dos docentes no uso de Tecnologias da Informação e Comunicação (TICs); (2) compreender as crenças de autoeficácia dos professores em relação ao uso de tecnologias digitais; (3) apontar os principais obstáculos enfrentados na integração das TICs no ensino; (4) desenvolver um programa de formação específico e adaptado ao contexto angolano; e (5) avaliar a eficácia do programa após a sua implementação.

O ensino superior em Angola enfrenta desafios estruturais significativos, como infraestruturas tecnológicas limitadas, acesso restrito a equipamentos e recursos digitais e uma carência de formação específica para professores. Apesar disso, iniciativas recentes demonstram um compromisso em superar essas limitações. Um exemplo é o Projeto Educação Superior, Ciência e Tecnologia (TEST), aprovado em 2023, com um investimento de 150 milhões de dólares para modernizar o sistema educacional.

A metodologia do estudo combina técnicas qualitativas e quantitativas, como entrevistas, questionários, observações em sala de aula e grupos focais. Professores universitários, gestores educacionais e especialistas em tecnologia educacional participaram na recolha de dados. Os dados quantitativos foram analisados com técnicas estatísticas descritivas, enquanto os dados qualitativos foram interpretados através de análises temáticas.

O programa de capacitação digital proposto organiza-se em três pilares principais: (1) alfabetização técnica, formar os docentes no uso operacional de ferramentas digitais, como software educativo e plataformas de aprendizagem; (2) competências cognitivas, desenvolver capacidades para resolver problemas e pensar criticamente em contextos digitais; e (3) alfabetizações sociais, promover habilidades de comunicação e colaboração em ambientes digitais.

Para além disso, o estudo sublinha a relevância de colaborações internacionais. Um exemplo é a parceria entre a ADPP (Ajuda de Desenvolvimento de Povo para Povo) e a KOICA (Agência Coreana de Cooperação Internacional), que apoia a formação de professores em áreas rurais utilizando TICs. Estas iniciativas mostram como a colaboração pode potenciar a formação de professores e o desenvolvimento educacional em Angola.

Os resultados esperados incluem: (1) um *framework* contextualizado para a formação digital de professores universitários; (2) diretrizes práticas para a criação de programas de

formação continuada em TICs; e (3) recomendações para políticas institucionais que promovam a integração de tecnologias digitais no ensino superior.

Este trabalho oferece uma contribuição relevante para a educação superior ao propor soluções práticas e adaptadas ao contexto angolano. Além de abordar as competências técnicas, considera também os aspetos pedagógicos e socioculturais que influenciam o uso das tecnologias no ensino.

Espera-se que as conclusões deste estudo sirvam de referência para outros países em desenvolvimento que enfrentam desafios semelhantes. Ao proporcionar um caminho para a capacitação digital dos docentes, esta investigação contribui para a construção de um sistema educacional mais eficiente, inclusivo e preparado para a era digital.

TRAINING SERIOUSLY WITH SERIOUS GAMES: MODERN BOARDGAMES APPLICATION TO TOURISM TRAINING IN PRÍNCIPE

61

Edgar Bernardo¹⁶

ISCE Douro – Instituto Superior de Ciências Educativas do Douro
Portugal

¹⁶ É professor coordenador no ISCE Douro, antropólogo mestre em desenvolvimento e doutorado em Sociologia pelo ISCTE-IUL e CI-ISCE, doutorado em Turismo pela Universidade de Aveiro. Investigador do CinTurs-UAlg, e os seus interesses de investigação centram-se no turismo e desenvolvimento desde a perspetiva antropológica e sociológica. Entre os temas recentemente investigados está património cultural e patrimonialização, gastronomia, souvenirs, mobilidade, turismo responsável, enoturismo e impactos do turismo, governança turística.

Abstract

The use of games as participatory and collaborative tools in planning and public engagement has been growing rapidly. However, despite the increasing academic interest and practical applications, structured methodologies for designing and implementing game-based approaches remain scarce. This article explores the potential of modern board games as serious games for tourism training on Príncipe Island, proposing a new framework and reflecting on the experience. Serious games offer several advantages for informal training. They make learning more engaging and participatory, allowing players to experiment and learn without real-world risks. Additionally, they simulate practical scenarios, encouraging the application of concepts and skills interactively while fostering teamwork, communication, and problem-solving. The immersive nature of games enhances information retention and encourages players to consider multiple perspectives, strengthening empathy and the understanding of complex issues. These games can be tailored to specific challenges, providing immediate feedback and creating an inclusive environment that facilitates participation. The article presents a serious game developed to train government officials on sustainability and tourism, emphasizing the importance of political involvement in tourism planning. By engaging decision-makers, the game fosters dialogue among stakeholders and highlights the role of such tools in shaping more inclusive and sustainable tourist destinations.

Keywords

Serious games, Tourism training, Public engagement, Sustainability, Policymaking

The use of games as participatory and collaborative tools in planning and public engagement has been expanding rapidly. Nonetheless, while practical applications and academic interest continue to grow, structured methodologies for designing and implementing game-based approaches remain scarce. This article investigates the potential of modern board games as serious games for tourism training on Príncipe, offering a novel framework and reflect on the experience.

The use of serious games for informal training offers numerous advantages. They are inherently engaging, making learning more enjoyable and encouraging active participation. By providing a risk-free environment, participants can experiment, make mistakes, and learn from them without real-world consequences. Serious games simulate practical scenarios, allowing players to apply concepts and skills interactively while fostering teamwork, communication, and problem-solving. The immersive nature of games enhances information retention compared to traditional methods, and their ability to highlight diverse viewpoints encourages participants to consider different roles and perspectives, fostering empathy and a deeper understanding of complex issues.

Furthermore, serious games can be tailored to specific training needs, addressing particular challenges relevant to the audience, while offering immediate feedback to promote self-assessment and learning progress. Their informal nature creates a more inclusive atmosphere, making it easier to engage individuals who might otherwise feel intimidated by conventional methods. These benefits make serious games a highly effective tool for informal education, especially in addressing complex topics such as sustainability, tourism, and public policy.

The aim of my article is to showcase a serious game developed on sustainability and tourism for government officials on Príncipe Island. This initiative emphasizes the critical importance of involving political actors in participatory dynamics, fostering dialogue and collaboration among stakeholders. By engaging these key decision-makers, the game underscores the relevance of such tools in shaping the planning process for emerging tourist destinations, ensuring more inclusive and sustainable outcomes.

PISTA DIGITAL AS A TOOL (ALSO) TO ENHANCE TEACHING AND LEARNING: AN APPLICATION OF PROBLEM-BASED LEARNING TO IDENTIFY SUSTAINABLE TOURISM PRACTICES IN HOTELS

64

Jaime Serra¹⁷

Universidade de Évora, CIDEHUS, HPC Chair
Portugal

Maria do Rosário Borges¹⁸

Universidade de Évora, CIDEHUS, HPC Chair
Portugal

Noémi Marujo¹⁹

Universidade de Évora, CIDEHUS
Portugal

¹⁷ Associate Professor in the Department of Sociology at the School of Social Sciences. Integrated researcher in the Tourism and Populations research group at CIDEHUS – Interdisciplinary Centre for History, Cultures, and Societies, and Coordinator of the Tourism Lab. Member of the scientific coordination team of ASTO – Alentejo Sustainable Tourism Observatory.

¹⁸ Associate Professor in the Department of Sociology at the School of Social Sciences. Coordinator and integrated researcher of the Tourism and Populations research group at CIDEHUS – Interdisciplinary Centre for History, Cultures, and Societies. Member of the scientific coordination team of ASTO – Alentejo Sustainable Tourism Observatory.

¹⁹ Associate Professor in the Department of Sociology at the School of Social Sciences. Integrated researcher in the Tourism and Populations research group at CIDEHUS – Interdisciplinary Centre for History, Cultures, and Societies. Member of the scientific coordination team of ASTO – Alentejo Sustainable Tourism Observatory.

Abstract

The global tourism industry, while a major economic driver, faces mounting pressure to adopt sustainable practices. Hotels, as central players in tourism, significantly contribute to resource depletion and environmental degradation. This study explores the integration of Problem-Based Learning (PBL) with the PISTA Digital system to enhance sustainable tourism education. PBL, an inquiry-based pedagogical approach, fosters critical thinking, problem-solving, and collaboration - key skills for addressing sustainability challenges in the hotel sector. The research employs a case study methodology, to assess environmental practices in a selected hotel. The PISTA Digital system provides students with a data-driven platform to analyse sustainability indicators, including water and energy consumption, waste management, and accessibility. Findings suggest that combining PBL with digital monitoring tools strengthens students' ability to identify sustainability gaps and propose evidence-based solutions. This study underscores the potential of sustainability-focused education in shaping future professionals capable of driving environmental and social change in the hospitality sector.

Keywords

Environmental monitoring, Hospitality education, PISTA digital, Problem-based learning, Sustainable tourism

Introduction

The global tourism industry, while a significant economic driver worldwide, faces increasing scrutiny for its environmental impact. Hotels, as key players in this sector, contribute substantially to issues such as resource depletion, waste generation, and carbon emissions. Simultaneously, tourism industry has long been recognized as a significant contributor to environmental degradation, with hotels being one of the primary culprits (Aksöz et al., 2021). Tourists' growing awareness of the environmental impact of their travel choices has led to an increased demand for more sustainable tourism practices, and hotels have been under pressure to adapt their operations to meet these expectations (Knowles et al., 1999; Aksöz et al., 2021). This shift required innovative educational approaches to prepare future professionals with the skills to address these complex challenges. Further, Problem-Based Learning (PBL) offers a promising pedagogical framework for integrating sustainability into hospitality and tourism education. PBL, by its nature, encourages critical thinking, problem-solving, and collaboration, essential skills for navigating the multifaceted aspects of sustainable tourism. This research explores the application of PBL within a specific context: using the PISTA Digital system (www.pistadigital.uevora.pt) as a tool for students to monitor and analyse environmental practices in hotels. This system provides a practical, data-driven approach for students to engage with real-world sustainability challenges and develop actionable solutions for the hotel industry. This study aims to explore how the PISTA Digital system, combined with PBL methodology, can enhance students' understanding of and ability to contribute to sustainable tourism practices in the hotel sector.

Problem-Based Learning (PBL) in Sustainable Tourism

Problem-Based Learning is an educational approach that encourages learners to engage with complex, real-world problems and develop solutions through a collaborative, inquiry-based process (Bertoni, 2008; Rana et al., 2023). This approach has been increasingly applied in the context of sustainable tourism, as it allows students and professionals to grapple with the multifaceted challenges of balancing environmental, social, and economic considerations in the industry (Bertoni, 2008). Aksöz et al. (2021) assume that one approach that has been explored in the context of sustainable tourism is the use of PBL, a pedagogical method that has been shown to be effective in fostering critical thinking, problem-solving, and collaborative skills. The use of PBL in sustainable tourism education has been explored in several studies since several years (Boley, 2011). These studies have demonstrated the potential of this approach to equip learners with the necessary skills and knowledge to address the complex issues surrounding sustainability in the tourism sector.

The existing literature on sustainable tourism education and Problem-Based Learning provides valuable insights into the potential for integrating these two concepts. Camargo & Gretzel (2017) highlighted the limited knowledge of sustainability principles and technical aspects related to sustainable tourism among tourism students, underscoring the need for

more effective educational approaches. Sabah (2019) discussed the increasing importance of sustainability within the tourism industry and the need for educational systems to consider different perspectives and disciplines. Camargo & Gretzel (2017) emphasized the dichotomy between the widespread concept of sustainable tourism and the limitations of the progress achieved, calling for a theoretical discussion to examine the definitions and operability of sustainable tourism (Bertoni, 2008).

Within this context, PBL has been identified as a promising pedagogical approach for sustainable tourism education (Camargo & Gretzel, 2017; Sabah, 2019; Henry & Jackson, 1996). The case study presented by Shi et al. (2020) concluded with the proposition of a student-oriented active learning process for introductory tourism courses, highlighting the implications for hospitality and tourism curricula.

Methodology

Context of Application

The PISTA Digital system is a technological tool that enables the monitoring and analysis of environmental practices in hotels. By providing students with access a check list on indicators of energy and water consumption, waste management, and other sustainability metrics, the PISTA Digital system offers a practical platform for engagement with sustainable tourism challenges.

Integrating the PISTA Digital system into a PBL framework allows students to apply critical thinking and problem-solving skills to address sustainability issues in the hotel industry. The combination of PBL and the PISTA Digital system provides students with the opportunity to:

- Identify and analyse the environmental/social impacts of hotel operations
- Develop and evaluate potential solutions to mitigate these impacts
- Collaborate with industry partners to implement sustainable practices

This approach not only enhances students' understanding of sustainable tourism but also prepares them to be effective change agents in the industry.

Methods

This study will employ a **case study approach**. Case study research is particularly well-suited to investigating complex phenomena within real-life contexts (Yin, 1984), such as the implementation of sustainable tourism practices in a hotel setting. This approach allows for in-depth exploration of the specific context and processes involved (Crowe et al., 2011), providing rich insights into the challenges and opportunities associated with integrating sustainability into hotel operations. This study will combine qualitative data from interviews with on-site observations from checklist assessments. The PISTA Digital system will serve as a framework for guiding the data collection and analysis process.

Development of Checklists based on Sustainability Indicators

Four checklists will be developed, for environmental and social dimension of sustainability under consideration: water, energy, waste and accessibility. Each checklist will include at least three indicators aligned with established sustainability frameworks such as the Green Key, ETIS, Biosphere, and ISO 14001 certifications. Example indicators might include:

Water:

- Water consumption per guest night
- Leakage detection and repair program
- Use of water-efficient fixtures (e.g., low-flow showerheads, toilets)
- Rainwater harvesting and greywater recycling systems
- Employee training on water conservation practices

Energy:

- Energy consumption per guest night
- Use of renewable energy sources (e.g., solar panels)
- Energy-efficient lighting and appliances
- Building insulation and energy management systems
- Employee training on energy conservation practices

Waste:

- Waste generation per guest night
- Recycling and composting programs
- Use of biodegradable and compostable products
- Waste reduction initiatives (e.g., minimizing single-use plastics)
- Employee training on waste management practices

Accessibility:

- No of rooms prepared for accessible tourism
- Doors dimensions
- No of adapted WC

Hotel Selection and Data Collection

One hotel is selected by each group of students as a case study. The selection criteria will include the hotel's size, location, and stated commitment to sustainability. An on-site visit will be scheduled to gather data using the developed checklists and to conduct semi-structured interviews with the hotel owner or manager. The interview will explore the hotel's current sustainability practices, challenges, and opportunities for improvement. This interview will also be used to determine whether the hotel is currently using sustainability indicators, and whether these indicators align with those identified in the checklists from step 1.

Identification of Effective Mitigation Measures

The data collected from the checklists and interviews will be analysed to identify any gaps between the hotel's current practices and best practices for sustainable tourism. If the hotel is already using sustainability indicators, the effectiveness of these measures in mitigating environmental impacts will be evaluated. Based on this analysis, specific recommendations for improvement will be developed, drawing on the PISTA Digital system and other relevant resources.

Reporting and Suggestions

A comprehensive report will be compiled summarizing the findings of this study, including the checklist assessments, interview insights, and recommendations for improvement. The report will also discuss the implications of the findings for the application of PBL in sustainable tourism education, highlighting the potential of the PISTA Digital system as a valuable tool for student learning and engagement.

Conclusions

The integration of Problem-Based Learning and the PISTA Digital system provides a promising approach for promoting sustainable tourism practices in the hotel industry. By engaging students in the identification, analysis, and solution of real-world sustainability challenges, this framework enables them to develop critical thinking and problem-solving skills that are directly applicable to the industry. Our case study findings suggest that the PISTA Digital system can be an effective tool for evaluating a hotel's current sustainability performance, identifying areas for improvement, and collaborating with industry partners to implement evidence-based mitigation strategies.

Finally, this study highlights the potential for sustainability-focused education to catalyse tangible change within the hospitality sector. By empowering future hospitality professionals with the knowledge, skills, and motivation to address environmental and social impacts, we can contribute to the broader transition towards more sustainable tourism practices across the industry.

Acknowledgements

This research is funded with a grant from the FCT – National Funding Agency for Science, Research and Technology, under the project UIDB/HIS/00057/2020 & UIDP/HIS/00057/2020 – CIDEHUS/Universidade de Évora.

References

- Aksöz, E. O., Aydin, B., & Esin, Y. (2021). Tourists approaches to eco-friendly hotels and determination of green hotel preferences: The case of Eskişehir. In *Turizam*, 25(2), 83. University of Novi Sad, Department of Geography, Tourism and Hotel Management. <https://doi.org/10.5937/turizam25-28792>.
- Bertoni, M. (2008). Turismo sostenible: Su interpretación y alcance operativo. In Cuadernos de Geografía Revista Colombiana de Geografía, 17, 155. National University of Colombia. <https://doi.org/10.15446/rcdg.n17.10925>.
- Boley, B. B. (2011). Sustainability in hospitality and tourism education: Towards an integrated curriculum. In *Journal of Hospitality & Tourism Education*, 23(4), 22. Taylor & Francis. <https://doi.org/10.1080/10963758.2011.10697017>.
- Camargo, B. A., & Gretzel, U. (2017). What do tourism students know about sustainability and sustainable tourism? An exploratory study of Latin American students. *Journal of Teaching in Travel & Tourism*, 1. Taylor & Francis. <https://doi.org/10.1080/15313220.2017.1294038>.
- Crowe, S., Cresswell, K., Robertson, A., Hubby, G., Avery, A., & Sheikh, A. (2011). The case study approach [Review of The case study approach]. *BMC Medical Research Methodology*, 11(1). BioMed Central. <https://doi.org/10.1186/1471-2288-11-100>.
- Henry, I., & Jackson, G. (1996). Sustainability of management processes and tourism products and contexts. *Journal of Sustainable Tourism*, 4(1), 17. Taylor & Francis. <https://doi.org/10.1080/09669589608667256>.
- Knowles, T., Macmillan, S., Palmer, J., Grabowski, P., & Hashimoto, A. (1999). The development of environmental initiatives in tourism: Responses from the London hotel sector. *International Journal of Tourism Research*, 1(4), 255. Wiley. [https://doi.org/10.1002/\(sici\)1522-1970\(199907/08\)1:4<255::aid-jtr170>3.0.co;2-8](https://doi.org/10.1002/(sici)1522-1970(199907/08)1:4<255::aid-jtr170>3.0.co;2-8).
- Serra, J., Borges, M.R., Sousa, A., Lima, J., Marujo, N. (2022). Manual para a implementação de práticas sustentáveis no turismo. Available at: <https://pista.hpc.uevora.pt/recursos> (Accessed:23/02/2025)
- Rana, V. S., Raina, A., & Bathla, G. (2023). The effect of sustainable practices on customer attitude: A study of sustainable hospitality operations, 2(1). <https://doi.org/10.54878/ejbess.227>.
- Sabah, Ş. (2019). Introductory chapter: Studying tourism. IntechOpen eBooks. IntechOpen. <https://doi.org/10.5772/intechopen.85803>.
- Shi, J., Jian-an, Z., & Cai, L. A. (2020). Active learning for an introductory tourism course - A case study. *Journal of Teaching in Travel & Tourism*, 21(1), 1. Taylor & Francis. <https://doi.org/10.1080/15313220.2020.1770663>.
- Yin, R. K. (1984). Case study research: Design and methods. <https://cds.cern.ch/record/1171670>.

COIL AS A MEANS TO ENHANCE INTERNATIONAL TOURISM EDUCATION IN UNIVERSITIES

71

Emese Panyik

Faculty of Philosophy and Social Sciences, Catholic University
Portugal

Callum Morrison

Coventry University London
UK

Introduction

Since the COVID-19 pandemic, the international stage has become increasingly uncertain in political, economic, and environmental terms. Undoubtedly, the pandemic has exposed the vulnerabilities of the global tourism sector, but it also demonstrated its ability to rapid recovery. In today's globalized world, technological advancements are driving change in all spheres of life, which present complex challenges for the tourism industry. Addressing these challenges requires interdisciplinary approaches, cross-cultural competencies and, as one of the core lessons of the pandemic, resilient strategies.

To prepare students for these demands, Collaborative Online International Learning (COIL) has emerged as an innovative pedagogical tool that promotes intercultural exchange and collaborative learning (Rubin, 2017). Using digital platforms, students and educators from different institutions and countries can work together on shared curricula. By enabling an intercultural experience, COIL integrates global perspectives into higher education, providing students with the necessary skills for an interconnected workforce.

While implementing COIL requires additional time, planning, and management from teachers, its popularity has been growing significantly. Furthermore, the shift to online teaching brought about by COVID-19 has further increased its visibility worldwide. Case studies across scientific fields have shown that the key benefit of COIL is the development of intercultural skills. However, despite the interdisciplinary nature of tourism, which makes it well-suited for COIL, there is a lack of studies exploring its potential benefits in tourism education. This paper aims to address this gap by discussing the opportunities and prospects of implementing COIL in tourism studies.

The Nature of COIL

Author and educationalist, Little (2015), states that education offers "... essential ways for students to come to a better understanding of themselves and their connection to society... sadly, there is no obligation for schools to engage their students in this process. Good schools do so intuitively". In short, education is broader than simple instruction, and teaching, but an effort needs to be made to include this broadness.

Society and its various social components can therefore be described as series of overlapping interpersonal relationships, and training programmes as the means to develop students' empathy, through which they may serve emotions and form substantive opinions of behaviours and thought processes. Empathetic skills include the following:

Communication: confidence, active listening, clarity, empathy, and patience are all examples of this competence.

Relation building: a soft skill to ensure that individuals can operate successfully together in the business and on teams with minimal conflict.

Problem Solving: refers to the ability to find a long-term solution to an issue that is in the best interests of the team and the people involved.

Critical Thinking: the ability to think logically and reasonably. This ability is essential for problem-solving and making decisions.

Negotiation: the ability to reach an agreement between two or more parties. It encompasses skills such as communication and persuasion.

Leadership: is used to evaluate an individual's capacity to operate independently and in groups.

It's not that the non-cognitive and social skills above are not present in standard educational programmes, rather, that they are easily sidelined by the teaching of frameworks, and important economic details, i.e. so-called hard skills. Extracurriculars and particularly COIL can ensure these soft skills are separately and evidently provided and learnt in educational programmes.

As all students quickly progress from the classroom to an office, their studies are simply the means to successfully join the global workforce, thus all knowledge should resolve into employability skills – some of which, COILS provide. While joining these short-term inter-university projects, students find themselves working with unfamiliar students and cultures, to solve an objective.

The added value of COILs is students enjoyably developing employability skills, and the creation of a narrative for job interviews. COILs create an environment similar to an international workplace in which people from different cultures are challenged to work together, negotiate who will do which tasks, and to find new ways to allocate their time to find solutions to social and business problems.

Ultimately, COILs memorably develop skills valued by employers, such as adaptability, team building, cultural recognition, problem solving, and delivery skills – all recallable in preparation for writing cover letters, discussing at interviews, and successfully joining the global workforce.

Implications of COIL for Tourism Education

Despite being a relatively recent academic field, tourism has evolved since the mid-20th century into a multidisciplinary area, drawing on a diverse range of disciplines such as geography, sociology, economics, environmental and cultural studies. While early research focused on the economic impacts of tourism and its role in regional development, the growth of mass tourism in the post-World War II era highlighted the increasing economic, social and environmental impacts of tourism. The negative impacts on destinations and communities have become a key area of research, leading to a growing focus on understanding sustainable and responsible tourism management.

At the international level, various examples demonstrate the viability of COIL across scientific fields and disciplines in higher education. The objective of COIL is generally an interdisciplinary applied project or practice-oriented learning scheme. Examples from different parts of the world include a COIL course that brought together physical education (PE) teacher training students from the Netherlands and primary school teacher training students from Ireland to collaboratively develop an inclusive physical education lesson plan

(Hackett & Van Hove, 2023). In another case, students from Germany, the UK, and South Korea jointly organized a virtual academic conference (Kunjuthamby & Lausberg, 2024). The ongoing COIL project led by the authors of this paper brought together Indian students from the UK and Portuguese students to analyse the impacts of overtourism on selected destinations and propose innovative solutions.

A common thread in these COIL applications is the development of intercultural skills. Moreover, research confirms that the main benefits of COIL are enhanced intercultural competence, digital literacy, collaborative skills, and critical thinking - essential competencies in the global tourism and hospitality industry.

The shift towards sustainable tourism provides an opportunity for the development of a range of interdisciplinary projects where issues and challenges can be discussed from diverse cultural and academic perspectives. Cross-sectional topics may include the environmental, economic and social impacts of tourism, cultural and natural heritage conservation, ethical tourism and social responsibility, carbon footprint of tourism, waste management in tourism and community involvement in tourism development.

Students from different countries use their first-hand experiences, exchange insights and compare case studies. Conducting a benchmarking analysis on good practices and actual measures from other countries enables the formulation of adaptable and transferable solutions.

Perhaps the most significant advantage of an interdisciplinary approach to sustainability issues, from a scientific perspective, is that it can facilitate the development of comprehensive strategies that balance economic benefits with environmental and social sustainability (Perkumienė & Pranskūnienė, 2019). By considering different economic, social, and environmental priorities, it also avoids standardised solutions. From an ethical perspective, cultural diversity encourages a respect for different values, traditions, and development priorities.

OTCOIL Case Study: Insights from an Ongoing Project

OTCOIL, the current COIL project led by the authors, was launched in February 2025 and ran for six weeks, focusing on overtourism (OT). As previously mentioned, the project was developed to analyse the impacts of OT in selected destinations, namely Goa in India and Lisbon in Portugal.

Overtourism is a relatively recent phenomenon that was first mentioned by Petersen (2001), who examined the challenges faced by Pompeii, Italy, due to excessive tourism. At that time, the first signs of overtourism had already been identified, including the deterioration of ancient structures and the city's diminishing capacity to protect its cultural heritage due to the sheer volume of tourists. However, the term only gained prominence in 2016, coinciding with waves of protests against mass tourism in various parts of the world, particularly in Europe, including Barcelona, Ibiza, and Mallorca in Spain, as well as Milan and Venice in Italy.

The term was later popularised by Ali (2018), the founder of Skift, who used it in the context of Iceland's tourism boom to describe the negative effects of excessive tourism on popular destinations. Considering that overtourism is a cross-border phenomenon, the first measures and policy responses have been developed based on action-oriented reports from the World Tourism Organization (UNWTO), the European Union, and the World Travel & Tourism Council (WTTC). However, the outbreak of the COVID-19 pandemic disrupted global tourism in 2020 and introduced a new, opposite phenomenon: undertourism. As a result, policy measures are still in their early stages, and new destinations and impacts have been identified in recent years as tourism has rebounded and even surpassed pre-pandemic levels.

Within this context, overtourism aligns with the core values of COIL, as it is a global phenomenon that students have undoubtedly encountered in one way or another—whether during holidays at a mass tourism destination, in their hometown, or even in the classroom. The analysis of the phenomenon requires interdisciplinary approaches therefore students could apply tools from study areas such as tourism, management, sociology and environmental studies to develop innovative solutions.

The authors of this paper mooted an innovative collaboration of two principal goals:

- a) ensuring tourism students were aware of their connection to society and the world by creating a learning environment in which students of both universities could collaborate and become more aware of the economic and environmental threats to society, and
- b) recognising the value chain of international tourism requires communication between many firms, each comprising individuals, of particular nations and cultures and therefore the need to also develop the students' social and intercultural skills.

A simple model of overtourism, structured around three key components, has been applied to facilitate understanding: Drivers, Impacts, and Responses. This model provides a clear framework for understanding how overtourism develops, its consequences, and potential solutions. The model is a synthesized framework based on widely accepted principles in tourism studies and sustainable development, derived from academic literature, case studies, and practical frameworks often cited in the study of overtourism (UNWTO, Doxey's Irritation Index (Irridex), Butler's Tourism Area Life Cycle (TALC).

Conclusions

Overtourism, i.e. OT, was chosen as the theme of this COIL project, aka OTCOIL, as it highly relevant for students of tourism, governments, residents, and other stakeholders.

OT is also not necessarily currently a taught part of a university syllabus which highlights another feature of the OTCOIL – also the opportunity to extend the syllabus by incorporating topical elements into a COIL as an extracurricular activity, and through its topicality, also create the conditions for students of different universities, to interact, to learn from each other, and become aware of other factors such as national or different personalities,

pedagogies, cultures, and practise and develop the behaviours characteristic of the personnel of a firm, engaged in international activities, e.g. tourism.

Considering future implication of COIL in tourism education, there are several elements worthy of development, including:

- a theory for students interact & learn from each other, i.e. Social Learning Theory (SLT);
- the interaction of students as a means to develop the social, soft, or higher order skills, that according to diverse research, are the critical success factors of success in life;
- the diverse nationalities of the students, and a theory to study of cultural dimensions, i.e. Hofstede (1980).

The implementation of COIL in tourism education is still very limited, yet it presents an innovative method and remarkable pedagogical approach to understand global, cross-boundary phenomena of tourism. In an era marked by rapid technological advancement, political instability and shifting socio-economic landscapes, COIL provides students with critical soft skills, including intercultural competencies, empathetic problem-solving and critical thinking.

References

- Ali, R. (2018, August 14). The genesis of overtourism: Why we came up with the term and what's happened since. Skift. Retrieved from <https://skift.com/2018/08/14/the-genesis-of-overtourism-why-we-came-up-with-the-term-and-whats-happened-since/>.
- Hackett, S., & Van Hove, P. (2023). Cross-boundary collaboration with COIL. European Association for International Education. Retrieved from <https://www.eaie.org/resource/cross-boundary-collaboration-coil.html>.
- Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization*, 10(4), 15-41. Retrieved from <https://doi.org/10.1080/00208825.1980.11656300>.
- Kunjuthamby, S., & Lausberg, I. (2024). Empowering education: Lessons learned from an innovative COIL & PBL project. Advance HE. Retrieved from <https://advance-he.ac.uk/news-and-views/empowering-education-lessons-learned-innovative-coil-pbl-project>.
- Kučerová, K. (2023). Benefits and challenges of conducting a Collaborative Online International Learning class (COIL). *International Journal on Studies in Education*, 5. 193-212. 10.46328/ijonse.110.
- Little, T. (2015). An intelligent person's guide to education. London: Bloomsbury.
- Perkumienė, D., & Pranskūnienė, R. (2019). Overtourism: Between the right to travel and residents' rights. *Sustainability*, 11(7), 2138. <https://doi.org/10.3390/su11072138>.
- Petersen, F. (2001, December 15). Blast from the past. *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/national/blast-from-the-past-20011215-gdf4yo.html>.

Rubin, J. (2017). Embedding collaborative online international learning (COIL) at higher education institutions: An evolutionary overview with exemplars. *Internationalisation of Higher Education*, 2, 27-44. Retrieved from www.handbook-internationalisation.com.

TERRITORIES AND HOSPITALITY - TWO PEDAGOGICAL APPROACHES WITHIN THE TECHNOLOGICAL FRAME

Ana Pereira Neto²⁰

CHAM, Faculdade de Ciências Sociais e Humanas, Universidade NOVA de Lisboa, CEIA, ISEC Lisboa
Portugal

Madalena Corte-Real²¹

CHAM, Faculdade de Ciências Sociais e Humanas, Universidade NOVA de Lisboa, CEIA, ISEC Lisboa
Portugal

²⁰ Full Professor at the School of Management, Engineering and Aeronautics of ISEC Lisboa, in the Hospitality Management Course; Integrated Researcher at CHAM, Faculdade de Ciências Sociais e Humanas, FCSH, Universidade NOVA de Lisboa, 1069-061 Lisboa and CEIA ISEC Lisboa; Professor since 1984 in the field of Hospitality Management and Tourism and Cultural Studies; Pioneer of Anthropological Studies on Tourism in Portugal; Member of the pioneer teaching team in first Portugal's Hotel Management Course (1984/85). Main área of interest: Identity semiotics, culture dialectics of spaces and places, and communication.

²¹ Has been working in the field of Sociology and Urban Studies in applied and academic settings in particular in the Lisbon Metropolitan Area, from different approaches as well as within an interdisciplinary context. Integrated researcher at CHAM - Centro de Humanidades; lecturer at ISEC Lisboa, teaching in the areas of Urban Planning and Mobility as well as Qualitative Methods and at FCSH-UNL (as visiting lecturer), teaching, Sociology of the Territory and Urban Sociology, The main areas of interest are urban development and local transformations by analysing how a territory is produced and perceived.

Abstract

Our paper reflects on the recent work within the scope of andragogical practices in areas related to Hospitality/Tourism at the School of Management, Engineering, and Aeronautics, namely in the Hotel Management and Municipal Management courses. It reflects on the perspectives used in the teaching methodology to integrate observation and factual analysis, where technology and gamification are present alongside fieldwork. We present our experience as teachers, reflecting part of what ISEC Lisbon does to follow the curricular adaptation trend in the European Union and, consequently, in our country. A generic approach to a case study points to short-term reflections on the synergetic suitability of teaching humanities curricular unit practices supported by the practices included within the technology ones. In the middle term, it is our objective to inquire into and analyze the results of the quality perspective regarding the adequacy of our students in the labor market and, subsequently, this to our students.

Keywords

Learning practices, Technology, Humanities, Game-based learning, Quality

Introduction to the Challenge of TechEdu

ISEC Lisboa, within the European context, has consistently worked to establish conditions aligned with its strategic plan to support the development of the academic community in accordance with the principles outlined in the European educational framework, positioning itself within the EU's Strategic Framework for Education.

From those, we enhance the five strategic priorities, valuing in our daily life of teaching the first of the five, concerning improving quality, equity, inclusion, and success for all in education and training, and the third that concerns competencies and motivation in the education profession.

The process of curricular adaptation is continuous, evolving throughout the academic community through debates and formational actions, where Elearning and Blearning educative methodologies are introduced as meaningful additions to new teaching models. Our primary concern is aligning students' skills with the demands of the world of work and consequently adapting to the pace of technological transformation. However, making sense of science requires conscience and intercommunication between the main scientific fields, such as exact and human, which is fundamental to breaking barriers to knowledge development (Morin, 2017).

The Bologna process functions as well as the results in each European country, and each institution publishes its quality results for each completed academic year. Each new academic year, preparation for teaching adequacy requires a profound analysis of the quality reports. These, in ISEC Lisboa (GAGQ, 2024) aim holistic approach, which we believe to be reachable by daily actions, as a continuous challenge in all our community.

The axis of time and space has more importance in our lives, and its profitability in knowledge gains individualized territory in each of us. Semesters are shortened, and the pace between people, promoting face-to-face contact, is shortened. Adaptational dynamics processes are compressed, namely, the ones involving credentialed students and employers. The well-being purpose of living is seen for within and not only for the clients, tourists, or citizens in general (Croonen et al., 2025).

It is not awkward to see the human flourishing concept emerge as an adaptation in the hospitality world (Grant, & McGhee, 2022). This Aristotelian concept is seen as a new, refreshing management way to the path of happiness, where humanism (Pereira Neto, 2023) seems to make sense to success in a world immersed on the Internet of Things, machine learning systems, artificial intelligence, gamification and reality throughout statistic models.

This is our challenge as teachers in this changing process, as facilitators of learning in an immense field for knowledge producers and collectors.

Active Methodologies in Use

Hospitality Management Course

After four years of the approval of the changes made in our institution's Hospitality Management course, in which active learning methodologies are applied to several curricular units, we focus on two of them on opposite axes of scientific approaches. These

methodologies, centred in the students' processes of knowledge creation, involve problem-solving, cooperative colleagues' work, and real-world concepts applications.

One curricular unit has no Blearning referenced on the syllabus, and the other has. These curricular units are from the fifth semester: Tourism and Cultural Heritage and Hotel Systems Simulation and Management.

In the first referred one, the classes are all in open air. Direct observation and inducted training for diverse and open debate perspectives is done in the streets, where the space is subject to scrutiny, evolving its use by the people. Exhibitions in museological context and non-museological contexts are also the subject of this learning methodology. The complementary learning process is done with the autonomous work of research in several platforms and documentation available on the World Wide Web. As a facilitator of knowledge, the professor indicates how to choose references.

The evaluation challenge relies on the application of technologies to better use culture in the users' learning process. It is supported by innovative ways of use, even if it is theoretical, as a proposal in a start-up entrepreneurship model. With tourists, individuals, and groups in mind, circuits are created to be good options for their choices of products and experiences. Innovation comes naturally from the personal perception of the different referrals of quality in everything tangible and intangible that is shown, listened to, and experienced in several ways. (Bates, 2022). Artificial intelligence can be helpful as a facilitator of knowledge transmission and sensorial interpreter, promoting bridges for understanding past and present generations. (Pereira Neto, 2019), This kind of work is a thrilling challenge for our students. However, there are no immediate results or time to verify and validate them.

The second curricular reference, Hotel Systems Simulation and Management, adopts games-based learning. This methodology focuses on learning by doing. The students use game design for real-time learning management experiences and contribute immediately by inputting knowledge into machine learning systems.

Playing with other national or international teams gives students more satisfying results in adapting to the job world; they feel more trustful in their problem-solving capabilities as team members.

The reduced ability of space in this kind of learning has no negative effects on validating class production in real-time and has good results on the perception of the quality of knowledge.

Municipal Management Course

The increasing tendency of visitors to build their experience of a place in advance is largely driven by the rapid growth of information technologies and widespread access to the internet. This has enabled new interaction and information sharing, significantly influencing travel and leisure planning. Examples include social media platforms like Instagram, which allows users to share photos and videos, creating a visual narrative of destinations; review platforms such as Tripadvisor that provide a space for travellers to share comments, opinions, and ratings of products and services; professional pages and personal blogs dedicated to tourist and leisure content that offer detailed information and personal experiences. These

new forms of communication increasingly influence decision-making when planning a trip or leisure activity (Xiang & Gretzel, 2010).

This is especially important regarding the increasing global competition of territories to capture visitors. Cities, in particular, have sought to transform historic centres for leisure and tourism through the requalification of public spaces and rehabilitation of buildings, which also brings challenges in how it affects locals. Based on a hypothetical case study, students take on the role of consultants regarding the intention of a municipality to capture the region's tourist flows, having to respond to the following tasks: identify specificities related to local identity; describe the current situation of the territory, potential and threats of tourism development; characterize how users, who frequent the territory on a daily basis, experience the space; illustrate the visitor experience; define what is transmitted over the territory.

Methodology

In this sense, students are asked to work in groups and make a proposal based on a multi-method approach, describing which method they would use to respond to each objective.

Taking a particular territory, analysing Google trends and associated words on Google, online repositories, social media platforms, travel blogs, and leisure guides, together with in-loco approaches like interviews, focus groups, and surveys, gives an in-depth understanding of perceptions and experiences. It provides a representation of an area regarding its identity, tourism potential, and challenges. Considering different sources, instruments, and data processing allows a more sustained interpretation from different perspectives and users²².

Final Considerations

Student-centred teaching is always at the core of every centred teaching professor who wants to obtain good results in the outer school's success.

Rapid changes in learning methods and technology require professors and students to adapt their approaches to daily practices. Fieldwork and accurate contact with people and their territory are basilar foundations of the courses in which our brief analysis is done.

More personal development through autonomous learning than through teaching (Ehlers, & Eigbrecht, 2024) seems more interesting to students who want to learn in real-time with errors and solve management problems with predictable adequacy for the future.

Thus, the possibility of foreseeing several models for future appliances can create better results in less time; however, students' free will is necessary and supported by multiple scenarios that technology can demonstrate in less time.

Time vectors and their accelerated rhythm of informational use by students are the most adventurous challenges we now face in our teaching careers. Social media has a shortage of time to use informational content, creating habits of quick choices or their opinion-making process. However, different possibilities of using a wider range of instruments of analysis and methodologies are positively accepted with good results by the end of the semester.

²² Approach based on the Project: Analysis of the meaning of the Territory – Axis Cacilhas - Almada Velha – Cristo Rei commissioned by the Municipality of Almada. Madalena Corte-Real, Maria João Gomes, Marianna Monte and Luís Manata e Silva, NOVA FCSH: Interdisciplinary Centre for Social Sciences (CICS.NOVA). 2018-2019.

Distance education resources are now part of the knowledge creation process and the way to the future, with sustainability, seems to us to be the hybrid model of teaching.

References

- Bates, T. (2024). Teaching the skills for the future. (pp.123-138).
- Bates, A. W. (2022). Teaching in a digital age: Guidelines for designing teaching and learning (3rd ed.). Tony Bates Associates Ltd.
- Croonen, E. P. M., Noseleit, F., & Wyrwich, M. (2025). From values to ventures: How value council resolution on a strategic framework for European cooperation in education and training towards the European education area and beyond (2021-2030) 2021/C priorities influence entrepreneurial well-being. *Small Bus Econ* (2025). <https://doi.org/10.1007/s11187-024-00984-2>.
- Ehlers, U. D., & Eigbrecht, L. (2024). I've learnt everything i know from the world. In U. D. Ehlers, & L. Eigbrecht (eds), *Creating the university of the future. Zukunft der hochschulbildung – Future higher education*.
- EURLEX. (2021). Document 32021G0226(01). Council resolution on a strategic framework for European cooperation in education and training towards the European education area and beyond (2021-2030) 2021/C 66/01.
- GAGQ ISEC Lisboa. (2024). Relatório de acompanhamento SIGQ- ISEC Lisboa. Online Version. Retirado de https://www.iseclisboa.pt/images/documentos/RL_GAGQ_RA_2024_V1.0.pdf.
- Grant, P., & McGhee, P. (2022). Harnessing hospitality for human flourishing (pp. 225-244). https://doi.org/10.1007/978-3-030-95671-4_12.
- Morin, E. (2017). Science avec Conscience. Points Sciences.
- Pereira Neto, A. (2023). Considerations about time and space regarding hospitality development. *Time and Space*, 419-422. CRC Press Taylor and Francis Group. <https://doi.org/10.1201/9781003260554-59>
- Pereira Neto, A. (2019). The fantasy of the natural/cultural elements as symbolic tourist attractions through senses and technology (pp.533-537). *5th International Multidisciplinary Congress PHI 2019*.(Book Series). Taylor & Francis Group. <https://doi.org/10.1201/9780429297755>.
- Xiang, Z. & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management*. 31(2), 179-188.

SHAPING THE FUTURE OF TOURISM EDUCATION WITH DIGITAL TECHNOLOGIES AND TOOLS

Célio Gonalo Marques²³

Polytechnic University of Tomar
Portugal

Vasco Santos²⁴

Polytechnic University of Tomar
Portugal

Inês Araújo

Polytechnic University of Tomar
Portugal

²³ Professor of the Information and Communication Technologies Department of the Polytechnic University of Tomar (IPT). Pro-President for Internationalization and Pedagogical Innovation, Director of the Laboratory of Pedagogical Innovation and Distance Learning (LIED) and responsible for the Research and Innovation Support Office (GAI). Has a degree in Computer Science and Management, a MSc in Educational Multimedia Communication, a post-graduation in e-Learning Techniques and Contexts, and a Ph.D. in Educational Sciences, with a specialization in Educational Technology. Integrated researcher of TECHN&ART (R&D unit) of which he was director from October 2018 to January 2024, and collaborator researcher of the Educational Technology Laboratory (University of Coimbra), Center for Administration and Public Policy (University of Lisbon) and Grigore Gafencu Research Center for the History of International Relations and Cultural Heritage (Valahia University of Târgoviste). Member of the Association for the Promotion and Development of the Information Society (APDSI), Metared Portugal, Europeana Network Association, NAU - Online Teaching and Training for Large Audiences, among others.

²⁴ Adjunct Professor at the Polytechnic University of Tomar (IPT) and member of the IPT's Research and Innovation Support Office. He has a degree in Management (European University, Lisbon), a PhD in Business Sciences (Fernando Pessoa University, Porto), a PhD in Tourism (University of Seville, Spain) and a Post-Doctorate in Innovation Management (University of Aveiro). Specialises in Hotel and Restaurant Management. Integrated researcher at NECE-UI and collaborating researcher at GOVCOPP (University of Aveiro) and CITUR (Polytechnic of Leiria). Editor-in-Chief of the scientific journal 'International Journal of Digital Marketing, Management, and Innovation (IJDDMI)'. Author and reviewer for indexed scientific journals.

Abstract

The rapid evolution of the tourism industry, driven by technological advancements and shifting traveler preferences, underscores the necessity for tourism education to integrate digital tools. This study explores the role of digital technologies—such as artificial intelligence, virtual and augmented reality, e-learning platforms, and big data—in reshaping tourism education. These innovations enhance learning experiences, making education more interactive, accessible, and aligned with industry demands. The research follows the PRISMA model to systematically review relevant literature, identifying key trends and best practices in digital tourism education. Findings suggest that incorporating digital tools improves student engagement, facilitates remote learning, and ensures that future tourism professionals develop the necessary skills for an increasingly competitive market. AI-driven chatbots, VR simulations, and data analytics tools are particularly effective in offering practical training opportunities that mimic real-world scenarios. Furthermore, digitalization democratizes education by enabling flexible, remote learning through platforms like Coursera and edX. This allows students from diverse socio-economic backgrounds to access high-quality training, while also providing institutions with opportunities to continuously update course content. Despite its benefits, the transition to digital learning presents challenges, including disparities in technology access, teacher training gaps, and digital security concerns. Addressing these issues is essential for successfully integrating digital tools into tourism education. Ultimately, balancing technological innovation with human-centered skills, such as empathy and creativity, crucial to maintaining the essence of hospitality while preparing professionals for a dynamic industry. This text contributes to ongoing discussions on the future of tourism education in the digital age.

Keywords

Tourism education, Digital tourism, Digital technologies, Digital tools, Digital skills

The tourism industry worldwide is constantly evolving, progressing and transforming, driven by technological innovations and changes in the needs, motivations and preferences of tourists, visitors and travellers. As such, the tourism education sector, in order to guarantee its future, will have to increasingly keep up with digital technologies and tools, above all to cater for the new generations of students who are the digital natives who will be the future tourism and hospitality professionals. Consequently, tourism education also needs to keep pace with these changes, incorporating digital technologies and tools to ensure that future professionals are prepared for the challenges and opportunities of the sector, taking into account the diverse cultures and nationalities in demand (Happ, & Ivancsó-Horváth, 2018; Vuorikari et al., 2022).

In this way, the adoption of digital technologies and tools such as artificial intelligence, chatbots as the new virtual assistants, virtual and augmented reality, e-learning platforms and big data are revolutionising the way knowledge is transmitted, learned and applied in practical, real and concrete terms in the tourism industry, namely hotels, restaurants, accommodation, aviation, tourist entertainment, events, agencies and tour operators (among others) (Balula et al., 2019; Adeyinka-Ojo et al., 2020).

With the higher growth of tourism in global and worldwide terms and increased competitiveness in the sector in terms of supply and related demands, the training of qualified professionals is essential to guarantee quality experiences for tourists, visitors and travellers. Therefore, integrating new technologies and digital tools directly into tourism education is not just a trend, but a necessity and a must in order to keep up with market demands. Furthermore, the use of digital technologies and tools contributes to the democratisation of access to knowledge, making teaching and learning more accessible to students from different geographies and socio-economic profiles (Bilotta et al., 2021; Happ, & Ivancsó-Horváth, 2018; Çinar, 2020).

The implementation of digital technologies in education also improves teaching efficiency, allowing students to have access to multimedia resources, real simulations and virtual interactions that deepen their understanding and cross-reference theoretical and practical concepts. And with the possibility of distance learning, i.e. remote and flexible, digital technologies and tools expand the reach of tourism courses, allowing more interested students to enter the field and qualify for the market (Biriescu, & Olteanu, 2025; Çinar, 2020).

The impact and essential role of digital technologies and tools in tourism education is revolutionising traditional education based on face-to-face classes and printed materials, as it is a new way of complementing the way of teaching tutored and, in some cases, replaced by innovative methodologies based on digital technology. This provides a more accessible, interactive and effective learning experience for students anywhere in the world. In addition, new technologies allow content to be adapted to the pressing needs of the market, training professionals who are better prepared for the many real challenges facing the sector (Chon, & Hao, 2024; Happ, & Ivancsó-Horváth, 2018).

Schools offering courses in tourism are already starting to digitise teaching by adopting digital tools and technologies to offer more engaging, up-to-date and immersive teaching. Technologies such as e-learning platforms, interactive simulations, virtual laboratories and data analysis tools are increasingly being used to help with teaching and the practical training of students. In addition, with the digitalisation of education, tourism students can make virtual visits to tourist destinations, learn about and explore tourism products, attend lectures with international experts, hackathons with tourism experts, and access interactive materials and forms, such as videos and quizzes, which make learning more engaging and effective (Balula et al., 2019; Çinar, 2020; Morellato, 2014).

Distance learning platforms have enabled tourism students to access high-quality courses regardless of their geographical location. The use of platforms such as Coursera, Udemy, edX and NAU has increased the flexibility of education, allowing students to learn at their own pace and explore diverse content. In addition, many LMS use active methodologies, such as problem-based and project-based learning, promoting more dynamic and practical teaching (Huang, 2024).

Another important aspect of e-learning is the possibility of constantly updating content. Unlike printed books, which can quickly become obsolete, online courses can be frequently revised and updated to reflect the latest industry trends. In addition, discussion forums and live sessions promote interaction between students and teachers, making learning more collaborative. Higher education institutions have also been developing

hybrid programmes, combining face-to-face classes with digital content to offer a more balanced approach to teaching tourism (Liu et al, 2024).

With regard to Virtual Reality and Augmented Reality, virtual reality (VR) and augmented reality (AR) have been widely used to simulate real tourism experiences. Students can visit tourist destinations virtually, explore cultural heritage and understand hospitality practices without leaving the classroom. These technologies provide immersive and interactive learning, helping students to develop a deeper understanding of tourism experiences. VR can be used for practical simulations, such as training in hotels and restaurants, providing a safe environment for students to gain experience before interacting with real customers. AR can be used for interactive guided tours, where additional information about a destination is superimposed on the real environment, enriching the learning experience. This innovation has been applied in museums, historic cities and tourist attractions, offering a new level of engagement for students and professionals in the sector. The use of VR also allows students to practise crisis management in tourism, simulating adverse situations such as natural disasters and hotel emergencies in a safe and controlled manner (Biriescu, & Olteanu, 2025; Morellato, 2014; Zhang, 2024).

Artificial intelligence (AI) has been applied in tourism education to personalise learning, provide immediate feedback and help resolve doubts. AI-powered chatbots can help students find information about courses, clarify complex concepts and simulate interactions with customers in the tourism sector. This technology can also be used to analyse student performance, identify difficulties and suggest complementary materials to improve learning. In addition, AI can be applied to create virtual assistants to guide tourists in real time, providing personalised information on destinations, transport, accommodation, travel and reservations (among many others). And it can be used in customer service simulations, helping students to develop communication and problem-solving skills. Some educational institutions are already incorporating AI systems to create personalised study plans, adjusting content according to each student's individual progress. The use of AI in tourism trend analysis also allows students to better understand traveller behaviour and adapt their strategies to meet the future demands of the sector (Biriescu, & Olteanu, 2025; Chon, & Hao, 2024; Huang et al., 2024; Zhang, 2024).

The use of big data in tourism education allows students to analyse traveller behaviour patterns, evaluate market trends and develop data-based strategies. Tools such as Google Analytics and Power BI help interpret crucial information for tourism management. As a result, students learn to make more informed decisions, optimising processes and increasing the competitiveness of tourist destinations. Predictive analysis based on big data can be used to forecast tourist demand, optimise accommodation prices and develop more effective marketing strategies. Students who learn to use big data are better prepared to operate in a highly competitive, data-driven market (Bilotta et al., 2021; Chon, & Hao, 2024; Vuorikari et al, 2022).

To sum up, the future of tourism education is guaranteed to be strongly associated with the use of innovative digital technologies. The adoption of e-learning, virtual reality, artificial intelligence and big data is enabling students to acquire knowledge and skills more effectively, quickly and interactively. However, to ensure the success of this transformation, it is essential to overcome challenges related to access to technology, teacher training and digital security. With the continuous evolution of these tools, tourism education is on the path to training more skilled professionals who are trained and prepared to meet the demands of the tourism sector in the 21st century. In addition, the need for an integrated 360 approach that combines technology with human skills, such as empathy and creativity, is becoming increasingly evident. Tourism is a sector that deals directly with human experiences and expectations, and technology must be an ally to improve the quality of the services provided, without replacing the essence of human contact. In this way, the balance between technological innovation and humanistic training will be fundamental to ensuring the sustainability of the future of tourism education, guaranteeing that professionals are prepared to meet the demands of a sector within dynamic transformation (Biriescu, & Olteanu, 2025; Chon, & Hao, 2024; Huang et al., 2024; Vuorikari, 2022; Zhang, 2024).

Methodologically, the extended abstract briefly followed the standard guidelines of the PRISMA model (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) to ensure transparency and reproducibility in the selection and analysis of studies, comprising the following steps: (1) Identification:

academic databases, including Scopus, Web of Science, Google Scholar, and ScienceDirect, and keywords used: ‘Tourism Education’, “Digital Technologies in Tourism”, “E-learning in Hospitality”, “Artificial Intelligence in Tourism Education” and “Big Data in Tourism Learning”; (2) Screening: the identified studies were filtered based on titles and abstracts; (3) Eligibility: the selected articles were analysed in full to check the relevance of the data and topics covered; and (4) Inclusion: highlighting the main findings, inputs and outcomes of the articles analysed.

References

88

- Adeyinka-Ojo, S., Lee, S., Abdullah, S. K., & Teo, J. (2020). Hospitality and tourism education in an emerging digital economy. *Worldwide Hospitality and Tourism Themes*, 12(2), 113-125.
- Balula, A., Moreira, G., Moreira, A., Kastenholz, E., Eusébio, C., & Breda, Z. (2019). Digital transformation in tourism education. *Tourism in Southern and Eastern Europe*, 5, 61-72.
- Bilotta, E., Bertacchini, F., Gabriele, L., Giglio, S., Pantano, P. S., & Romita, T. (2021). Industry 4.0 technologies in tourism education: Nurturing students to think with technology. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 29, 100275.
- Biriescu, S., & Olteanu, L. (2025). Technologies Promoting the Digital Tourism Economy and Student Attitudes Towards Artificial Intelligence in Tourism. In *Green Wealth: Navigating towards a Sustainable Future* (pp. 239-256). Emerald Publishing Limited.
- Chon, K. K. S., & Hao, F. (2024). Technological evolution in tourism: a Horizon 2050 perspective. *Tourism Review*.
- Çinar, K. (2020). The digital revolution: Impact on tourism education. *Journal of tourism and gastronomy studies*, 8(4), 2417-2443.
- Dalgıç, A., Yaşar, E., & Demir, M. (2024). ChatGPT and learning outcomes in tourism education: The role of digital literacy and individualized learning. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 34, 100481.
- Happ, É., & Ivancsó-Horváth, Z. (2018). Digital tourism is the challenge of future - a new approach to tourism. *Knowledge Horizons. Economics*, 10(2), 9-16.
- Huang, A., de la Mora Velasco, E., & Haney, A. (2024). Examining instructional technologies in hospitality and tourism education: A systematic review of literature. *Journal of Hospitality & Tourism Education*, 36(2), 113-131.
- Liu, C. H., Horng, J. S., Chou, S. F., Yu, T. Y., Huang, Y. C., Ng, Y. L., & La, Q. P. (2024). Explore links among marketing knowledge, data literacy, skill improvement, and learning attitude in STEAM application for hospitality and tourism education. *The International Journal of Management Education*, 22(1), 100919.
- Morellato, M. (2014). Digital competence in tourism education: Cooperative-experiential learning. *Journal of Teaching in Travel & Tourism*, 14(2), 184-209.
- Vuorikari, R., Kluzer, S., & Punie, Y., (2022). DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes, EUR 31006 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-48883-5, doi:10.2760/490274, JRC128415.

Zhang, K., Li, X., Ye, H., Lin, K. J., Chen, S., & Law, R. (2024). How can ChatGPT assist hospitality and tourism education?. *Journal of Teaching in Travel & Tourism*, 24(4), 438-448.

A UTILIZAÇÃO DA INTELIGÊNCIA ARTIFICIAL GENERATIVA PELOS ESTUDANTES DE TURISMO: ESTUDO DE CASO

90

Ana Elisa Sousa²⁵

Politécnico de Leiria, CiTUR - Centro de Investigação, Desenvolvimento e Inovação em Turismo
Portugal

Paula Cardoso²⁶

Politécnico de Leiria, CiTUR - Centro de Investigação, Desenvolvimento e Inovação em Turismo
Portugal

²⁵ Licenciada em Comunicação Social e Educação Multimédia, mestre em Comunicação, Cultura e Tecnologias da Informação e doutorada em Sociologia, com pós-doutoramento em Turismo. É professora adjunta no Politécnico de Leiria e investigadora do CiTUR- Centro de Investigação, Desenvolvimento e Inovação em Turismo. Tem desenvolvido investigação na área do Turismo, Hotelaria, Inovação Pedagógica e Tecnologias

²⁶ Professora Adjunta no Politécnico de Leiria. Com formação inicial em Línguas e Literaturas Modernas, é doutorada em Educação, com especialização em Ensino a Distância e eLearning. É investigadora no Laboratório de Ensino a Distância e eLearning da Universidade Aberta (LE@D) e no Centro de Investigação, Desenvolvimento e Inovação em Turismo do Politécnico de Leiria (CiTUR). É autora de inúmeras publicações científicas nacionais e internacionais nas áreas da Inovação Pedagógica, Educação Aberta e Ciência Aberta, assim como Línguas Estrangeiras aplicadas ao Turismo. Atualmente é também Coordenadora do Laboratório de Competências Linguísticas e Inovação Pedagógica do Politécnico de Leiria (CLiP)

Abstract

This study examines the deployment of Generative Artificial Intelligence (GAI) by Tourism students at the Polytechnic of Leiria, focusing on their perceptions of its benefits and challenges. Based on a survey questionnaire, the research found widespread adoption of GAI tools among the students, particularly ChatGPT, QuillBot, and Gemini. The findings reveal that GAI tools are predominantly utilized for defining concepts, idea generation, and assisting in academic tasks, offering benefits such as time savings, instantaneous feedback, enhanced confidence, and improved academic performance. However, the challenges identified include the dissemination of unreliable information, risks of plagiarism, and potential dependency on these technologies. The results underscore the necessity for a balanced integration of GAI in education, advocating for the development of AI literacy among students to ensure critical and effective use of these tools. The study suggests the implementation of institutional policies to guide ethical use of GAI, aimed at strengthening academic integrity and promoting more independent and reflective learning.

Keywords

Academic integrity, AI literacy, Generative artificial intelligence, Survey questionnaire, Tourism education

“GenAI is an unsupervised or partially supervised machine learning framework that seamlessly generates artificial creations by analyzing existing digital content like videos, images/graphics, text, and audio” (Baidoo-Anu & Owusu, 2023). Na educação, a Inteligência Artificial Generativa (IAG) é uma ferramenta que ajuda a melhorar a aprendizagem, em vez de substituir os professores, apoiando tarefas como a criação de conteúdos, o feedback personalizado e as experiências de aprendizagem adaptativas. No entanto, a sua eficácia depende da forma como os professores e os alunos interagem com ela, reforçando assim a ideia sugerida na definição da UNICEF (2021) de que a IA deve expandir - e não substituir - os conhecimentos especializados e a criatividade humana no processo de aprendizagem.

Apesar do entusiasmo em torno dos recentes desenvolvimentos, a IA também suscita múltiplas preocupações e o seu papel na educação traz tanto benefícios como desafios.

Para investigar a utilização e as perceções dos estudantes relativamente às ferramentas de Inteligência Artificial Generativa foi desenvolvido um estudo quantitativo através da aplicação de um inquérito por questionário. O inquérito foi concebido para compreender a utilização que os estudantes da área do Turismo do Politécnico de Leiria fazem das ferramentas de Inteligência Artificial Generativa e as suas perceções relativamente aos benefícios e desafios associados à sua utilização.

O questionário aplicado baseou-se essencialmente no inquérito por questionário utilizado no estudo de (Almassaad et al., 2024) cujo instrumento de investigação tinha sido previamente aplicado e validado. O questionário online foi criado no Google Forms e distribuído através das redes sociais aos alunos da área do Turismo do Politécnico de Leiria.

O inquérito esteve disponível online de 15 de outubro de 2024 a 30 de dezembro de 2024. Responderam ao inquérito 88 alunos, sendo 64,8% do sexo feminino e 35,25% do sexo masculino.

Destes, 71,6% frequentam uma licenciatura, 12,5% um Curso Técnico Superior Profissional, 10,2% um mestrado e 5,7% um doutoramento.

Os resultados do questionário foram analisados com o SPSS (versão 29).

Com exceção de apenas um inquirido, os restantes 87 afirmaram utilizar ferramentas de inteligência artificial generativa. Destes, 40,2% refere fazer uso destas ferramentas frequentemente, 25,2% muito frequentemente, 27,6% ocasionalmente e 6,9% raramente. Uma utilização mais frequente destas ferramentas de IAG sugere que para uma parte substancial da população estudantil, estas ferramentas tornaram-se parte integrante da sua rotina académica. A sua utilização frequente pode resultar da perceção dos benefícios de eficiência, acessibilidade e melhoria das tarefas cognitivas, bem como de um conforto crescente na adaptação da IA aos fluxos de trabalhos académicos (Chan et al., 2023; Krause et al., 2024).

Os resultados do inquérito revelam também que o uso de ferramentas de IAG é cada vez mais uma prática comum entre os estudantes de Turismo no ensino superior, uma vez que 62,8% refere que esta utilização é muito difundida entre os pares. Dos inquiridos, 19,8% diz que o Politécnico estabeleceu regras ou diretrizes para a utilização responsável da IAG e apenas 15,1% refere que os professores incentivam o seu uso, o que sugere que há ainda um

caminho a percorrer para que os docentes compreendam os benefícios do uso da IAG e a integrarem no processo de ensino-aprendizagem. O ChatGPT é a ferramenta de Inteligência Artificial mais utilizada, seguido do QuillBot e Gemini. Al-kfairy (2024) identifica a percepção da facilidade de utilização, a percepção da utilidade, a qualidade do feedback, a qualidade da avaliação e a confiança como os fatores que influenciam de forma mais consistente os utilizadores do ChatGPT a adotá-lo.

Os principais propósitos educacionais do uso das ferramentas de IAG são definir ou clarificar conceitos, gerar ideias durante a escrita e ajudar na realização de trabalhos. Relativamente aos benefícios percebidos do uso da IAG, poupar tempo nas tarefas, fornecer feedback instantâneo, aumentar a confiança durante a aprendizagem e melhorar o desempenho académico, são os mais citados entre os estudantes. Quanto a desafios, fornecer informações não fiáveis, fornecer referências inexatas ou falsas, conduzir ao plágio e à batota são os maiores problemas que os estudantes apontam.

Apesar das vantagens percebidas, subsistem preocupações quanto à dependência excessiva da IAG. Isto sugere a necessidade de uma integração equilibrada da IA na educação, garantindo que, embora os estudantes beneficiem do apoio da IA, também se envolvam em processos de aprendizagem ativos e reflexivos para desenvolverem competências analíticas essenciais. Estas conclusões realçam a necessidade de iniciativas de literacia em IA para ajudar os estudantes a avaliar criticamente os conteúdos gerados pela IA e evitar a dependência excessiva de fontes não verificadas. As preocupações dos estudantes também sublinham a importância de garantir a igualdade de acesso às ferramentas de IA para todos. Neste sentido, é necessária mais investigação e a implementação de políticas institucionais para orientar a utilização ética e eficaz da IA na educação.

Esta investigação traz implicações importantes para a integração efetiva das ferramentas IAG na educação. Para maximizar os seus benefícios, os professores devem promover uma utilização equilibrada, tirando partido dos pontos fortes das ferramentas de Inteligência Artificial Generativa. Além disso, os docentes devem também conceber atividades de aprendizagem que integrem exercícios de pensamento crítico assistidos por IA, bem como proporcionar formação sobre literacia em IA para ajudar os estudantes a utilizar estas ferramentas de forma eficaz, mantendo a integridade académica.

Referências

- Al-kfairy, M. (2024). Factors impacting the adoption and acceptance of ChatGPT in educational settings: A narrative review of empirical studies. *Applied System Innovation*, 7(6), 110. <https://doi.org/10.3390/asi7060110>.
- Almassaad, A.; Alajlan, H., & Alebaikan, R. (2024). Student perceptions of generative artificial intelligence: Investigating utilization, benefits, and challenges in higher education. *Systems*, 12(10), 385. <http://doi.org/10.3390/systems12100385>.
- Baidoo-Anu, D., & Owusu, L. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Journal of AI*. 7(1),52-62. <https://dx.doi.org/10.2139/ssrn.4337484>.

- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *arXiv preprint arXiv:2305.00290*. <https://arxiv.org/abs/2305.00290>.
- Krause, S., Panchal, B., & Ubhe, N. (2024). The evolution of learning: Assessing the transformative impact of generative AI on higher education. *ArXiv*. <https://doi.org/10.48550/arXiv.2404.10551>.
- UNICEF. (2021). *Policy guidance on AI for children*. Paris: UNICEF. Retrieved from <https://www.unicef.org/innocenti/media/1326/file/UNICEF-Global-Insight-policy-guidance-AI-children-draft-1.0-2020.pdf>

BETWEEN VIRTUAL AND IN-PERSON: ACADEMIC DECISION MAKING IN THE ERA OF HYBRID EVENTS

95

Jorge Marques²⁷

REMIT – Research on Economics, Management and Information Technologies, Portucalense University,
CEGOT – Centre of Studies in Geography and Spatial Planning, Humanities Faculty, University of Coimbra
Portugal

Joana A. Quintela²⁸

REMIT – Research on Economics, Management and Information Technologies, Portucalense University,
CICEE - Research Center in Business & Economics
Portugal

²⁷ Jorge Marques is an Associate Professor at the Universidade Portucalense Infante D. Henrique, researcher at the REMIT – Research on Economics, Management and Information Technologies and member of CEGOT – Centre for Studies in Geography and Spatial Planning. With a PhD in Tourism, Leisure and Culture from the University of Coimbra, he develops research in the areas of business tourism, hotel management and innovation, digital transformation in hospitality, tourism planning and development and sustainability. Throughout his academic career, he has coordinated bachelor's and master's degrees in tourism and hospitality and has actively participated in national and international research projects funded by the European Union, focusing on innovation, destination management and tourism impacts. He is the author of several indexed scientific articles and book chapters, in addition to acting as a reviewer and member of editorial boards in publications in the field.

²⁸ Joana A. Quintela has a European PhD in Tourism. She is a Professor at Portucalense University and Coordinator of the Short Master – Wine Sommelier and Global Wine Market. She is a researcher, she is an integral member of the 'Territorial Research and Development Group' of REMIT – Research in Economics, Management and Information Technologies. She has participated in several international conferences and has published scientific articles in leading international journals, book chapters, and opinion articles in specialized tourism publications. She is a member of the editorial and scientific boards of academic journals as well as an invited editor. Her research interests focus on tourism and hospitality, service quality, health and wellness tourism, with emphasis on marketing and sustainability

Abstract

Scientific events play a fundamental role in academic and professional tourism, allowing for the dissemination of knowledge, networking and experiences exchange between experts from different fields. With the advance of technology, online events have gained ground, especially after the Covid-19 pandemic, raising questions about whether face-to-face events can be definitively replaced. This study aims to identify the participants' preferences to attend physical and/or online scientific events, exploring trends, challenges and preferences in holding these meetings. The empirical study is based on an interview script applied to 22 tourism university professors and researchers, exploring trends, challenges and preferences in holding these meetings. The results indicate that the respondents recognize a sum of advantages as well as disadvantages in both formats – physical and online. Although online events have become a viable and advantageous alternative in many respects, face-to-face events remain essential for networking building deeper connections and enriching experiences. However, the choice of destination will continue to be a relevant factor for physical events, influencing participants' decisions based on infrastructure, cultural attractions and cost-effectiveness. The future of scientific events will probably be marked by a hybrid approach, balancing the best of both formats. This study provides theoretical and practical contributions to the Meetings Industry (MI) sector. These trends indicate that organisers of scientific events need to adapt their formats to meet the new demands of participants, guaranteeing valuable and accessible experiences for the global academic and professional community.

Keywords

Scientific events, Tourism, Technology, Meetings, Hybrid events

Introduction

Scientific events (SE) are part of the MICE sector and play a fundamental role in academic and professional tourism, allowing for the dissemination of knowledge, networking and the exchange of experiences between experts from different fields (Sari, 2023). With the advance of technology, online scientific events (OSE) have gained ground, especially after the COVID-19 pandemic, raising questions about whether physical scientific events (PSE) can be definitively replaced (Brown & Drakeley, 2023). This empirical study is based on an interview script applied to participants in SE, exploring trends, challenges and preferences in holding these meetings.

This study aims to identify the participants' preferences to attend PSE and/or OSE, exploring trends, challenges and preferences in holding these meetings. For that, a sum of specific research goals were defined, as follows: (i) to analyse the frequency and most common destinations of travel to professional, scientific and academic events: (ii) to assess participants' perceptions of the possibility of digital/remote events permanently replacing physical events, (iii) to identify the main advantages associated with taking part in online/distance events, (iv) to explore the main perceived benefits of attending face-to-face events, (v) to investigate the factors that most influence the decision to take part in events, whether online or physical, and (vi) to understand the aspects most valued by participants concerning the location of face-to-face events.

Methods

This work was carried out using a qualitative methodology, based on collecting primary data from university lecturers and researchers. To this end, a research tool was developed in the form of a structured interview script, comprising a set of questions aligned with the study's objectives. Data collection took place in 2024, between November and December of 2024. The research instrument was administered indirectly, and responses were obtained in written form by e-mail. A total of 22 valid responses were collected. The data treatment followed the content analysis technique, and 5 categories were created.

Results and Main Findings

The respondents are mostly female teachers (81,2%), compared to 18,2% of male teachers. On average, academics attend to 4.1 SE per year. However, the frequency of participation in SE shows a wide variation, ranging from 1 to 10 annual events, making it possible to define 3 levels of frequency, considering a set of factors, as described in Table 1.

Levels of attendance	No. of SE per year	Trends and observations
Low attendance	1-2 events	Some participants mention attending only one event a year due to academic requirements or personal preferences. In some cases, this participation involves international travel.
Medium attendance	3-5 events	Most interviewees fall into this category, attending both national and international events. The number varies according to the period analysed, considering pre- and post-pandemic.
High attendance	6-10 events	Some academics mentioned taking part in many events, especially when there are virtual opportunities, which reduce costs and logistical barriers.

Table 1. Levels of attendance to SE

Source: own elaboration

The pandemic context has also fuelled a trend towards hybrid events, combining face-to-face and digital participation. Not surprisingly, the pandemic period significantly influenced the frequency of OSEs, compared with the pre-pandemic period. Some interviewees reported a reduction in participation during the pandemic period, nationally and internationally, while others took advantage of virtual events to increase the number of events attended. In other cases, this trend continued in the post-pandemic period, allowing teachers and researchers to take part in a greater number of events, considering that this format reduces costs and logistical barriers. Nevertheless, some interviewees expressed a desire to resume travelling to scientific events.

Determinant Factors on SE Selection

The results show that the decision to take part in a scientific event, whether online or face-to-face, is influenced by various factors. Those factors are mainly relating to the event's topic and its relationship with the participant's area of research and teaching, considering its feasibility within their own agenda. Also, the presence of recognised keynote speakers, the indexation to prestigious databases (Scopus, Web of Science) and the possibility of publication in scientific journals are decisive factors. The existence of networking opportunities, to interact with other professionals and establish strategic contacts, also strongly influences the decision.

The cost-benefit ratio is mainly considered in the case of PSE. Travelling and accommodation costs are evaluated in relation to the expected benefits, and the destination and infrastructure of the event, as well as the perceived safety, can have a significant impact on the decision to take part.

Finally, the programme's scientific quality and the event structure, the diversity of activities and even the elements of surprise can make the experience more attractive. Events that offer different experiences, such as interactive workshops and technical visits, tend to attract more participants.

Resuming, participants evaluate scientific relevance, networking opportunities, organisational quality, costs and location before choosing to attend scientific events. In this way, the interviewees emphasised that events that combine face-to-face and digital participation (hybrid format) are likely to become more popular in the future, as they offer both a sum of advantages.

The relevance of destination in PSE.

Regarding PSE, as mentioned before, destination attractiveness assumes an important factor for attendance. In what concerns destination selection, is usually related to the reputation of the event, geographical proximity and the tourist attractiveness of the location. Many participants combine academic and leisure travel, taking the opportunity to explore the culture and tourist attractions of the main destination. Table 3 describes the sum of 7 criteria identified by the respondents and the corresponding factors that are most valued at the event destination.

Criteria	Main factors
Relevance and attractiveness of the destination	Climate and preference for places never visited before combine the scientific event with new cultural and tourist experiences
Accessibility and infrastructure	Transport (direct flights, efficient connections) proximity of the event to accommodation
Gastronomy and tourist attractions	Local culinary experience visits to museums and access to cultural heritage
Safety and travel cost	Safety of the location cost of travelling, namely in international travel
Extra activities	Excursions and social activities organised by the events
Contact with nature	Places with natural landscapes and outdoor events for a more relaxing experience
Metropolises as a logistical choice	For large-scale events, metropolitan cities are preferred because of the infrastructure available

Table 3. Criteria and determine factors at the venue (destination) for PSE
Source: own elaboration

Thus, it is possible to conclude that PSE participants choose a destination based mainly on accessibility, infrastructure, cost, safety and opportunities to explore new cultures and experiences.

Online SE versus Physical SE

The decision to participate in scientific events varies significantly among the interviewees, depending on factors such as academic requirements, professional interests, budget, and preference for OSE or PSE. Analysing the data collected allows us to identify some important trends, described on Tables 3 and 4.

Advantages	Description
Cost reduction	Greater accessibility for researchers without travel funding Elimination of travel, accommodation and food costs Lower registration fees for many events Better value for money, allowing access to more events
Time savings and flexibility	No need to travel, allowing for better diary management Makes it easier to juggle work, classes and family commitments Possibility of taking part in several events at the same time Flexible schedules, allowing participation without compromising other activities
Greater accessibility and inclusion	Allows attendance at a greater number of scientific/academic events Democratises access for researchers with less funding
Reduced environmental impact	Lower carbon footprint (no need to travel and consume resources) Promotes sustainability
Ease of organisation	Require less logistics and can be realised with less infrastructure

Table 3. Advantages of OSE

Source: own elaboration

The main advantages of participating on OSE indicated by interviewees are, therefore, related to cost savings, time savings and a positive environmental impact. Despite these advantages, many interviewees emphasised that the lack of human contact reduces the quality of the experience and the effectiveness of academic interactions. Due to that, PSE continue to be highly valued for their immersive experience and impact on building networks, as shown in Table 4.

Advantages	Description
Networking and Social Interaction	The chance to meet and interact personally with other participants Greater immersion and exchange of knowledge facilitates the exchange of ideas, the formation of partnerships and the development of scientific collaborations
Complete Sensory Experience	Greater immersion and exchange of knowledge More dynamic interactions (coffee breaks, informal conversations and spontaneous encounters are essential for learning)
Focus and engagement	Increases attention and motivation Eliminates distractions that occur in the virtual environment (other tasks, home environment)
Cultural experience at the destination	Possibility of getting to know new cities, cultures and institutions, making the experience more enriching
Fewer technical problems	Absence of internet outages or technical problems

Table 4. Advantages of PSE

Source: own elaboration

Globally, PSE are valued mainly for its socialising character, networking opportunities and a more complete and immersive experience. However, the choice between PSE and OSE therefore depends on the individual needs and priorities of each participant.

The future of SE

The perspectives got divided when the interviewees were asked about the possibility of online scientific events permanently replacing physical scientific events. Some respondents believe that online events will grow steadily and may even become the norm in the future. Some responses indicate that up to 70 per cent of events could be digital in the future due to time and cost savings.

101

The main challenges for digital events include the difficulty in establishing informal connections, the lack of immersion and the wear and tear caused by spending too much time in the virtual environment. For many, networking is one of the most valued aspects of scientific events, and face-to-face interaction with academic colleagues facilitates the creation of new collaborations and opportunities, promoting deeper interactions. Most participants mentioned that physical scientific events will remain essential and are unlikely to be completely replaced, as they provide experiences and interactions that cannot be replicated in the virtual environment. Additionally, physical presence also contributes to economic impact, promoting tourism and boosting sectors such as hotels and transport.

However, there is a consensus that the hybrid model (both face-to-face and online participation) will be predominant. The rise of the hybrid modality is seen as the most viable and inclusive, and this will be the dominant format in the future, combining digital advantages with the need for face-to-face contact, as stated by Sá, Ferreira, & Serpa (2019). This trend can already be seen in several scientific and academic events, which are now offering both face-to-face and remote participation, as it is the case of the International Conference in Information Technology & Education (ICITED) or the International Conference on Tourism Technology & Systems (ICOTTs), just to name a few. The hybrid format allows for greater accessibility and cost savings, especially for researchers who don't have funding for travelling, making it more accessible and expanding the audience. The greater flexibility is seen as an advantage, as also stated by Hammoud, Tawfik, & Mohamed (2022), allowing researchers to take part in events without having to take time off work or family, and combining with the environmental benefits of a smaller carbon footprint associated with travelling, particularly on an international scale.

As such, data reveals a diversity of opinions on the possibility of digital scientific events permanently replacing face-to-face scientific events. Participants emphasise the advantages of online events but point out that the face-to-face experience remains fundamental for social interaction, networking and academic immersion. However, there is a consensus that the hybrid model will predominate in the future.

Conclusion

The dynamics of scientific events are constantly evolving, driven by digitalisation and changes in participants' preferences, as stated by Sadd et al. (2014). Although online events have become a viable and advantageous alternative in many respects, face-to-face events remain essential for building deeper connections and enriching experiences. It is therefore

possible to conclude that the hybrid format might be the main trend for academic, scientific and professional events, combining the flexibility of digital with the richness of face-to-face interactions. Digital events offer convenience and accessibility, but they don't completely replace the richness of face-to-face interactions, which are critical for networking, cultural exchanges and deepening academic partnerships. However, online events stand out in terms of environmental impact, as less travel means less carbon footprint. Therefore, scientific event organisers need to adapt their formats to meet the new demands of participants, guaranteeing valuable and accessible experiences for the global academic and professional community.

References

- Brown, T. & Drakeley, C. (2023). Designing the virtual and hybrid event experience. In V. Ziakas & D. Getz (eds). *Cases For Event Management and Event Tourism*. Goodfellow Publishers. <http://dx.doi.org/10.23912/978-1-915097-34-7-5400>.
- Hammoud, G.A., Tawfik, H.F., & Mohamed, S.S.R. (2022). technological innovation in tourism and events industry: A hybrid future of events. *International Journal of Tourism, Archaeology, and Hospitality*, 2(3), 217-286.
- Sá, M., Ferreira, C., & Serpa, S., (2019). Virtual and face-to-face academic conferences: Comparison and potentials. *Journal of Educational and Social Research*, 53(3), <https://doi.org/10.2478/jesr-2019-0011>.
- Sadd, D., Yeoman I., Robertson, M., McMahon-Battle, U., Backer, E., & Smith, K. (2014). *The future of events & festivals is virtual* (pp.209-218). Routledge.
- Sari, Y.K. (2023). Gone or go on? The existence of hybrid events as urban tourism strategy. *Gadjah Mada Journal of Tourism Studies*, 5(2). <https://doi.org/10.22146/gamajts.v5i2.95005>. | 172-185

BALANCING TECHNOLOGICAL PROFICIENCY AND SOFT SKILLS IN TOURISM EDUCATION: A STUDY ON PEDAGOGICAL NEEDS IN THE DIGITAL AGE

103

Catarina Nadais²⁹

ISLA Gaia, Centro de Estudos de Geografia e Ordenamento do Território da Universidade de Coimbra
Portugal

Nuno Ricardo Mateus Coelho³⁰

Universidade Lusófona, NRM.CPT|ARIS2-Journal|LAPI2S
Portugal

²⁹ Professora Adjunta do ISLA Gaia, investigadora no Centro de Estudos de Geografia e Ordenamento do Território da Universidade de Coimbra, Portugal

³⁰ Professor Associado na Universidade Lusófona, CEO da NRM.CPT, Editor Chefe da revista científica ARIS2-Journal, Diretor do LAPI2S, Portugal

Abstract

The evolution of tourism education has paralleled cultural, social, and technological shifts, reflecting broader societal transformations. Initially, educational tourism, epitomized by the Grand Tour of the 17th to 19th centuries, served as a pedagogical instrument for young British aristocrats to acquire cultural and social knowledge. This early phase underscored travel as a formative educational experience, concentrating on languages, arts, and etiquette. The formal inception of tourism education emerged in the 20th century, with pioneering programs at universities like Rome (1925), Vienna (1936), and Bern (1941). The field gained distinct academic recognition in the 1960s, evidenced by a surge in dedicated courses, student enrolments, and research activities. Modern tourism education, under the influence of the Fourth Industrial Revolution and Schwab's (2016) principles, advocates for a balanced integration of technological and human skills. This shift towards Education 5.0 emphasizes a human-centric learning process, promoting personalized, collaborative education rooted in empathy, ethics, and social well-being. It integrates artificial intelligence, augmented reality, and other digital technologies while focusing on creativity, critical thinking, and social awareness. However, contemporary challenges highlight the necessity for cybersecurity within this framework. The reliance on digital technologies in tourism underscores the imperative to protect personal data and ensure reliable tourist experiences. This paper discusses the trajectory of tourism education, advocating for a balanced approach that incorporates both advanced technological skills and essential socioemotional abilities, preparing professionals for the nuanced demands of the modern tourism industry.

Keywords

Cybersecurity in tourism, Education 5.0, Fourth industrial revolution, Grand tour, Tourism education

The evolution of tourism education reflects cultural, social, and technological transformations over the centuries. Initially, the concept of educational tourism was associated with the *Grand Tour*, a practice from the 17th to the 19th century, where young British aristocrats traveled across Europe to acquire cultural and social knowledge. This period marked the beginning of tourism as a learning tool, focusing on languages, arts, and etiquette, consolidating the idea that travel was a form of education (Benson, 2007).

However, it was only in the 20th century that formal tourism education began to gain traction in academic institutions. Universities such as Rome (1925), Vienna (1936), and Bern (1941) were pioneers in offering tourism-related programs, but the true expansion occurred in the 1960s when tourism was established as a distinct academic field in universities worldwide. This period saw a significant increase in the number of courses, students, and research dedicated to the subject, consolidating tourism as a mature area of study (Airey et al., 2015).

Throughout this historical trajectory, tourism education evolved from an informal and cultural approach to a structured and technologically advanced academic field. Today, it faces the challenge of preparing professionals who can integrate technical skills with socio-emotional abilities, ensuring a more human-centered and adaptive tourism sector.

With the advancement of digital technologies and globalization, tourism education has undergone another transformation. Schwab's (2016) vision of the Fourth Industrial Revolution precisely reinforces the importance of balancing technological and human skills in tourism education.

While Tourism Education 4.0 focused on technology and automation, Education 5.0 places the human being at the center of the learning process. Seeking a balance between technology, sustainability, and human aspects, it promotes a personalized, collaborative educational process centered on human values such as empathy, ethics, and social well-being (Schwab, 2016).

Thus, it fosters the integration of artificial intelligence, augmented reality, the metaverse, and other technologies while emphasizing creativity, critical thinking, and social awareness in an adaptive learning style tailored to the student's individual pace and needs (Bergdahl, & Wimmer, 2018). It understands the learning process as continuous education and active learning, based on experience and problem-solving, with a focus on developing socio-emotional skills and sustainability (Ahmad et al., 2023).

In this sense, Tourism Education 5.0 should not only provide students with technological skills but also prepare them for a sensitive and conscious approach to the human and social needs that characterize this activity.

One of the fundamental errors in modern schooling is perceiving it merely as a system, focusing on processes and standards while ignoring the human element within it. Modern schooling still reflects the structure of the industrial era, following a standardized model that emphasizes conformity and repetition, devaluing creativity and autonomy. This approach no longer meets postmodern needs, where innovation and adaptability are essential (Zhao, 2012).

Etymologically, the word "skole" (school) originates from Greek and means "leisure." In Ancient Greece, school was a space of freedom, where obligations were assigned to slaves, while citizens dedicated themselves to study, body and spirit care, and research in their fields of passion. However, over the centuries, school has become a place of obligation, focusing on rigid curricula and standardized assessments. This divergence from its original concept invites us to question the true essence of education and its real function in postmodern society (Freire, 2005).

In 1837, educator Friedrich Froebel introduced the idea of the teacher as a gardener and students as plants, emphasizing expression and treating learners with the utmost dignity for their authenticity and developmental levels (Brosterman, 2001). Thus, an inspired teacher committed to the learning process creates and provides a fertile environment for learning, critical thinking, and real-world integration, translating into wisdom.

António Damásio argues that emotions are an integral part of cognitive processes, essential for both thinking and action. In other words, for learning to occur, emotional involvement must happen (Damásio, 1994), directly supporting the need to create emotionally engaging educational environments essential for meaningful learning in the tourism context.

The word "emotion" comes from the Latin "e+movere," meaning "to move from one place to another," indicating that emotion is related to movement and transformation. Thus, an educational context that stimulates emotions facilitates the learning and development process, making it essential to promote experiences that inspire, motivate, and engage students.

Sophia de Mello Breyner Andresen argued that the essential subjects should be poetry, music, and gymnastics (Andresen, 2005), which can be associated with the power to trigger emotions. According to her vision, education should cultivate sensitivity, expression, and movement, allowing for the integral development of the human being and the interconnection of knowledge. This interdependence of different fields reinforces the need for an education system that does not fragment knowledge but rather presents it in an integrated and meaningful way.

In a world where technology raises many questions about the future, schools should be (re)thought as spaces for experimentation and discovery, fostering autonomy, freedom, and critical thinking through environments that stimulate curiosity, creativity, and individual expression, ensuring meaningful and transformative learning (Bersin, 2019).

Education 5.0, by integrating technological advancements and humanistic principles, enables a paradigm where schools can once again be spaces freely chosen for holistic human growth and development (Schwab, 2016).

As educational models evolve to value both human and technological skills in an integrated manner, it becomes imperative to ensure that these competencies also include digital protection, guaranteeing safe and reliable tourism experiences.

In this context, recognizing the transition from Education 5.0 to cybersecurity is not only logical but necessary, considering that tourism is an activity deeply centered on human interaction and trust.

Thus, training tourism professionals must integrate technological competencies, particularly in cybersecurity, to address the challenges posed by artificial intelligence. Protecting personal data has become essential, as cybersecurity is fundamental to the proper functioning of technologies that serve people. Since tourism is a human-centered activity, its digital security must be a priority to ensure trustworthy and protected experiences for consumers.

The increasing use of advanced technologies, such as artificial intelligence and augmented reality in the tourism sector, amplifies the need for effective strategies to protect customer information. Studies indicate that cybersecurity plays a crucial role in safeguarding personal data, making it a legal and ethical imperative for organizations (Coelho, & Cunha, 2023). Identity theft and privacy breaches are becoming more frequent, especially in tourist destinations with lower technological maturity and less robust data protection systems.

Thus, investing in the technological training of tourism professionals becomes essential. Only through adequate training can resilient and solid mechanisms be created to ensure the protection of tourists' data and the digital security of hospitality infrastructures (Ghaderi et al., 2024). Risk mitigation strategies, such as data encryption, multi-factor authentication, and compliance with international security standards, must be integral to the knowledge and practices adopted by sector professionals.

Moreover, smart tourism destinations that have implemented data protection strategies exemplify how technological training, combined with social and ethical awareness, can contribute to safer, more sustainable, and competitive tourism.

Additionally, the increasing sophistication of cyber threats demands that industry workers develop a preventive mindset and be prepared to handle digital security incidents. Implementing continuous training and certification programs in cybersecurity can ensure that tourism professionals keep up with emerging technological trends and challenges (Thealla et al., 2024).

Thus, cybersecurity education in tourism not only contributes to a safer and more reliable sector but also strengthens the reputation and competitiveness of businesses operating in this area. Investing in technological qualification and digital security in tourism services is a crucial step in addressing emerging challenges and ensuring a sustainable and protected tourism experience for all stakeholders.

In summary, rethinking educational models in tourism requires acknowledging the importance of balancing advanced technological skills with essential socio-emotional abilities, such as empathy, creativity, and critical thinking. Education 5.0 offers a unique opportunity to integrate these two domains, preparing professionals to effectively manage emerging technologies while simultaneously addressing the human and social needs of tourists. Investing in continuous training in cybersecurity also becomes indispensable, ensuring safe and sustainable tourism experiences in an increasingly complex digital context. Thus, the future of tourism education will depend on the ability of educational institutions to provide environments that simultaneously foster technological innovation and holistic human development.

References

- Ahmad, S., Umirzakova, S., Mujtaba, G., Amin, M. S., & Whangbo, T. (2023). Education 5.0: Requirements, enabling technologies, and future directions. arXiv preprint arXiv:2307.15846. <https://doi.org/10.48550/arXiv.2307.15846>.
- Airey, D. (2016). Tourism education: Past, present and future. *The Business of Tourism*, 17, 9-12. Retrieved from <https://pdfs.semanticscholar.org/609f/13ba6f43c8a83e7e059ef452baa6113e1d61.pdf>
- Andresen, S. de M. B. (2005). *A educação como processo integral*. Editorial Caminho.
- Benson, A. (2007). Research tourism: Professional travel for useful discoveries. *Niche tourism* (pp.133-142). Routledge.
- Bergdahl, R., & Wimmer, C. (2018). Education 4.0: Rethinking the future of learning in a digital era. *International Journal of Educational Technology in Higher Education*, 15(1), 25-36.
- Bersin, J. (2019). *The future of work: Trends, technology, and transformation*. Deloitte Insights.
- Brosterman, N. (2001). Inventing kindergarten. *Journal of Aesthetics and Art Criticism*, 59(2), 228-229.
- Damásio, A. (1994). *Descarte e a emoção: O corpo e a construção da mente*. Companhia das Letras.
- Dhande, K. R. (2024). Fourth industrial revolution and the role of cybersecurity: Technologies on the travel and tourism industry and more specifically cybersecurity in travel tourism. In P. Thealla, V. Nadda, S. Dadwal, L. Oztosun, & G. Cantafio (Eds.), *Corporate cybersecurity in the aviation, tourism, and hospitality sector* (pp. 241-257). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-2715-9.ch013>.
- Freire, P. (2014). *Pedagogia da esperança: Um reencontro com a pedagogia do oprimido*. Editora Paz e Terra.
- Ghaderi, Z., Beal, L., Hall, C. M., Zaman, M., Ahmad Rather, R., & Mat Som, A. P. (2024). Cybersecurity and smart tourist destinations resilience. *Tourism Recreation Research*, 1-17. <https://doi.org/10.1080/02508281.2024.2434791>.
- Mateus-Coelho, N., & Cruz-Cunha, M. (Eds.). (2023). *Exploring cyber criminals and data privacy measures*. IGI Global. <https://doi.org/10.4018/978-1-6684-8422-7>.
- Schwab, K. (2016). *The fourth industrial revolution*. Crown Publishing Group.
- Zhao, Y. (2012). *World class learners: Educating creative and entrepreneurial students*. Corwin Press.

STRATEGIC MODELS AND CURRENT TRENDS IN TOURISM BUSINESS MANAGEMENT

109

Nuno Gustavo³¹

Escola Superior de Hotelaria e Turismo do Estoril, CiTUR - Centro de Investigação, Desenvolvimento e
Inovação em Turismo – Polo Estoril
Portugal

Miguel Belo³²

Escola Superior de Hotelaria e Turismo do Estoril, CiTUR - Centro de Investigação, Desenvolvimento e
Inovação em Turismo – Polo Estoril
Portugal

Catarina Nunes³³

Escola Superior de Hotelaria e Turismo do Estoril, CiTUR - Centro de Investigação, Desenvolvimento e
Inovação em Turismo – Polo Estoril
Portugal

³¹ Nuno Gustavo holds a PhD in Tourism, Leisure and Culture, completed in 2011 in the University of Coimbra. He is Coordinator Professor at the Estoril Higher Institute for Tourism and Hotel Studies (ESHTe) since 2002, collaborating with several institutions on both international and national levels, such as Oporto Católica University, Grenoble Graduate School of Business, Eduardo Mondlane University - ESHTI, Lúrio University, Cape Verde Institute for Tourism and Hotel Studies and the University of Coimbra. His main areas of interest are focused on strategic and operations management and marketing of tourism and hospitality businesses. He has edited 2 books, published 19 book chapters and 10 articles in specialized journals, collaborating with 20 fellow researchers and receiving 4 awards. The curriculum also shows the development of several projects in the field of tourism and hospitality in Portugal, Mozambique and Cape Verde. He is also a member of the Editorial Board (Review Board Member) of the Journal of Hospitality and Tourism Management.

³² Miguel Belo holds a PhD in Tourism, awarded in 2022 by the University of Lisbon, and a Master's Degree from the Estoril Higher Institute for Tourism and Hotel Studies. He is an Assistant Professor at Estoril Higher Institute for Tourism and Hotel Studies. He is an integrated researcher at CiTUR - Centre for Applied Research in Tourism (centre accredited by FCT, the Portuguese National Funding Agency for Science, Research and Technology). He has experience as a member of research teams in several competitive research projects (namely FCT funded). He supervises several master's dissertations. He develops research in tourism and leisure and business sciences. He has several publications with global book editors and journals indexed in Scopus.

³³ Catarina Nunes completed a Bachelor's degree in Nutritional Sciences in 2016 at the Faculty of Nutrition and Food Sciences, University of Porto. She has been pursuing a PhD in Human Motricity in the field of Physical Activity and Health at the Faculty of Human Motricity, University of Lisbon, since 2018, and is also enrolled in the postgraduate program in Applied Statistics to Biology and Health Sciences at the Faculty of Sciences, University of Lisbon. She has published 13 articles in specialized journals and has 4 articles under review. She has co-supervised 1 undergraduate thesis. She has received 1 award and/or honor. She is involved or has been involved as a researcher in 3 projects.

Abstract

Since the 1950s, tourism has been growing at an astonishing pace and is now one of the main global economic and social drivers of western societies. This growth has been made possible by technological innovations along with globalization, which transformed the structure and business strategies of the industry. With the introduction of new business models as well as digitalization and the shared economy, the industry faces several challenges, including economic recessions, changing oil costs, and changes in finance models. Nowadays, the tourism sector is much more complex and diverse as well as far more dynamic. In order for firms to survive in today's environment, there is a need to change the way they do business. This change is evident in the hospitality and airline sectors. It is crucial for firms in the tourism industry to develop adjustable operational models that can solve both structural problems such as seasonality and new challenges in the international environment. Adapting is a requirement in this ever-changing industry if a business wants to establish itself in the long run.

Keywords

Tourism industry, Globalization, Digitalization, Business models

In light of an ever-changing world, tourism has constantly been on the rise since the 1950s, and is now one of the main economic and social activities in contemporary Western societies (Fletcher et al., 2018). This growth is particularly promoted by the technological changes in the lifestyle of individuals. The importance of the sector of tourism and hospitality is reinforced by the year, being critical to several economies across the globe (Barrows et al., 2012). In this new economic and social order, the predictions suggest the development of tourism flows in the years to come. Tourism, as both a social phenomenon and economic activity, has become central to both modern and rising economies (Gustavo, & Belo, 2019).

Nowadays, tourism reflects the profound metamorphosis of a more global, interdependent and uncertain world, where the perishable and the digital tend to prevail over the stable and the analogic (Kotler et al., 2021). The hotel sector has gotten more fragile to externalities, particularly through periods of crisis such as the 2007 subprime meltdown or the COVID pandemic (Evans, 2024). The nature of tourism has forced it to adapt itself to other global phenomena such as volatility in the price of oil, new finance models and a shrinking market. Despite these challenges, the sector has been able to preserve its innovative spirit with tourism businesses growing and applying new management models in a globalized world that is increasingly uncertain and dynamically changing (Cunil, 2006).

Tourism has been traditionally and remains an industry of the masses. However, factors such as globalization, liberalization, technology revolution in emerging markets have completely redefined the status quo in the sector (Gidebo, 2021). These elements have influenced the way in which communication and transportation are conducted, resulting to important strategic patterns modifications as well as operational management shifts (Daft, & Albers, 2015; Enz, 2010). This simultaneously allows tourism businesses to add value to the tourist experience, providing them with an opportunity to differentiate themselves in a new digital era (Sustacha et al., 2024).

In this new context, the tourism industry has moved from the 4 Ss (simple, static, single, safe) to the 4 Ds: diverse, dynamic, difficult and dangerous. This has forced tourism professionals to replace old strategic and operational options with new strategies to maintain their competitiveness (Tribe, 2020). New models and philosophies have emerged to this new dimension of global specialization, which reflects an important innovative business dynamic (Hassanien, & Dale, 2019; Menon economics, 2018). This trend has led to the expansion of big international hotel chains as an instance (Christou et al., 2023; Kotler et al., 2021). Tourism is an inherently human-driven business but still has to adapt new principles of operation like technology — artificial intelligence, shared economy and digitalization. Accordingly, the industry has diversified some interesting business models such as Co-creation or peer-to-peer, making it more mature and competitive and market-prone (Ivanova, & Ivanov, 2016).

In conclusion, we can highlight major changes in the way tourism businesses operate. The exponential growth of the sector has led to a significant increase in its competitiveness, which adds pressure for businesses' margins in an increasingly heterogeneous world (Tribe, 2020). In this scenario, the main challenge of tourism businesses is to develop an operational model that is flexible enough to allow the implementation of a management concept able to

overcome the traditional challenges of the sector, such as the seasonality of the demand, while responds to the new challenges of the global contemporary market (Parra-López et al., 2018).

References

- Barrows, C. W., Powers, T., & Reynolds, D. (2012). *Introduction to management in hospitality industry* (10th ed.). John Wiley & Sons.
- Christou, P., Hadjielias, E., Simillidou, A., & Kvasova, O. (2023). The use of intelligent automation as a form of digital transformation in tourism: Towards a hybrid experiential offering. *Journal of Business Research*, 155, 113415. <https://doi.org/10.1016/j.jbusres.2022.113415>.
- Cunill, O. M. (2006). *The growth strategies of hotel chains: Best business practices by leading companies*. Routledge. <https://doi.org/10.4324/9780203820810>.
- Daft, J. & Albers, S. (2015). An empirical analysis of airline business model convergence. *Journal of Air Transport Management*, 46, 3-11. <https://doi.org/10.1016/j.jairtraman.2015.03.008>.
- Enz, C. (2010). *Hospitality strategic management: Concept and cases* (2nd ed.). Wiley.
- Evans, N. (2024). *Strategic management for tourism, hospitality and events* (4th ed.). Routledge.
- Fletcher, J., Fyall, A., Gilbert, D., & Wanhill, S. (2018). *Tourism: Principles and practices* (6th ed.). Pearson.
- Gidebo, H. (2021). Factors determining international tourist flow to tourism destinations: A systematic review. *Journal of Hospitality and Tourism Management*, 12(1), 9-17. <https://doi.org/10.5897/JHMT2019.0276>.
- Gustavo, N. & Belo, M. (2019). O novo ambiente competitivo dos negócios turísticos. Em *Tourfly - Inovação e Futuro: Contributos para o desenho da oferta turística na AML* (pp. 35-55). Escola Superior de Hotelaria e Turismo do Estoril.
- Hassanien, A & Dale, C. (2019). *Hospitality business development* (2nd ed.). Routledge. <https://doi.org/10.4324/9781351033701>.
- Ivanova, M. & Ivanov, S. (2016). Hotel chains' conceptual models. In M. Ivanova, S. Ivanov, & V. P. Magnini (Eds.), *The routledge handbook of hotel chain management* (pp. 69-82). Routledge.
- Kotler, P., Kartaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for humanity*. John Wiley & Sons.
- Menon economics (2018). *What to consider as a hotel when choosing a hotel affiliation chain*. Retrieved from <https://www.menon.no/wp-content/uploads/2018-4-What-to-consider-as-a-hotel-when-choosing-a-hotel-affiliation-chain.pdf>.
- Parra-López, E., Yanes-Estévez, V., Mercedes, M.-N., & Martínez-González, J. A. (2018). International strategies in tourism. In L. Moutinho, & A. Vargas-Sánchez (Eds.), *Strategic management in tourism* (3rd ed.) (pp. 248-263).

Sustacha, I., Baños-Pino, J. F., & Del Valle, E. (2024). The role of technology in enhancing the tourism experience in smart destinations: A meta-analysis. *Journal of Destination Marketing & Management*, 30, 100817. <https://doi.org/10.1016/j.jdmm.2023.100817>.

LEARNING DESIGN IN TOURISM HIGHER EDUCATION: PEDAGOGICAL SHARING BASED ON EXAMPLES FROM IPBEJA

114

Victor Figueira³⁴

Polytechnic Institute of Beja, CiTUR - Centre for Tourism Research, Development and Innovation
Portugal

João Rodrigues³⁵

Polytechnic Institute of Beja
Portugal

Ana Isabel Rodrigues³⁶

Polytechnic Institute of Beja, CiTUR - Centre for Tourism Research, Development and Innovation
Portugal

Maria João Ramos³⁷

Polytechnic Institute of Beja, University of Lisbon Centre for English Studies (ULICES/CEAUL)
Portugal

³⁴ PhD in Tourism (University of Évora - Portugal). Assistant Professor at the Polytechnic Institute of Beja, Portugal. Coordinator of the Postgraduate Programme in Sustainable Tourism and Well-being. Coordinator of the Tourism Laboratory. Integrated member at CiTUR - Centre for Tourism Research, Development and Innovation.

³⁵ PhD in Literary, Cultural and Interartistic Studies (Faculty of Arts and Humanities of the University of Porto). Assistant Professor at the Polytechnic Institute of Beja, Portugal. International Mobility Coordinator of the Tourism Degree Programme.

³⁶ PhD in Tourism (University of Algarve- Portugal). Assistant Professor at the Polytechnic Institute of Beja. Coordinator of the Tourism Degree Programme. Integrated member at CiTUR - Centre for Tourism Research, Development and Innovation.

³⁷ PhD in Literary and Cultural Studies (Faculty of Letters of the University of Lisbon). Coordinating Professor. IPBeja Centre for Languages and Cultures Coordinator. Integrated member at CiTUR - Centre for Tourism Research, Development and Innovation.

Abstract

It is a self-evident truth that, over the past decades, higher education has undergone several changes. Alongside the importance of the ubiquitous presence of technology, which allows for instant access to vast amounts of information and to numerous innovative resources and tools, recent educational trends have been strongly influenced by a paradigm shift based on the growing prevalence of learner-centred approaches. This trend is also closely linked to the increasing importance of learning design as a key element in the organization and delivery of higher education programmes. Drawing on the concept of learning design, this presentation aims to share a selection of pedagogical practices adopted within the context of the tourism-related courses offered by the Polytechnic Institute of Beja (IPBeja), Portugal, namely the bachelor's degree in Tourism and the postgraduate course in Sustainable Tourism and Well-being. The design of such student-centred practices, implemented either in the context of specific curricular units or as part of the extracurricular components of the programmes, is grounded in a clear goal-setting process and emphasizes experiential and transformative learning. This approach helps achieve the overall objective of the programmes: to provide students with a comprehensive and systemic overview of the tourism sector.

Keywords

Learning design, Experiential learning, Tourism degree programmes, Pedagogical practices

Theoretical background

Higher education has undergone significant transformations over the past decades. The rapid evolution in the world of technology, combined with instant access to vast amounts of information and to a wide plethora of resources and tools, has challenged traditional educational models and deeply reshaped dynamics of teaching and learning. According to Mor & Craft (2012), educators are no longer seen as mere “distributors of knowledge”, but as “designers of learning experiences” (p.85). As emphasised by these authors, while educators still provide learners with access to information, the focus has shifted to creating the best conditions for learners to construct and explore their own knowledge based on the resources and tools available.

116

This idea is linked to the concept of learning design, which has attracted a growing interest among researchers, especially with the dissemination of e-learning courses. Nonetheless, although learning design is commonly associated with the way in which learning resources are structured and presented on online learning platforms, the concept is not only about technology (e.g., Stripe, & Simpson-Bergel, 2023). In fact, several authors highlight the broad scope of the concept, as is the case of Assis and Almeida (2017), who state that learning design can be seen both as a product and as a process. In line with the broader scope of the concept, Mor and Craft (2012), for instance, refer to learning design as ‘the act of devising new practices, plans of activity, resources and tools aimed at achieving particular educational aims in a given situation’ (p.86). Furthermore, learning design should be supported by ‘subject knowledge, pedagogical theory, technological know-how and practical experience. [...] It should also engender innovation in all these domains and support learners in their efforts and aims.’ (p.86). When defining the concept, Conole (2013) clarifies that learning design applies to ‘the design of resources and individual learning activities right up to curriculum-level design’ (p.8).

Considering this, one can say that learning design involves the decision-making process in the planning, construction, implementation and assessment of learning experiences with the aim of helping learners have the best learning experience possible. Such informed decisions are also based on the conscious selection of an appropriate instruction pedagogy, bearing in mind the learners’ profile(s), needs and objectives.

In the case of the Tourism programmes at the Polytechnic Institute of Beja (IPBeja), this selection has led to the prevalent adoption of experiential learning as a key component of the learning process, as highlighted below. Within this learning theory, also known as active, hands-on, or interactive learning, students actively engage in the learning process rather than passively absorb knowledge (Kolb, 1984). According to the author, experiential learning emphasizes the crucial role of experience in the learning process and embraces a holistic, integrative approach that blends experience, perception, cognition, and behaviour.

Tourism Courses at IPBeja

IPBeja offers two programmes in the field of Tourism: a bachelor's degree in Tourism and a postgraduate course in Sustainability and Well-Being.

The bachelor's degree programme in Tourism does not focus on a specific tourism subsector; instead, it aims to provide students with an overview of the tourism industry as well as of related fields of knowledge. The curriculum includes subjects of different disciplines (e.g., tourism, languages, management, heritage, among others), and emphasizes practical, applied knowledge. As part of the learning experience, students participate in a wide range of practical activities, such as field trips, seminars with representatives from tourism sectors, participation and support in events promoted by both public and private sector entities. A key component is a three-month internship, allowing students to gain real-world experience in the sector (IPBeja, n.d.-a).

The postgraduate course in Sustainable Tourism and Well-Being is a one-semester programme. Although it is fully taught online, the course has a practical nature and is intended to meet the needs of tourism professionals, and others, interested in developing skills in the broad field of sustainability applied to tourism (IPBeja, n.d.-b) and offers seminars and workshops in which the contact with the real market is encouraged.

Both programmes are designed to provide learners with student-centred activities and foster experiential learning in multiple ways.

Examples of Pedagogical Practices in Tourism Higher Education at IPBeja

The pedagogical practices below correspond to a selection of the student-centred tasks designed within the Tourism programmes at IPBeja. These practices align with the overall objective of providing students with the opportunity of becoming familiar with the various subsectors of tourism. The examples shown below are organised as follows: the first group refers to activities implemented within the context of specific curricular units; the second group includes pedagogical practices grounded in interdisciplinary work, and the last group refers to extracurricular activities open to all students.

Practices Implemented Within the Context of a Specific Curricular Unit

Example 1. Simulated guided tours (Curricular unit: English III)

In this oral task, students are asked to simulate a guided tour of an attraction chosen by them. They must do research on the chosen site, write a commentary, and simulate/record the tour in situ, staging the main parts of a guided tour, namely: welcome the group; lead the group and keep them interested in the talk; finish the tour and say goodbye.

This task has the following objectives: (i) to foster students' awareness of a tour guiding job requirements; (ii) to promote students' awareness of the structure, content and characteristics of a tour guide's commentary; (iii) to develop public speaking and social

interaction skills; (iv) to develop and strengthen the students' speaking skills, namely in live, face-to-face situations with customers in a tourism context; (v) to develop and consolidate specific vocabulary (related to history, architecture, art, production processes, etc.).

The design of this learning experience promotes the acquisition of relevant and specific English-language and tour guiding skills. Above all, students have had hands-on experience of designing and delivering a tour guide's commentary in situ, which makes it more effective than simulating this communicative situation in the classroom context.

Example 2: Looking for solutions (Curricular unit: Professional Practice III)

This activity involves identifying solutions to a real challenge faced by a company or organisation in the tourism sector.

This task aims (i) to enhance higher education students' role as change agents, (ii) to foster students' awareness of real challenges in both public and private entities, and (iii) to encourage students to mobilize their knowledge and skills in designing and presenting sustainable and creative solutions to real challenges.

Over the years, this pedagogical practice has resulted in various outputs, grouped into three main categories: (i) communication (e.g., creation of websites, social media accounts, promotional materials, merchandising); (ii) product development (e.g., proposals for new outdoor activities, itineraries); and (iii): operational solutions (e.g., satisfaction surveys, business opportunities analyses, etc.). The design of this learning experience has proved to help bridge academia and local/regional companies/organisations, which can benefit from students' insights. On the other hand, students are given the opportunity to develop both hard and soft skills, such as critical thinking and teamwork, while engaging with entities in the job market.

Example 3: Fora do Lugar [video series] (Curricular Unit: Strategic Planning and Territorial Marketing)

This learning experience is based on a series of six videos, recorded in different municipalities of the Alentejo region. The videos, which feature interviews conducted by the teacher with local and regional agents, can be used both as a pedagogical and a territorial marketing resource.

The videos aim to: (i) stimulate students' holistic and eclectic growth, and (ii) help shape destination images, based on (virtual) visits to the territories.

The innovative nature of this pedagogical tool lies in the fact that students of the online postgraduate course are transported to spaces outside the traditional learning environment, and content is presented through conversations held in locations that exemplify specific territorial marketing policies. Throughout the videos, students' attention is drawn to specific details of each territory which serve as a starting point for reflection about theoretical content.

Example 4: Kamsamnidá, South Korea (Curricular units: Events and Protocol, and International Tourism)

Since its creation, the Events and Protocol curricular unit has been based on project-based learning and encouraged students to organise an event (e.g., a gala dinner, a seminar, among others).

Since 2024, an interdisciplinary approach has been adopted in collaboration with the International Tourism course: under the motto “Learning by doing”, each year, students are challenged to organize a roundtable discussion with speakers specializing in a specific country and travel destination/market. This year’s topic was South Korea. The roundtable was followed by a gastronomic tasting featuring traditional products from Alentejo, Portugal, and South Korea. In the organization of the event, students were grouped, according to specific tasks: Communication/Public Relations, Sponsorships, Financial Management, Image/Design, Decoration, among others.

This learning experience aimed to: (i) develop practical skills, (ii) stimulate critical thinking and problem-solving, (iii) foster teamwork, and (iv) enhance creativity and innovation.

The design of this learning experience has proved to be particularly relevant in training future tourism professionals, as students are responsible for the entire process. As in an example of “experiential and transformative” learning, students were constantly challenged to reflect on everything they knew (or thought) before, while examining situations from new perspectives, making room for new insights, based on their practical experience. Moreover, this hands-on approach has helped students understand the complexity of each stage in the event organization process.

Example 5: Collaborative Online International Learning (Curricular units: New Technologies in Tourism, Professional Practice II, Experiential Tourism, English III)

The Tourism Degree programme organises two Collaborative Online Integrated Learning (COIL) programmes per year (one per semester). In each edition, students work collaboratively with peers from a partner institution on a tourism-related topic covered within the scope of specific curricular units. The two editions held in 2024, organized in cooperation with the University of Maribor and with the Vilnius University of Applied Sciences, focused on rural tourism and on gastronomic tourism, respectively.

COIL programmes, as a learning experience, aim to: (i) strengthen ‘internationalisation at home’ (Beelen & Jones, 2015), providing an international experience without requiring physical mobility, (ii) promote intercultural awareness, encouraging students to work with peers from different institutions abroad, and (iii) develop key communication, language, and digital skills, all of which crucial for future tourism professionals. Furthermore, the interdisciplinary approach adopted in the COIL programmes contributes to a more effective integration of the various fields of knowledge involved in the systemic training provided by this bachelor’s degree programme.

Example 6: Portfolio of extracurricular activities

Since 2010, the Tourism Degree has developed a set of extracurricular activities aimed at complementing students' academic training by providing them with opportunities to develop both technical and behavioural skills. An example of such activities is the support to various events taking place both at IPBeja and in the region every year (e.g., conferences, seminars, local and regional business fairs, etc.).

These activities function as “living laboratories” and authentic workspaces and serve as a bridge between theory and practice, by promoting interaction with industry professionals, offering students a practical, up-to-date, and holistic view of the tourism sector while expanding their professional network.

Students are also encouraged to work on: (i) interpersonal communication and teamwork, (ii) creativity and innovation, especially in finding innovative solutions in the tourism sector, (iii) leadership and autonomy, as they are empowered to take on responsibilities and effectively manage situations with empathy and confidence, and (iv) time management and organization, by helping develop the ability to plan and execute tasks efficiently in dynamic work environments.

Concluding Remarks

In conclusion, the selected practices outlined above highlight the diverse learning experiences provided Tourism students at IPBeja, both within specific curricular units and as extracurricular activities. The prevalence of a student-centred approach and the strong emphasis on experiential learning evidence the practical nature of the programmes. The inclusion of such diversified, hands-on learning experiences is a key feature of the learning design process, contributing to achieve the main goal of IPBeja's Tourism programmes: to equip students with training that combines a comprehensive, systemic perspective of the tourism sector with practical experiences.

References

- Assis, M. P., & Almeida, M. E. B. (2017). Learning design e tecnologias: Criação de ambientes colaborativos para a aprendizagem. *Psicologia da Educação*, 44, 47-56. <https://doi.org/10.5935/2175-3520.20170005>.
- Beelen, J., & Jones, E. (2015). Redefining internationalization at home. In A. Curaj, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The european higher education area. between critical reflections and future policies* (pp.59-72). Springer.
- IPBeja (n.d.-a). *Turismo. Objetivos e metodologias*. Retirado de <https://www.ipbeja.pt/CURSOS/ESTIG-TUR/Paginas/ObjectivoseMetodologia.aspx>.

- IPBeja (n.d.-b). *Pós-graduação em turismo sustentável e bem-estar. Objetivos e metodologias*. Retirado de https://www.ipbeja.pt/CURSOS/ESTIG-PG_TURSUSTBEMESTAR/Paginas/ObjetivoseMetodologias.aspx.
- Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Mor, Y., & Craft, B. (2012). Learning design: Reflections upon the current landscape. *Research in Learning Technology*, 20, 85-94. <https://doi.org/10.3402/rlt.v20i0.19196>.
- Stripe, K., & Simpson-Bergel, E. (2023). (Re)defining learning design: A framework fit for the twenty-first century. *Compass: Journal of Teaching and Learning*, 16(2), 121-136. <https://doi.org/10.21100/compass.v16i2.1435>.

SIGNIFICANCE OF LABORATORIES AND TECHNOLOGIES IN TEACHING TOURISM: CASE STUDIES IN THE AREA OF TOURISM AND LEISURE

122

Manuel Salgado³⁸

Polytechnic University of Guarda
Portugal

Fernando Florim de Lemos³⁹

Polytechnic University of Guarda
Portugal

³⁸ PhD in Tourism by the Aveiro University; Member of the Governance, Competitiveness and Public Policies Research Unit (GOVCOPP), School of Tourism and Hospitality, Polytechnic University of Guarda (IPG), TECHN&ART (IPT) and CITUR; Director of the Master in Management and Sustainability in Tourism.

³⁹ Title of Specialist in Tourism and Leisure; School of Tourism and Hospitality, Polytechnic University of Guarda (IPG), Member of the TECHN&ART (IPT) and CITUR; Director of the Department of Tourism and Hospitality and Director of the Bachelor's Degree in Tourism and Leisure.

Abstract

The use of laboratories and proper technology plays a crucial role in tourism education, providing a practical and dynamic environment for developing the skills required across various sectors of the job market. The objective is to simulate real-world scenarios in the classroom, such as hotel and restaurant operations and management, as well as other tourism-related businesses, including event planning and management, and the design and execution of tourist itineraries. This hands-on approach ensures an optimal learning experience, equipping future professionals with the necessary competencies to navigate the challenges of this vital industry for Portugal and worldwide. To analyze best practices, is used the case study methodology (Yin, 2018), driven by the interest in understanding the educational approach of a specialized higher education institution (HEI), the School of Tourism and Hospitality (ESTH) at the Polytechnic Institute of Guarda, particularly regarding its academic framework in the fields of Tourism and Leisure (TL) and Hospitality. The aim is to assess the value of a focused school in this scientific domain and the advantages of improved coordination across different levels of its educational programs. This exploratory empirical study focuses on the Bachelor's program in TL and its Master's program in Tourism Management and Sustainability (TMS). The study examine the positioning of these programs, primarily through internal and secondary data analysis, to interpret their evolution and future prospects to assess curricular development components, in particular in terms of infrastructure, equipment, and other pedagogical resources that contribute to the quality of education in this field.

Keywords

Laboratories, Technologies, Education, Research, Tourism and leisure

The advancement of education and research in TL must be anchored in several transitions, particularly the digital one, fostering the increasing adoption of technology in Tourism-related HEI and, consequently, enhancing operational and service efficiency in all types of tourism organizations. To achieve this goal, the Schools must be equipped with appropriate facilities that enable the simulated execution of practical sessions that should take place in laboratory environments, closely replicate real-world professional settings, such as hotels or travel agencies, ensuring a learning experience aligned with industry demands.

The meaning of laboratories and technologies in teaching TL lies in their ability to provide experiential learning, hands-on learning experiences that bridge the gap between theory and real-world practice. The key aspects to be address could focus in the capacity to: simulating real-world environments; data analysis and decision-making skills; case studies and problem-based learning; soft skills development; innovation and adaptability; developing sustainable tourism solutions, including the climate change and clean energies paradigms.

The simulating real-world environments can be developed in specific laboratories equipped with several technologies, like Virtual Reality (VR) and Augmented Reality (AR), which enable students to immerse themselves in realistic tourism scenarios, such as visiting cultural sites, experiencing hotel management, or handling customer service challenges, without physically being on-site. For example, VR-based tourism labs allow students to explore virtual travel destinations or manage a simulated hotel front desk, preparing them for industry scenarios.

Sigala and Buhalis are scholars in the field of tourism and technology that focuses on topics like smart tourism, the role of information and communication technology (ICT) in enhancing tourist experiences, and the integration of augmented and virtual reality in tourism. The article of Buhalis (2020) "Technology in tourism - from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article", published in *Tourism Review* in, explores how disruptive technologies, such as the Internet of Things (IoT), Artificial Intelligence, and rich media like virtual and augmented realities, have created smarter environments that transform tourism in terms of structure, processes, and practices. For instance, Buhalis et al. (2019) explores the concept of smart tourism destinations, where technology is leveraged to create enriched, personalized, and efficient visitor experiences. This includes the use of ICT to simulate environments or enhance real-world settings, fostering deeper engagement and satisfaction among tourists. Sigala has similarly contributed to research on ICT-enabled tourism experiences, including co-creation and the role of user-centric technologies in service enhancement, including the emergency of remote learning, that is not the only way that COVID-19 disrupted tourism (Sigala, 2021). The field of education was one of the areas most affected by the COVID-19 pandemic (Coman et al., 2024), as both teachers and students had to adapt to new study and teaching conditions. Classrooms were replaced by virtual learning environments, and teachers had to adjust to these new circumstances.

This study arises from the need to strengthen the interconnection between different educational levels, both at the level of specific programs and in a broader institutional and strategic context, in order to better address competitiveness and sustainability challenges in

higher education. The theoretical framework allows that this research allows the development of a model that promotes enhanced articulation between undergraduate and master programs within the same scientific field at sequential educational levels and the increasing use of ICT. More specifically, the study aims to identify the advantages and challenges of optimizing the educational offerings of the ESTH, examining aspects such as programs structure, and curriculum design and implementation. Therefore, the research evaluates the adequacy of facilities, equipment's, and other resources essential for both academic and extracurricular activities.

The research methodology provides a rationale for the choices adopted in the empirical research and the collection of internal and secondary data related to the selected case studies. The analytical framework, integrating key variables, identifies the data analysis and interpretation. This approach facilitates the formulation of conclusions regarding the primary findings that validate the study's objectives, while also proposing contributions to the consolidation of education and research in TL. This empirical study seeks to deepen the understanding of the scope, functioning and links of the undergraduate program in TL and the TMS master, which constitute the case studies (Lemos & Salgado, 2022; Lemos et al, 2021; Salgado et al, 2021). Both programs belong to the predominant scientific domain of TL, with the undergraduate program established since the academic year 2000/01, at ESTH, and the master program since 2009/10.

Articulating curricular structures between technological courses, bachelor's, and master's degrees in TL scientific area, along with research in the field, ensures a seamless learning progression that equips students with up-to-date knowledge and skills. The bachelor's degree should focus on the key principles of tourism and leisure, destination management, and digital innovation, introducing students to the impacts of sustainability and emerging industry trends. Building on this, the master's program should specialize in advanced topics such as sustainable, digital, and responsible tourism. This structured approach ensures that each cycle and phase of learning reinforces the next, fostering a comprehensive understanding of both theoretical and practical aspects, and preparing students for leadership roles in an ever-evolving global tourism landscape.

The bachelor and Master TL programs in ESTH articulates curricular structures to ensure a continuous progression of knowledge, preparing students for emerging challenges in the sector. The bachelor's degree focus on the fundamentals of tourism and leisure, destination and experience concepts and management, and digital innovation for the several subsectors of the tourism industry, introducing topics such as smart tourism and digital transformation, and impacts and sustainability in terms of economic, social, cultural and environmental facets. The master's program should specialize in applying digital, energy, and sustainable transitions, covering emerging technologies, circular economy, regenerative tourism, and decarbonization policies. This articulation ensures a holistic education aligned with market demands and global trends in responsible, sustainable and smart tourism.

To support the development of these programs, a HEI establish specialized labs equipped with cutting-edge technological resources. Smart Tourism Labs can integrate virtual and augmented reality tools, IoT-enabled tourism simulations, and AI-driven data analytics for

personalized experiences. Sustainability and Energy Transition Labs should include renewable energy models, carbon footprint assessment software, and life-cycle analysis tools to explore sustainable tourism solutions. Digital Innovation Labs must feature big data analytics platforms, blockchain applications for tourism management, and smart mobility simulations. Additionally, Experience Design Labs can provide eye-tracking technology, biometric sensors, and immersive media studios to enhance visitor experience research. These labs, equipped with advanced digital and sustainability-focused tools, foster innovation, research, and practical learning, ensuring students are well-prepared for the evolving tourism landscape.

The ESTH has modern facilities and specialized laboratories that support training in Tourism and Hospitality. Among its facilities are the "A Escola" Restaurant, a partnership with Newhotel Software and Hotelar, which serves as a practical training space for students. The actual laboratories includes the Travel Agency Laboratory, in partnership with Travelport, and the Hotel Room Laboratory, in collaboration with Burel Mountain Hotels, Burel Factory, and Hotelar. These infrastructures provide students with a practical and up-to-date learning environment, essential for developing skills aligned with the some current demands of the job market.

In conclusion, the integration of digital and technological transitions in TL education is essential for improving the links between teaching and industry practice. By equipping HEI with the right facilities and technology, students gain practical, hands-on experiences that mirror real-world professional environments. These simulated experiences in laboratory-based learning, help close the gap between theory and practice, fostering skills in data analysis, decision-making, and problem-solving. Furthermore, this approach encourages the development of critical soft skills, innovation, and adaptability, all while addressing the urgent need for sustainable tourism solutions in the face of challenges like climate change and clean energy. Through this structured educational framework, future professionals from academia will be better prepared to meet the dynamic demands of the tourism industry, ensuring its long-term success and sustainability.

References

- Buhalis, D. (2020). Technology in tourism - From information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: A perspective article. *Tourism Review*, 75(1), 267-272. <https://doi.org/10.1108/TR-06-2019-0258>.
- Coman, E., Stoicov, I., Țîru, L. G., Brătucu, G., Ciobanu, E., Nechita, F., Bucs, L., & Coman, C. (2024). Work engagement and performance of Romanian school teachers during the COVID-19 pandemic: The impact of sociodemographic and contextual factors. *Administrative Sciences*, 14(11), 305. <https://doi.org/10.3390/admsci14110305>.
- Friães, R. (2016). *Hotelaria, turismo e lazer*. Lisboa: A3ES Ciclos de Estudos Temáticos.
- Lemos, F., Salgado, M., Correia, L., & Costa, C. (2021). A avaliação e educação em turismo: Perspetivas no ensino superior português. *Revista Turismo & Desenvolvimento*, 36(1), 465-475. <https://doi.org/10.34624/rtd.v1i36.11979>.

- Lemos, F. & Salgado, M. (2022). Impacto da COVID-19 na formação em turismo: Dois estudos de caso na área de turismo e lazer. *Egitania Scientia*, II Edição Especial: Educação, 159-176.
- Koo, C., Mendes Filho, L., & Buhalis, D. (2019). Smart tourism and competitive advantage for stakeholders. *Tourism Review*, 74(1), 1-4. <https://doi.org/10.1108/TR-02-2019-208>.
- Salgado, M., Martins, J., & Guerra, R. (2021), Ensino superior em hotelaria, turismo e lazer em Portugal: Estudo de caso ESTH/IPG. *Revista Turismo e Desenvolvimento*, 36(2), 215-227. DOI:10.34624/rtd.v36i2.10683.
- Sigala, M. (2021). Editorial: Journal of Hospitality & Tourism Research. *Journal of Hospitality & Tourism Research*, 45(5), 920-923. <https://doi.org/10.1177/10963480211012058>.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage.

TURISMO VIRTUAL: TECNOLOGIAS DE INFORMAÇÃO E COMUNICAÇÃO E INOVAÇÕES NO ENSINO

128

Frederico Couto Marinho⁴⁰

Universidade Federal de Minas Gerais
Brasil

⁴⁰ Frederico Couto Marinho, Professor Dep. Geografia / Instituto de Geociências / UFMG e do Programa de Pós-Graduação de Prevenção da Violência, Faculdade Medicina / UFMG. Doutor em Sociologia com estágio de Doutorado na Universidade Lille 1 (França). Pesquisador do Centro de Estudos de Criminalidade e Segurança Pública (CRISP) e do Laboratório de Pesquisas em Turismo (LabTur). Desenvolve pesquisas nas áreas: Sociologia do Desvio, Sociologia Urbana, Políticas Públicas, Turismo.

Resumo

Objetiva-se demonstrar como o ensino do turismo virtual na graduação em turismo é mediado por tecnologias de informação e comunicação que atribuem aos estudantes um papel ativo na construção da sua aprendizagem. Os estudantes desenvolvem autonomia e criatividade através do uso de diversas tecnologias de informação e comunicação como: Realidade Virtual⁴¹ (RV), Realidade Aumentada⁴² (RA), Simulações⁴³, Jogos Educativos⁴⁴, Plataformas de Aprendizado Online⁴⁵, Ferramentas de Colaboração⁴⁶, Tecnologias de Geo-Localização⁴⁷, Ferramentas de Análise de Dados⁴⁸, Tecnologias de Imersão⁴⁹ e Ferramentas de Criação de Conteúdo⁵⁰. Elas permitem a visualização em várias escalas de paisagens urbanas e naturais, ruas, museus e equipamentos culturais além dos serviços turísticos (transporte, hospedagem e alimentação). Essas possibilitam aos alunos construir roteiros de viagem e de visitação personalizados. Os alunos aprendem a fazer um planeamento integral das viagens com informações sobre a cotação dos custos, a mensuração das distâncias e do tempo entre os pontos de interesse, sobre a acessibilidade para os visitantes, as avaliações dos visitantes sobre os atrativos turísticos, os meios de hospedagem, os serviços de alimentação, os serviços de transporte público e privado. Os alunos desenvolvem análises sobre o impacto social e o impacto ambiental do turismo nas comunidades e territórios pesquisados. As tecnologias de informação e comunicação empregadas na graduação em turismo facilitam e inspiram a aprendizagem criativa dos estudantes, a avaliação crítica de roteiros de viagem e de roteiros de visitação e a promoção da cidadania.

Palavras chave

Turismo virtual, Tecnologia, Ensino

⁴¹ Cria ambientes virtuais, permitindo aos turistas interação com destinos turísticos de forma imersiva.

⁴² Superpõe informações virtuais ao mundo real, permitindo o acesso a informações sobre os destinos turísticos.

⁴³ Replicam experiências turísticas, permite ao usuário praticar e aprender habilidades relacionadas ao turismo.

⁴⁴ Utiliza elementos de jogos para ensinar conceitos como: gestão de destinos, marketing turístico e sustentabilidade.

⁴⁵ Permite a criação de cursos de turismo virtual, com recursos como vídeos, áudios, imagens e textos.

⁴⁶ Ferramentas que permitem a interação entre os usuários, como fóruns, chats e videoconferências.

⁴⁷ Ferramentas que permitem a localização de destinos turísticos e a criação de rotas personalizadas (Google Maps, Google Earth, Google Expeditions, Google Street View, Google Places).

⁴⁸ Análise de dados relacionados ao turismo: estatísticas de visitação e avaliações de satisfação.

⁴⁹ Criação de experiências de imersão, como o uso de headsets, óculos de realidade virtual.

⁵⁰ Criação de conteúdo relacionado ao turismo, como vídeos, áudios e imagens.

Abstract

The aim is to demonstrate how the teaching of virtual tourism in undergraduate tourism courses is mediated by information and communication technologies that give students an active role in the construction of their learning. Students develop autonomy and creativity through the use of various information and communication technologies such as: Virtual Reality (VR), Augmented Reality (AR), Simulations, Educational Games, Online Learning Platforms, Collaboration Tools, Geo-Location Technologies, Data Analysis Tools, Immersion Technologies and Content Creation Tools. They allow the visualization at various scales of urban and natural landscapes, streets, museums and cultural facilities as well as tourist services (transport, accommodation and food). They enable students to build personalized travel and visit itineraries. Students learn how to plan a comprehensive trip with information on cost estimates, measuring distances and time between points of interest, accessibility for visitors, visitors' evaluations of tourist attractions, accommodation, food services, public and private transport services. Students develop analyses of the social and environmental impact of tourism on the communities and territories surveyed. The information and communication technologies used in undergraduate tourism courses facilitate and inspire students' creative learning, the critical evaluation of travel and sightseeing itineraries and the promotion of citizenship.

Keywords

Virtual Tourism, Technology, Education

O Turismo Virtual tem gerado significativas inovações e impactos em diversas áreas, especialmente no ensino nos cursos de graduação de turismo, no desenvolvimento de tecnologias de informação e comunicação e no desenvolvimento de serviços no mercado turístico. No campo acadêmico, ele tem levado a uma redefinição conceitual e teórica do turismo, ampliando as fronteiras do que é considerado uma experiência turística. Tradicionalmente, o turismo era compreendido como a prática de deslocar-se fisicamente para destinos, mas com o avanço das tecnologias de realidade virtual e aumentada, surgem novas formas de vivenciar e explorar paisagens e atrativos turísticos. Essa mudança exige que os estudos e pesquisas acadêmicos repensem a definição de turismo, incorporando experiências imersivas que não envolvem o deslocamento físico do turista. O turismo virtual redefine e complexifica a experiência educativa, a experiência de entretenimento, a experiência estética e a autenticidade no turismo. Uma vez que o turista pode explorar ambientes de maneira digital e interativa, sem estar fisicamente no local, mas ainda assim sentindo-se *parte* do espaço e da cultura visitadas.

No que diz respeito às tecnologias de informação e comunicação, a inovação se dá principalmente no desenvolvimento de aplicativos e dispositivos especializados (Realidade Virtual [RV], Realidade Aumentada [RA], Simulações, Jogos Educativos, Plataformas de Aprendizado Online, Ferramentas de Colaboração, Tecnologias de Geo-Localização, Ferramentas de Análise de Dados, Tecnologias de Imersão e Ferramentas de Criação de Conteúdo) que permitem uma imersão profunda e realista nas experiências turísticas digitais. O uso desses dispositivos possibilita uma sensação mais intensa de presença nos ambientes virtuais, o que pode transformar a maneira como as pessoas experimentam e consomem o turismo. O desenvolvimento de plataformas que utilizam realidade virtual e realidade aumentada torna o turismo acessível de uma maneira nova, oferecendo, por exemplo, visitas virtuais a museus, parques naturais e cidades históricas em um formato imersivo, mas o deslocamento físico. Isso democratiza o acesso as experiências turísticas (educativa, estética, entretenimento, autenticidade), tornando-o mais inclusivo, ao permitir que pessoas com limitações de mobilidade ou com restrições financeiras possam "viajar" para locais de interesse global.

Além dos impactos já mencionados na universidade e na tecnologia, o turismo virtual está moldando diversas outras áreas de maneira profunda. No público, o turismo virtual oferece uma ampliação e diversificação consideráveis no acesso e nas opções de viagem. Ele permite que pessoas que, por qualquer motivo, não podem realizar viagens físicas – seja por questões financeiras, limitações de saúde, falta de tempo ou até pela distância geográfica – possam explorar o mundo de forma digital. Isso expande o conceito de "visitantes", pois agora qualquer pessoa, independentemente de sua localização ou situação, pode acessar experiências turísticas. O turismo virtual também possibilita a criação de experiências altamente personalizadas, como tours temáticos ou interativos, aumentando o engajamento do público e permitindo que se explorem diversos destinos de forma mais acessível e inclusiva.

O turismo virtual enfatiza o consumo de experiências imateriais, em que a interação é mediada por tecnologias digitais. Em ambientes virtuais, os turistas têm um papel mais ativo,

moldando a oferta de serviços de acordo com suas preferências e necessidades. Com o avanço do turismo virtual, surge a questão sobre seu impacto na forma como o turismo é entendido e praticado. Essa modalidade não é apenas uma extensão do turismo convencional, mas uma transformação que desafia paradigmas tradicionais. Ao alterar a definição da experiência turística, inaugurar novos modos de interação e criar perfis inéditos de turistas, o turismo virtual estabelece uma nova maneira de vivenciar o mundo.

O debate sobre a autenticidade das experiências no turismo virtual tem impulsionado estudos na antropologia, na sociologia e no marketing, redefinindo o valor da experiência turística (educativa, estética, entretenimento, autenticidade) em contextos digitais. O turismo virtual torna as experiências turísticas mais inclusivas, acessíveis e diversificadas para o público, promovendo acessibilidade onde as pessoas com limitações financeiras, físicas ou logísticas podem explorar destinos e atrativos em qualquer cidade do mundo.

A interatividade nos tours virtuais permite ao público aprender mais profundamente sobre destinos e culturas, personalizando suas experiências e aumentando o engajamento.

A demanda por experiências turísticas virtuais tem incentivado a inovação tecnológica, resultando em dispositivos mais acessíveis e interativos, como equipamentos de realidade virtual que oferecem interfaces intuitivas e imersivas, transformando a maneira como os usuários experimentam o turismo. O desenvolvimento de aplicativos específicos para turismo virtual tem crescido, como tours interativos em museus e visitas a patrimônios naturais em alta definição. Além disso, a combinação de realidade virtual com Inteligência Artificial (IA) possibilita a customização e personalização das experiências turísticas. Com base em dados de preferências dos usuários, essas tecnologias oferecem recomendações de destinos e atividades específicas, elevando os níveis de satisfação e engajamento.

No mercado de serviços, as inovações tecnológicas trazem novas oportunidades para empresas do setor turístico, como hotéis, agências de viagens e atrações turísticas, que podem criar versões digitais de seus produtos e serviços. Isso inclui desde a oferta de experiências imersivas, como uma visita virtual a um museu ou à natureza, até o desenvolvimento de pacotes turísticos que combinam o físico e o digital, onde uma pessoa pode *viajar* para um destino virtualmente e, em seguida, planejar uma visita física real. A virtualização de experiências também permite que os operadores turísticos testem novas ofertas ou destinos sem grandes investimentos iniciais em infraestrutura, o que pode ser uma maneira de atrair turistas reais.

O Turismo Virtual também ajuda a diversificar o público do setor turístico. A utilização de elementos de gamificação e interação em plataformas de turismo virtual atrai um público jovem e adepto de novas tecnologias, ampliando o alcance do setor e proporcionando experiências inovadoras. Emerge um novo tipo de turista: conectado, tecnológico e mais consciente. Jovens familiarizados com tecnologia, gamers e consumidores interessados em práticas sustentáveis são especialmente atraídos por essa nova experiência.

O crescimento da economia criativa impulsionado pelo turismo virtual gera empregos e fomenta parcerias entre o setor turístico e o tecnológico. A criação de conteúdos e cenários virtuais abre espaço para profissionais de diversas áreas, como design, programação e narração de histórias, ampliando o impacto econômico do turismo digital.

Com isso, o surgimento do turismo virtual também viabilizou a criação de novos serviços no mercado, como visitas guiadas virtuais, eventos culturais imersivos e experiências interativas que simulam viagens. Essas ofertas permitem que os consumidores explorem destinos de forma acessível e segura, sem a necessidade de deslocamento físico. Os sistemas criados integram diversos serviços turísticos, como reservas de hotéis, compra de ingressos e planejamento de viagens, promovendo praticidade e conectividade.

Na universidade o turismo virtual desafia as definições tradicionais de ensino do turismo, convencionalmente baseadas em aulas expositivas e visitas e interação direta nos atrativos e destinos turísticos. Essa nova modalidade exige um reposicionamento teórico que leve em consideração muitos aspectos. O ensino do turismo virtual em cursos de graduação de turismo mediado por tecnologias de informação e comunicação atribui aos estudantes um papel ativo na construção da aprendizagem. Através do uso dessas tecnologias, os estudantes tem autonomia para aprender e explorar várias ferramentas tecnológicas (Realidade Virtual (RV), Realidade Aumentada (RA), Simulações, Jogos Educativos, Plataformas de Aprendizado Online, Ferramentas de Colaboração, Tecnologias de Geo-Localização, Ferramentas de Análise de Dados, Tecnologias de Imersão e Ferramentas de Criação de Conteúdo). Elas permitem a visualização em várias escalas de bairros, ruas, paisagens urbanas e naturais, museus e equipamentos culturais além dos serviços turísticos como transporte, hospedagem e alimentação. Essas ferramentas tecnológicas possibilitam aos discentes construir roteiros de viagem e roteiros de visita (onde exploram, comparam e personalizam esses diferentes roteiros).

Os alunos aprendem a fazer um planejamento integral das viagens com informações sobre a cotação dos custos, a mensuração das distâncias e do tempo entre os pontos de interesse, sobre a acessibilidade para os visitantes, as avaliações dos visitantes sobre os atrativos turísticos, os meios de hospedagem, os serviços de alimentação, os serviços de transporte público e privado.

As tecnologias de informação e comunicação geram oportunidades para explorar destinos remotos, áreas protegidas ou locais com risco elevado de acidentes sem as limitações impostas pela distância ou dificuldade de acesso. Isso democratiza o conhecimento e a vivência desses espaços para públicos ao redor do mundo. As tecnologias de informação e comunicação do Turismo Virtual possibilitam um aprendizado imersivo sobre culturas, patrimônios e histórias. Os cursos das universidades podem utilizá-las para oferecer vivências educacionais que transcendem os limites da sala de aula, aproximando os alunos de contextos culturais distantes no tempo e no espaço.

As tecnologias de informação e comunicação empregadas na graduação em turismo facilitam e inspiram a aprendizagem criativa dos estudantes, a avaliação crítica de roteiros de viagem e de visita e a promoção da cidadania.

TEACHING TOURISM IN THE AGE OF CHATGPT: ACTIVE METHODOLOGIES AND SOLUTIONS FOR REAL-WORLD CHALLENGES

Simone de Lira Almeida⁵¹

Universidade Federal de Pernambuco – UFPE
Brasil

Viviane Santos Salazar⁵²

Universidade Federal de Pernambuco – UFPE
Brasil

Alexandre César Batista da Silva⁵³

Universidade Federal de Pernambuco – UFPE
Brasil

Luís Henrique de Souza⁵⁴

Universidade Federal de Pernambuco – UFPE
Brasil

⁵¹ Associate Professor II at the Department of Hospitality and Tourism at the Federal University of Pernambuco (UFPE), holding a Ph.D. and a Masters degree in Administration, with a Bachelor's degree in Hospitality and a specialization in Strategic Management in Distance Education (EAD). She has 18 years of experience in teaching, research, and extension, leading the Check-in Research Group and coordinating Entrepreneurship and Incubation at UFPE. She stands out in the Innovation and Creativity course, which applies the Projeto methodology to develop innovative projects. She works in innovation and entrepreneurship, mentoring startups and projects. Her focus includes hospitality, gastronomy, culture, entrepreneurship, and innovation, as well as the development of distance education (EAD) and innovative pedagogical methodologies.

⁵² Associate Professor I at the Department of Hospitality and Tourism at the Federal University of Pernambuco (UFPE). Holds a Bachelor's degree in Hospitality from UFPE (2000) and a Bachelor's degree in Business Administration from the University of Pernambuco (UPE) (2003). Also holds a Master's and Ph.D. in Administration from UFPE. Her research interests include Business Strategy, Services Marketing, and Consumer Behavior, with a focus on hospitality businesses.

⁵³ Alexandre César Batista da Silva is an associate professor at the Department of Hospitality and Tourism at the Federal University of Pernambuco (Brazil). He holds a PhD in Accounting from the Federal University of Pernambuco (Brazil) and a Master's degree in Accounting from the University of Brasília (Brazil). Currently, he serves as the coordinator of the Bachelor's Degree in Hospitality at the Federal University of Pernambuco (Brazil). His main research fields include managerial and financial aspects of tourism and hospitality enterprises, as well as public finance in tourism.

⁵⁴ Luís Henrique de Souza is associate professor at the Department of Hospitality and Tourism at the Federal University of Pernambuco (Brazil). He holds a PhD and a Master degrees in Tourism from Aveiro University (Portugal) He also acted as coordinator of Hospitality course at the Federal University of Pernambuco and coordinator of Tourism course at Federal University of Sergipe (Brazil) and as Tourism analyst at the Tourism Excellence Centre at the University of Brasília (Brazil). The main research fields are: experience tourist, sharing economy in tourism, consumer behavior in tourism, tourism and sustainability, urban tourism. He is member of the Research Unit on Governance, Competitiveness and Public Policies (GOVCOPP) working within the group of Tourism and Development.

Abstract

The use of active methodologies in higher education has been increasing, yielding more fruitful results in training professionals who are critical, creative, and skilled in problem-solving. The Tourism and Hospitality programs at the Federal University of Pernambuco offer teaching and learning models in which students play a leading role in constructing knowledge. The "Projetão" model, described in this article, adopts the perspective of training students in designing innovative projects connected to the market and society. "Projetão" has been established as a teaching method applied in various fields of knowledge, including Tourism and Hospitality. This study aims to present the "Projetão" model as a methodological teaching approach focused on solving real-world problems. The results show that the "Projetão" model strengthens multidisciplinary learning and the practical application of innovative concepts, establishing an essential tool for teaching entrepreneurship in Tourism and Hospitality.

Keywords

Active methodology, Educational technology, Tourism, Hospitality, "Projetão"

The incorporation of new technologies in education is essential to improving learning, making it more dynamic, interactive, and accessible. Tools such as digital platforms, artificial intelligence, augmented reality, and gamification allow for personalized learning, catering to different student profiles and fostering engagement. Additionally, technology facilitates access to up-to-date content, promotes student autonomy, and enhances performance assessment. Thus, innovation in education through technology contributes to more efficient learning, aligned with the demands and challenges of the modern world.

According to Escueta et al. (2020), educational technology (ed-tech) refers to any application of Information and Communication Technology (ICT) aimed at improving learning in education. The need for digital technologies in education arises from observed behavioral changes among students, who increasingly identify as "digital natives" (Perrenoud, 1999), meaning they are familiar with using digital technologies in their daily lives. However, in the educational context, technology should not be limited to digital media consumption. Ed-tech should provide an environment where students actively engage with technology by interacting, researching, problem-solving, interpreting, constructing, and adding knowledge (Freitas, & Almeida, 2012).

Higher education programs in Tourism face this challenge as they take on the responsibility of training critical-thinking professionals capable of solving problems and delivering innovative tourism products and services. In this regard, students in Tourism and Hospitality programs at the Federal University of Pernambuco (UFPE) have the opportunity to participate in courses focused on problem-solving and innovation in delivering value to society through products and services. Tourism is a very dynamic field, that imposes challenges to professionals that should develop different skills such as holistic vision, problems solving capacity, culture differentiation ability, leadership and team management, along with critical thinking and decision-making skills, are aspects that professionals acting in the fields of Tourism and Hospitality should develop. These topics can be combined with project management improving the professional performance. Last but not least, to face the dynamic features of the Tourism and Hospitality fields, adaptability and constant learning, basic digital skills, and empathy and interpersonal relationship skills are well coming (Pire, 2025).

Passive teaching methodologies, commonly used in higher education, may not provide the necessary prerequisites for Tourism and Hospitality students to overcome current professional challenges. In this sense, according to Freitas and Almeida (2012), higher education institutions are required to offer subjects that encourage greater student involvement in the teaching and learning process. ICT can be an ally to these institutions, since the use of technologies in education can be a motivational factor for students since they are quite familiar with the use of technology in their daily lives. In this context, and being attentive to challenging professional scenarios, the Department of Hospitality and Tourism at the Federal University of Pernambuco make efforts to offer classes using active methodologies, providing a more engaging educational environment. The mentioned Department launched in 2019 the Creativity Laboratory which students can develop their

skills in solving problems and project development. Furthermore, the Department gives support for their students to enroll in disciplines adopting the “Projetão” methodology.

“Projetão” is an innovation framework created in 2002 at the UFPE Center for Informatics (CIn) by professors Geber Ramalho, Cristiano Araújo, Luciano Meira, and André Neves. Developed to train students in designing innovative projects connected to the market and society, Projetão has become an established teaching method, applied across various courses and institutions. Over the years, the methodology has evolved, incorporating multidisciplinary and innovation principles such as Lean Startup, Design Thinking, and User-Centered Design. Over time, it has transitioned from being just a course to becoming a practical approach for developing innovative and sustainable projects.

“Projetão” is based on six fundamental principles:

- Evidence-based – Innovation stems from real, relevant problems, not just good ideas.
- Altruistic listening – Involves empathy and understanding of user needs.
- This is not a simulation – Projects must be tested in the real world to validate their impact.
- Value and meaning creation – The focus should be on what truly matters to users, not just the designer's vision.
- Collaboration and active learning – Multidisciplinary teams and constant exchanges are essential.
- Imperfect execution of the unknown – Innovation is a continuous process of testing and improvement.

The “Projetão” methodology is structured into nine activities, called "Quests," guiding the project's development from the initial observation phase to the final presentation:

1. Scenario & People – Direct observation of activities and challenges faced by different user profiles. This phase helps identify real problems, connecting the project to tangible needs.
2. Theme & Opportunities – Based on previous observations, participants define a thematic area to guide the project, focusing on real innovation opportunities.
3. Problem & Competitors – Selection of a specific problem to solve and mapping of existing solutions to understand competition and identify market gaps.
4. Unique Value Proposition – Definition of the project's key differentiators, highlighting the core values that make it unique compared to alternatives.
5. Innovation Strategy – Planning of resources and minimal necessary functions to make the product or service viable, aiming to deliver maximum value with minimal effort.
6. Business Model & ARM (Acquisition, Retention, and Monetization) – Structuring a sustainable business model, analyzing costs, resources, customer acquisition strategies, and financial viability.
7. Prototyping & Usability – Development of low- and medium-fidelity prototypes to test the project with users and validate usability, allowing for adjustments before final development.

8. Project Plan – Organizing the production process to ensure the solution can be built and tested within the established timeframe, preparing it for the final stage.
9. Demo Day Preparation – Planning the final project presentation at innovation fairs and investor pitches.

“Projetão” has already impacted more than 1,624 students and generated 153 innovative projects, strengthening multidisciplinary learning and the practical application of innovation concepts. Its methodology has been widely replicated and adopted in various contexts, establishing itself as an essential tool for education and the practice of entrepreneurship and innovation in Brazil.

References

- Escueta, M., Andre J., Philip O., & Vincent Q. (2020). Upgrading education with technology: Insights from experimental research. *Journal of Economic Literature*, 58(4), 897-996.
- Freitas, M., & Almeida, M. (2012). *Docentes e discentes na sociedade da informação*. Rio de Janeiro: Brasport.
- Perrenoud, P. (2000). *Dez novas competências para ensinar*. São Paulo: Artmed.
- Pires, J. (2025). Você precisa dessas habilidades para trabalhar no turismo. Retrieved from <https://piresiturismo.com.br/voce-precisa-dessas-habilidades-para-trabalhar-no-turismo/>.

O VIDEOGAME COMO INSTRUMENTO DIDÁTICO- PEDAGÓGICO NO TURISMO

139

Éder Danilo Bezerra⁵⁵

Universidade Federal de Alagoas, Unidade Educacional Penedo (UFAL/Penedo)
Brasil

⁵⁵ Professor do Magistério Superior da Universidade Federal de Alagoas (UFAL), lotado na Unidade Educacional Penedo. Doutor em Administração de Empresas pela Fundação Getúlio Vargas, Escola de Administração de Empresas de São Paulo – FGV/EAESP (2015-2019). Mestre em Administração pela Universidade Federal de Sergipe – PROPADM/UFS (2011-2013), e Bacharel em Turismo pela Faculdade Sete de Setembro – FASETE (2005-2009). Na UFAL, atua como docente na Área de Estudo de Ciências Sociais Aplicadas, lecionando nos cursos de Graduação em Turismo, Engenharia de Pesca e Sistemas de Informação. É membro do núcleo docente permanente do Mestrado em Ciências Ambientais (PPGCiAmb). Atualmente, exerce funções administrativas e representativas, incluindo Vice-Coordenador do Curso de Graduação em Turismo da UFAL (Biênio 2023-2025), Representante Titular da UFAL no Conselho Municipal de Turismo do Município de Penedo (Biênios 2023/2024 e 2024/2025), e Membro Titular do Núcleo Docente Estruturante (NDE) do Curso de Graduação em Turismo (Triênio 2024-2027).

Resumo

O uso de videogames como instrumento didático-pedagógico no ensino do turismo representa uma abordagem inovadora que alia interatividade, imersão e gamificação para potencializar o aprendizado em sala de aula. Jogos como *GeoGuessr*, *Assassin's Creed*, *Red Dead Redemption* e *Grand Theft Auto* permitem que os jogadores/estudantes explorem virtualmente diferentes destinos turísticos, estimulando reflexões sobre aspectos históricos, geográficos, culturais e ambientais, em mundos abertos e ambientes interativos. Para estruturar o uso dos videogames no ensino do turismo, propõe-se um framework baseado em três pilares fundamentais, a saber: (1) Interatividade e Imersão, que destaca como os jogos oferecem ambientes virtuais detalhados, com paisagens e cenários realistas, facilitando a compreensão do espaço turístico; (2) Reflexão Crítica, que explora como os jogos abordam contextos socioeconômicos e políticos, propiciando o debate sobre o turismo e seus impactos em diferentes contextos; e (3) Gamificação, enfatizando a importância de desafios, missões e recompensas como elementos de engajamento capazes de tornar o aprendizado mais envolvente. Apesar desse potencial educacional, o uso do videogame como instrumento didático-pedagógico no ensino do turismo ainda enfrenta desafios como a necessidade de infraestrutura tecnológica, capacitação docente, e os custos dos equipamentos e jogos necessários à sua implementação. Ainda assim, à medida que a tecnologia avança e se torna mais acessível, espera-se que os videogames se consolidem como ferramentas para o ensino do turismo, proporcionando experiências imersivas que transcendam as metodologias de ensino tradicionais.

Palavras-chave

Turismo, Videogame, Tecnologia, Educação, Aprendizagem

Abstract

The use of videogames as a didactic-pedagogical tool in tourism education represents an innovative approach that combines interactivity, immersion, and gamification to enhance classroom learning. Games such as *GeoGuessr*, *Assassin's Creed*, *Red Dead Redemption*, and *Grand Theft Auto* allow players/students to virtually explore different tourist destinations, encouraging reflections on historical, geographical, cultural, and environmental aspects in open-world and interactive environments. To structure the use of videogames in tourism education, a framework based on three fundamental pillars is proposed, namely: (1) Interactivity and Immersion, highlighting how games provide detailed virtual environments with realistic landscapes and settings, facilitating the understanding of tourist spaces; (2) Critical Reflection, exploring how games address socioeconomic and political contexts, fostering discussions on tourism and its impacts in different scenarios; and (3) Gamification, emphasizing the importance of challenges, missions, and rewards as engagement elements that make learning more compelling. Despite this educational potential, the use of videogames as a didactic-pedagogical tool in tourism education still faces challenges, such as the need for appropriate technological infrastructure, teacher training, and the costs of necessary equipment and games. Nevertheless, as technology advances and becomes more accessible, videogames are expected to establish themselves as valuable tools for tourism education, providing immersive experiences that go beyond traditional teaching methodologies.

Keywords

Tourism, Videogame, Technology, Education, Learning

No mundo pós-moderno e hiperconectado, o turismo tem passado por um processo de transformação ou “reengenharia”, no qual as novas tecnologias atuam como motores dessas mudanças (Beni, 2020; Bezerra, Luft, & Dacorso, 2012; Buhalis, 1998; Buhalis, & Law, 2008; Hjalager, 2010; Molina, 2006).

A partir desse novo paradigma, temos uma reestruturação que engloba diversas áreas do turismo, a saber: (1) digitalização, automação e transformação digital em modelos de negócios (Cheng *et al.*, 2023; Pencarelli, 2020; Stankov, & Gretzel, 2020); (2) uso de *big data* para oferecer uma experiência turística personalizada (Del Vecchio, Secundo, & Passiante, 2018; Yang, Zhang, & Feng, 2024); (3) tecnologias de realidade aumentada (AR) e realidade virtual (VR) como novas formas de explorar atrativos turísticos (Bretos, Ibáñez-Sánchez, & Orús, 2024; Tussyadiah *et al.*, 2018); (4) alinhamento entre novas tecnologias e turismo para promover a sustentabilidade e os destinos turísticos inteligentes (Bastidas-Manzano *et al.*, 2021; Buhalis, & Leung, 2018); e (5) o uso de jogos e gamificação como ferramentas de marketing no turismo (Bowman *et al.*, 2024; Xu *et al.*, 2017).

Esta última tendência de uso de jogos e gamificação, além de ser aplicada no marketing, também pode ser utilizada no campo educacional, particularmente no turismo. Isso porque os jogos de videogame são capazes de criar um ambiente virtual interativo, no qual os jogadores podem explorar os cenários de maneira lúdica, estimulando-os a refletir sobre aspectos culturais, históricos e ambientais que compõem o produto turístico (Dubois, & Gibbs, 2018; Van Nuenen, & Scarles, 2018).

De fato, existem uma série de jogos que tem sido utilizados como instrumentos para o ensino do turismo. Desde jogos mais simples como *GeoGuessr*, até títulos mais elaborados de mundo aberto como as séries *Assassins' Creed*, *Red Dead Redemption* e *Grand Theft Auto*, que permitem uma exploração mais imersiva de ambientes históricos, culturais e urbanos.

GeoGuessr é um jogo que propõe levar o jogador a explorar o mundo e adivinhar sua localização por meio de pistas e imagens do *Google Street View* (Anh, & Ha, 2022; Ting *et al.* 2025). Colocado em um local aleatório, o jogador deve usar suas habilidades de observação para identificar a cidade ou país em que se encontra, levando em consideração elementos culturais, naturais e paisagísticos da região. Dessa forma, o *GeoGuessr* estimula o estudante a aprender sobre geografia e diversidade, além de despertar o interesse por novos destinos turísticos. Então o jogo pode ser utilizado como uma ferramenta educacional para ensinar geografia, diversidade cultural, e estimular o interesse do estudante por novas localidades.

Já a série *Assassin's Creed* tem sido continuamente ambientada em cidades e épocas históricas diversas, como Jerusalém, Acre e Damasco (*Assassin's Creed*), Roma e Itália Renascentista (*Assassin's Creed II*), Constantinopla (*Assassin's Creed: Revelations*), Caribe (*Assassin's Creed IV: Black Flag*), Paris (*Assassin's Creed: Unity*), Londres (*Assassin's Creed: Syndicate*), Egito Antigo (*Assassin's Creed: Origins*), Grécia Antiga (*Assassin's Creed: Odyssey*), Grã-Bretanha e Irlanda (*Assassin's Creed: Valhalla*), Iraque (*Assassin's Creed: Mirage*), e, mais recentemente, Japão (*Assassin's Creed: Shadows*).

Trata-se de uma série de jogos que tem sido objeto de estudo em pesquisas que relacionam videogames e turismo (Bowman *et al.*, 2024; Schwarz, 2023; Van Nuenen, 2017). Isso porque, ao reproduzir tais localidades em ambientes virtuais imersivos e realistas, os jogos oferecem a oportunidade de explorar esses lugares, ajudando a despertar no jogador um interesse por elementos geográficos, culturais e sociais, que o aproximam do destino turístico e possíveis experiências turísticas reais. Não por acaso, versões mais recentes da franquia *Assassin's Creed* vêm acompanhadas do “*Discovery Tour*”, um conteúdo adicional que permite ao jogador explorar destinos turísticos famosos (Emboava, 2021; Politopoulos *et al.* 2019). Esses destinos são ainda divulgados por *streamers* de *games* e influenciadores digitais nas mídias sociais, como parte de uma estratégia de promoção de destinos turísticos em parceria com organizações de turismo dos países representados, com a colaboração da Ubisoft, desenvolvedora da série. Dessa maneira, *Assassin's Creed* pode servir para ensinar os estudantes sobre história, geografia, arquitetura, patrimônio cultural, além de estimular o pensamento crítico e reflexivo, pois a série é ambientada em contextos de intrincada política, guerras, e baseada em eventos históricos reais.

Finalmente, a série *Red Dead Redemption*, e especialmente sua prequela *Red Dead Redemption 2*, oferece um vasto mundo aberto no qual o jogador pode interagir com diversos NPCs [personagens não jogáveis], participar de missões ambientadas nos Estados Unidos do final do século XIX e explorar elementos da fauna (caçadas e pescarias) e da flora (coleta de plantas), em paisagens inspiradas em diversas paisagens reais do país, como os Montes Apalaches, pântanos da Louisiana, Mississippi, Alabama e Flórida, e as áreas mais frias do Meio-Oeste Americano, e as regiões áridas e desérticas inspiradas no Texas, Novo México, e Arizona. A série *Red Dead* tem sido amplamente utilizada no contexto acadêmico para ensinar história e educação ambiental (Crowley *et al.*, 2021; Locke, & Mackay, 2021, Olsson, 2023). Também a Rockstar Games, criadora de *Red Dead*, é responsável pela série *Grand Theft Auto*, que é ambientada em versões fictícias de grandes cidades dos Estados Unidos, como Liberty City (Nova York), Vice City (Miami), Los Santos (Los Angeles), San Fierro (São Francisco), Las Venturas (Las Vegas), e Alderney (Nova Jersey), e, portanto, pode ser útil para discutir questões pertinentes ao planejamento e ordenamento urbano de grandes metrópoles, impactos do turismo, como criminalidade e mobilidade urbana, além da relação entre os espaços urbanos e o comportamento dos turistas em tais localidades, servindo de base para discutir aspectos paisagísticos inerentes ao turismo, já que são fortemente baseadas em cidades reais.

Para utilizar jogos como ferramentas educativas no ensino do turismo, propõe-se um *framework* baseado em três pilares:

1. **Interatividade e Imersão:** ao utilizar um ambiente virtual interativo, os estudantes/jogadores poderão “mergulhar” em diferentes paisagens, que são a essência do *lugar*, objeto de estudo do turismo enquanto ciência, elicitando uma série de respostas cognitivas que estimulam o aprendizado sobre as características históricas, geográficas, culturais e ambientais de um destino turístico, criando uma conexão mais profunda com o espaço explorado;
2. **Reflexão Crítica:** tais ambientes virtuais são ainda dotados de “alma”, visto que

elementos geográficos e ambientais estão também associados a contextos políticos que, mesmo sendo virtuais, são baseados em localidades e possíveis destinos turísticos reais, permitindo uma discussão mais crítica sobre quais outros elementos compõem as dinâmicas sociais dos espaços, e como estes se relacionam com aspectos e desafios econômicos, culturais, e naturais para a sustentabilidade de destinos turísticos; e

3. **Gamificação:** a incorporação de elementos de gamificação nos jogos, como recompensas, pontos e conquistas, estimula os jogadores/estudantes a se envolverem ativamente na interação com os conteúdos virtuais, visto que os elementos típicos dos jogos de mundo aberto, como desafios e progressão contínua, oferecem ao jogador liberdade de exploração e incentivam o engajamento com os ambientes virtuais, tornando o aprendizado mais dinâmico e interativo.

Como principais desafios para o uso efetivo do videogame em sala de aula para o ensino do turismo, podem-se destacar a falta de infraestrutura tecnológica apropriada, a carência de treinamento de professores para integrar tais ferramentas didático-pedagógicas, a resistência à mudança, tanto por parte de professores quanto de estudantes, além do custo elevado para a aquisição dos dispositivos e dos jogos.

Referências

- Anh, T. N., & Ha, N. T. (2022). Digitalization in early childhood education in vietnam. *International Journal of Social Sciences*, 5(4), 341-346.
- Bastidas-Manzano, A. B., Sánchez-Fernández, J., & Casado-Aranda, L. A. (2021). The past, present, and future of smart tourism destinations: A bibliometric analysis. *Journal of Hospitality & Tourism Research*, 45(3), 529-552.
- Beni, M. C. (2020). Turismo e Covid-19: Algumas reflexões/tourism and COVID-19: Some reflections. *Rosa dos Ventos*, 12(3), 1-23.
- Bezerra, É. D., Luft, M. C. M. S., & Dacorso, A. L. R. (2012). El turismo en la sociedad de la información: Un abordaje conceptual sobre el “pos-turismo”. *Estudios y Perspectivas en Turismo*, 21(5), 1262-1280.
- Bowman, N. D., Vandewalle, A., Daneels, R., Lee, Y., & Chen, S. (2024). Animating a plausible past: perceived realism and sense of place influence entertainment of and tourism intentions from historical video games. *Games and Culture*, 19(3), 286-308.
- Bretos, M. A., Ibáñez-Sánchez, S., & Orús, C. (2024). Applying virtual reality and augmented reality to the tourism experience: a comparative literature review. *Spanish Journal of Marketing*, 28(3), 287-309.
- Buhalis, D. (1998). Strategic use of information technologies in the tourism industry. *Tourism Management*, 19(5), 409-421.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. *Tourism Management*, 29(4), 609-623.

- Buhalis, D., & Leung, R. (2018). Smart hospitality—Interconnectivity and interoperability towards an ecosystem. *International Journal of Hospitality Management*, 71, 41-50.
- Cheng, X., Xue, T., Yang, B., & Ma, B. (2023). A digital transformation approach in hospitality and tourism research. *International Journal of Contemporary Hospitality Management*, 35(8), 2944-2967.
- Crowley, E. J., Silk, M. J., & Crowley, S. L. (2021). The educational value of virtual ecologies in Red Dead Redemption 2. *People and Nature*, 3(6), 1229-1243.
- Del Vecchio, P., Secundo, G., & Passiante, G. (2018). Analyzing Big Data through the lens of customer knowledge management: Evidence from a set of regional tourism experiences. *Kybernetes*, 47(7), 1348-1362.
- Dubois, L. E., & Gibbs, C. (2018). Video game-induced tourism: a new frontier for destination marketers. *Tourism Review*, 73(2), 186-198.
- Emboava, V. (2021). *Assassin's Creed Valhalla ajuda impulsionar o turismo na Irlanda*. MeuPlayStation. Retirado de <https://meups.com.br/noticias/assassins-creed-valhalla-turismo-irlanda/>.
- Hjalager, A. M. (2010). A review of innovation research in tourism. *Tourism Management*, 31(1), 1-12.
- Locke, H. J., & Mackay, T. A. (2021). You are a true progressive: red dead redemption 2 and the depiction and reception of progressive era politics. *The Journal of the Gilded Age and Progressive Era*, 20(1), 174-193.
- Molina, S. (2006). *El posturismo: Turismo y posmodernidad*. México, D. F.: Trillas.
- Olsson, T. (2023). Teaching history with video games. *The American Historical Review*, 128(4), 1755-1775.
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology & Tourism*, 22(3), 455-476.
- Politopoulos, A., Mol, A. A., Boom, K. H., & Ariese, C. E. (2019). History is our playground: Action and authenticity in assassin's creed: Odyssey. *Advances in Archaeological Practice*, 7(3), 317-323.
- Schwarz, A. (2023). Discovering the past as a virtual foreign country: Assassin's creed as historical tourism. *Games and Culture*.
- Stankov, U., & Gretzel, U. (2020). Tourism 4.0 technologies and tourist experiences: A human-centered design perspective. *Information Technology & Tourism*, 22(3), 477-488.
- Ting, H., Hwa (Jacky) Cheah, J., Tan, K., Tham, A., & Leong, Q. L. (2025). Mobile gamification's impact on tourism visit intention. *International Journal of Tourism Research*, 27(1), e70002.
- Tussyadiah, I. P., Wang, D., Jung, T. H., & Tom Dieck, M. C. (2018). Virtual reality, presence, and attitude change: Empirical evidence from tourism. *Tourism Management*, 66, 140-154.
- Van Nuenen, T. (2017). Touring the Animus: Assassin's Creed and chronotopical movement. *Loading*, 10(17), 22-39.
- Van Nuenen, T., & Scarles, C. (2021). Advancements in technology and digital media in tourism. *Tourist Studies*, 21(1), 119-132.

- Xu, F., Buhalis, D., & Weber, J. (2017). Serious games and the gamification of tourism. *Tourism management*, 60, 244-256.
- Yang, X., Zhang, L., & Feng, Z. (2024). Personalized tourism recommendations and the E-tourism user experience. *Journal of Travel Research*, 63(5), 1183-1200.

TECNOLOGIAS E MUSEUS INTERATIVOS PARA EDUCAÇÃO PATRIMONIAL E TURISMO

Fabiana de Oliveira Lima⁵⁶

Universidade Federal de Alagoas
Brasil

147

⁵⁶ Graduada em Turismo e Mestre em Antropologia pela Universidade Federal de Pernambuco. Doutora em Ciências Sociais – Antropologia pela Universidade Fernando Pessoa, Porto, Portugal. Professora Associada da Universidade Federal de Alagoas no curso de graduação em Turismo.

Abstract

Museums are traditionally spaces for safeguarding memories, education, and leisure. With the help of technology and its pathways for interaction, we expand the possibility of deepening their use as a tool for heritage education. The aim of this work is to discuss ways to utilize technology in museums, specifically in the city of Penedo, in the state of Alagoas, Brazil's Northeast region, which has three spaces with historical collections supported by municipal management and private initiative: the Museu do Rio, the Biblioteca Casa do Penedo, and the Museu do Paço Imperial. The relationship between heritage education and museums has been strengthened through the dynamization of technological tools. Technology is essential for encouraging new educational and entertainment uses, as it allows for greater interaction with its audience, whether they are citizens, visitors, or tourists. To this end, a characterization of the spaces, their structures and collections, as well as their operating hours and visitation frequency, will be provided. Following that, exploratory research will be conducted on how technology could contribute to heritage education through the mentioned facilities.

Keywords

Museums, Heritage education, Technology, Penedo

Os museus são espaços tradicionalmente para salvaguarda de memórias, educação e lazer. Com o auxílio da tecnologia e seus caminhos de interação, ampliamos a possibilidade de aprofundamento de seu uso como ferramenta de educação patrimonial. O uso de tecnologias da informação e comunicação nesses espaços tem sido cada vez mais explorado e nesse sentido, estimulando públicos diversos, mas principalmente estudantes, a conhecerem bens culturais e patrimônio em geral de modo dinâmico e conectado com o cotidiano. Bem por isso, o objetivo desse trabalho é discutir sobre caminhos de utilização da tecnologia para museus, mais especificamente, na cidade de Penedo, estado de Alagoas, Nordeste brasileiro, que dispõe de três espaços com acervo histórico disponibilizados com apoio da gestão municipal e iniciativa privada.

A relação entre educação patrimonial e museus tem se estreitado a partir da dinamização de ferramentas tecnológicas. A tecnologia se apresenta como essencial para o incentivo de novos usos, educativos e de entretenimento, a medida que possibilita maior interação com seu público, seja de cidadãos ou visitantes e turistas. A comunicação através de recursos como aplicativos, jogos, entre outros, tem sido cada vez mais utilizada como mediação entre o sujeito e a construção de pontes de conhecimento e pertencimento, em que o visitante deixa de ser apenas um expectador que não interage e passa a atuar junto.

Algumas opções de interação são ofertadas através do uso do smartphone do visitante, tecnologias de reprodução de áudio, vídeo, texto, simulações. Por exemplo, no Museu da Gente Sergipana, localizado na cidade de Aracaju, capital do estado de Sergipe, Nordeste brasileiro, na instalação “Seu Cordel” é possível o visitante gravar a leitura de um cordel e enviá-la para uma rede social de áudios e vídeos. Neste mesmo museu, na instalação “Nossos Trajes”, na frente de um espelho o visitante pode se ver vestido virtualmente com trajes típicos das manifestações populares do estado.

Essas vivências descritas servem de exemplo sobre como intervenções tecnológicas podem aproximar o público dos museus e seus conteúdos. Elaborar formas interativas de ofertar um acervo, principalmente quando não são expostas apenas peças, mas também bens imateriais, pode estimular a valorização da cultura, ao mesmo tempo em que gera maior aproximação e melhor apreensão de seus conteúdos.

Desse modo, a tecnologia se coloca como aliada da educação patrimonial. De acordo com Fernandez e Sainz (2021), entre os anos 2000 e 2019, as pesquisas que relacionam educação patrimonial e museus forma ampliadas e aprofundadas. Um dos conteúdos associados é a Tecnologia da Informação e Comunicação, mas ainda numa perspectiva de pré-visita virtual, através de páginas eletrônicas (sítios), vídeos e outros materiais disponibilizados através das redes. Por sua vez, Di Pietro (2018), destaca que o patrimônio é um recurso universal para o turismo e a implementação da tecnologia em espaços como museus pode reforçar as experiências dos visitantes, construir memórias e mesmo o senso de pertencimento, quando falamos de visitantes locais.

No âmbito do turismo cultural, a experiência de visita a museus, tem sido destacada como caminho de educação patrimonial (Gomes, 2015). Tal experiência quando explora de modo inovador as tecnologias, é um equipamento educativo e de entretenimento. Tolentino (2019), destaca que a educação patrimonial deve acontecer de modo dialógico, pois são

fundamentais para mediar a comunicação entre a comunidade e o bem patrimonial exposto. Sem esse diálogo, o patrimônio será apenas objeto de contemplação passiva.

Considerando que Penedo é um município situado às margens do Rio São Francisco, uma das principais bacias e cursos d'água do Brasil – reconhecido como rio da integração nacional, por sua relevância cultural, social e econômica. Além disso, Dispõe de um centro histórico de significativa importância, tombado pelo IPHAN em 1995, também pelo estado de Alagoas e pelo próprio município.

Atualmente, possui um território de 688,452 km², tem população estimada em 64 mil habitantes e densidade demográfica de 87,61 habitantes por quilômetro quadrado (IBGE, 2023a). Sobre a sua origem, existem duas principais hipóteses. A primeira está associada às expedições de Duarte Coelho Pereira, o primeiro donatário da Capitania de Pernambuco. A segunda está vinculada a seu filho, Duarte Coelho de Albuquerque, herdeiro da capitania, que conduziu expedições de reconhecimento na região, por volta de 1560 (IPHAN, 2023). Um outro fato histórico de grande relevância é a presença e permanência de negros malês/islâmicos (Duarte, 1958) no seu primeiro bairro, Santo Antônio, mais conhecido como Barro Vermelho, margeado pelo referido rio.

O município oferta à população local e visitantes equipamentos culturais que permitem o acesso à história e cultura do município, ainda que destacando a presença e domínios europeus. Dentre esses espaços, escolhemos para observação a Biblioteca Casa do Penedo, o Museu do Rio – acervo Casa do Penedo e o Museu do Paço Imperial. Todos os acervos foram recolhidos pela iniciativa privada, à princípio, mas estão em funcionamento com viabilização do poder público. Como observamos, a utilização da tecnologia da comunicação é dinâmica, desde um acervo digitalizado que nos permita a criação de pontos de acesso e jogos interativos, e trazemos uma reflexão sobre como elas podem contribuir para o melhor aproveitamento e conservação dos acervos. Tais ferramentas tecnológicas podem contribuir desde a identificação, descrição e gestão do acervo, até e principalmente, comunicando-se com o público de forma dialógica.

Para tanto, será feita a caracterização dos espaços, suas estruturas e acervos, além do período de funcionamento e frequência de visita. Na sequência, uma pesquisa exploratória sobre como a tecnologia poderia contribuir com a educação patrimonial através dos equipamentos em questão. Desse modo, esperamos estimular a dinamização e utilização dos acervos ofertados, viabilizando parcerias com as escolas locais e regionais, além de pesquisadores e o público em geral.

DESAFIOS PARA OS ESTUDOS EM TECNOLOGIA NO TURISMO: FORMAÇÃO TÉCNICA E SUPERIOR NO BRASIL

151

Juliana Medaglia⁵⁷

Universidade Federal do Paraná (UFPR)

Brasil

Sérgio Rodrigues Leal⁵⁸

Universidade Federal de Pernambuco (UFPE)

Brasil

Carlos Eduardo Silveira⁵⁹

Universidade Federal do Paraná (UFPR)

Brasil

⁵⁷ Doutora em Ciência da Informação (Universidade Federal de Minas Gerais, Brasil). Professora Associada do Departamento de Turismo e Permanente do Programa de Pós-graduação em Turismo da UFPR. Grupo de Pesquisa TEEM - Turismo, Educação, Emprego e Mercado. ORCID: <https://orcid.org/0000-0002-4034-5113> E-mail: juliana.medaglia@ufpr.br.

⁵⁸ Ph.D. em Turismo (University of Surrey, Reino Unido), Professor Associado do Departamento de Hotelaria e Turismo e Docente Permanente do Programa de Pós-graduação em Hotelaria e Turismo da UFPE. Membro do Grupo de Pesquisa TEEM - Turismo, Educação, Emprego e Mercado. ORCID: <https://orcid.org/0000-0002-4898-4489> E-mail: sergio.rleal@ufpe.br

⁵⁹ Doutor em Gestión y Desarrollo Turístico Sostenible (Universidad de Málaga, Espanha). Professor Adjunto do Departamento de Turismo e Permanente do Programa de Pós-graduação em Turismo da UFPR. Grupo de Pesquisa TEEM - Turismo, Educação, Emprego e Mercado. ORCID: <https://orcid.org/0000-0002-1414-1096> E-mail: caesilveira@ufpr.br.

Resumo

A educação em turismo no Brasil possui uma história de mais de 50 anos. Ao longo do tempo, diretrizes foram elaboradas para direcionar o desenvolvimento dos cursos de graduação na área. Porém, tais diretrizes estão desatualizadas e não contemplam a contento a transformação digital no turismo ocorrida nas últimas décadas. Com base em uma série de investigações realizadas pelo Grupo de Pesquisa TEEM, percebe-se que, embora o turismo seja um campo de atuação para profissionais da tecnologia, a área tecnológica não vislumbra o turismólogo como um profissional apto para atuar nela. Os próprios egressos dos cursos de turismo não vêem a área de tecnologia como uma opção para atuação profissional. A atualização das Diretrizes Curriculares Nacionais aparece como um caminho para a promoção da inclusão da tecnologia na formação de turismólogos, possibilitando uma maior e melhor interação entre as áreas, tanto nos estudos como no mercado de trabalho em turismo.

Palavras-chave

Tecnologia e turismo, Brasil, Transformação digital em turismo

Abstract

Tourism education in Brazil has a history of more than 50 years. Over time, guidelines have been developed to guide the development of undergraduate courses in the area. However, such guidelines are outdated and do not satisfactorily contemplate the digital transformation in tourism that has occurred in recent decades. Based on a series of investigations carried out by the TEEM Research Group, it is clear that, although tourism is a field of activity for technology professionals, the technological area does not see the tourism specialist as a professional able to work in it. The graduates of tourism courses themselves do not see the technology area as an option for professional performance. The update of the National Curriculum Guidelines appears as a way to promote the inclusion of technology in the training of tourism specialists, enabling greater and better interaction between the areas, both in studies and in the tourism job market.

Keywords

Technology and tourism, Brazil, Digital transformation in tourism

Introdução

A educação superior em turismo no Brasil remonta ao início dos anos 1970, com a criação dos primeiros bacharelados na área (Ansarah, 2002). Desde então, diversos avanços podem ser constatados, tais como a consolidação enquanto área de pesquisa, com a criação de programas de pós-graduação e periódicos científicos, e a internacionalização por meio de ações pontuais de pesquisadoras e pesquisadores bem como instituições de ensino e de pesquisa (Leal, Panosso, & Trigo, 2012; Santos, Leal, & Panosso Netto, 2015).

154

Ao mesmo tempo, o Fórum Econômico Mundial (WEF na sigla em Inglês) prevê que a ampliação do acesso digital será a maior transformação, com 60% dos empregadores considerando que seus negócios serão afetados pelos avanços tecnológicos (especialmente IA) até 2030 (WEF, 2025). Diante do impacto da transformação digital no turismo (Pencarelli 2020), novas necessidades de formação vêm surgindo, com as questões relacionadas à tecnologia ganhando destaque (Infante-Moro, Infante-Moro, & Gallardo-Pérez, 2019). No entanto, não há atualização no mesmo ritmo dos projetos pedagógicos dos cursos de Turismo. No Brasil, as Diretrizes Curriculares Nacionais para o turismo, que deveriam nortear os projetos pedagógicos, datam de 2006 (Catramby *et al.*, 2022). São quase duas décadas sem atualizações e com transformações marcantes na sociedade. Neste cenário, buscamos compreender como os estudos em tecnologia no turismo vêm acontecendo nas universidades brasileiras, e quais as expectativas do mercado em relação a esses estudos.

A Tecnologia na Formação e na Atuação Profissional em Turismo

O grupo de pesquisa TEEM - Turismo, Educação, Emprego e Mercado, do qual atuam os autores, tem estudos desde 2012 relacionados à atuação profissional de egressos de cursos superiores de Turismo no Brasil. Há uma pesquisa realizada em várias edições (2012, 2018, 2021/22) na qual é possível perceber uma parcela significativa de respondentes que, apesar de formados na área, não atuam com turismo. Na edição de 2024, ainda inédita, do universo de 987 respondentes, 206 afirmaram trabalhar em uma área diferente, que não o turismo. A estes foi questionado, então, em que área estavam atuando. Considerando os que se dispuseram a fornecer tal informação, já que a pergunta não era obrigatória, excetuando-se os que preferiram não especificar (um total de 8), as respostas foram tratadas por meio do software Iramuteq, gerando a nuvem de palavras a seguir.

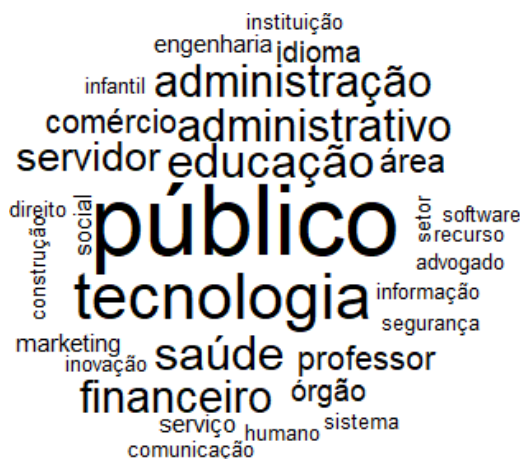


Figura 1. Nuvem de palavras sobre as área de atuação de turismólogos em outras áreas

Fonte: Pesquisa TEEM 2024 (a ser publicada)

Percebeu-se, no caso brasileiro, uma propensão a atuar no setor público. Em seguida, um total de 16 respondentes afirmaram trabalhar com tecnologia de alguma forma, mais dois com softwares e mais dois com análises de sistemas. A amostra não é significativa para incorrer em afirmações categóricas, mas indica um número pouco significativo de turismólogos que migraram para a área de tecnologia, o que vai ao encontro da percepção de descolamento entre a formação em turismo e os conteúdos tecnológicos. Ainda que se possa considerar que se trata de uma falta de atualização dos currículos de formação, há outras questões que contribuem.

Para fins de comparação, na mesma pesquisa mencionada, outra questão levantada junto a esses turismólogos dizia respeito ao que sentiram falta, em termos de conteúdo, durante a graduação. Como também se tratava de questão não obrigatória, houve 584 respondentes.



Figura 2. Quais conteúdos ou disciplinas você sentiu falta durante sua graduação (em Turismo)

Fonte: Pesquisa TEEM 2024 (a ser publicada)

Aparecem entre as respostas, quando analisadas uma a uma, temas como informática, sistemas de informação, sistemas e outras menções, mas com pouco destaque quando comparadas a outras áreas desejadas e prementes. As carências referentes ao mercado, ao conhecimento sobre gestão, empreendedorismo, conhecimentos práticos e o trabalho ofuscaram outros temas e se colocaram acima da preocupação com a falta de conteúdos de tecnologia, ainda que sua ausência nos currículos do ensino superior em turismo já fosse conhecida em decorrência de outra investigação realizada por membros do Grupo de Pesquisa TEEM. Masiero, Rangel, Silveira e Medaglia (2022) pesquisaram disciplinas e ementas de cursos superiores de turismo de universidades públicas brasileiras, subordinadas à legislação do Ministério da Educação, e às Diretrizes Curriculares Nacionais, por conseguinte.

Foram levantadas 31 disciplinas relacionadas às Tecnologias da Informação e Comunicação (TIC) em 26 universidades. As 31 ementas foram tratadas no software Iramuteq e as análises indicaram os principais assuntos abordados nas disciplinas voltadas às TIC, tais como: “informação”, com principais ramificações em sistemas e tecnologia; “turismo”, em interface com áreas das ciências sociais aplicadas, como administração, economia e marketing; e por fim, “turístico”, ligado a desenvolvimento, empresas e serviços. Além disso, os resultados trouxeram também considerações acerca das funcionalidades das ferramentas tecnológicas, em proximidade das classes Operacional e Empresas Turísticas, indo ao encontro dos resultados do levantamento com turismólogos, que indicam uma concentração destes profissionais nas agências, operadoras e meios de hospedagem (Silveira, Medaglia, & Nakatani, 2018), postos de trabalho nos quais a utilização de sistemas é essencial.

Em contraste, artigo recente que investigou habilidades digitais de recém-formados em turismo no Chipre, indica que estes profissionais dominam o pacote Microsoft Office, mas viram superficialmente softwares específicos do setor como Opera, Fidelio, Booking e Expedia. Os respondentes, diferentes dos brasileiros, afirmaram que sentem falta de conhecimentos acerca de plataformas de mídias digitais e Customer Relationship Management (CRM) (Stylanou, & Pericleous, 2025).

Por fim, outro dado significativo das pesquisas do TEEM indica que o mercado de tecnologia não vislumbra os turismólogos como conhecedores de conteúdos específicos do campo. Em pesquisa realizada com 24 empresas de tecnologia que atuam no mercado turístico da cidade de Curitiba (capital do estado do Paraná e destino de turismo urbano, negócios e eventos), levantou-se que conhecimentos acerca de Sistemas de Informação, Big Data, TIC e Gestão do Conhecimento não foram considerados como essenciais para estes profissionais. Para ilustrar, em uma escala que variava entre Essencial, Muito Importante, Importante, Pouco Importante ou Sem Importância, Big Data foi considerado essencial para apenas um respondente e pouco importante para 10. Já TIC foram consideradas Essencial por apenas três respondentes e pouco importante para outros oito. A título de curiosidade, os destaques positivos ficaram para Ética e Comunicação, consideradas como Essencial por 10 respondentes e Geografia, citada nesta classe nove vezes (Rangel, Gardolinski, Silveira & Medaglia, 2023).

Considerações Finais

Intuitivamente, a partir dos dados preliminares apresentados, pode-se vislumbrar que os cursos de turismo do Brasil não são procurados por quem tenha interesse na área de tecnologia. Contudo, a recíproca não é verdadeira. A área de tecnologia ou de sistema de informação encontra no turismo um objeto de estudo e de atuação profissional frutífero. As contratações para as funções que envolvam habilidades nessa área, são voltadas a esses profissionais que ‘ingressam’ na área de turismo após formados.

O turismo é visto como uma área inter ou multidisciplinar, mas, de ‘mão-única’, em que algumas áreas de especialidade (como tecnologia) ingressam em nossa área, mas não acolhem turismólogos em suas atividades mais amplas ou especializadas, como ações ligadas às tecnologias.

Contudo, é fato que é preciso revisar as diretrizes brasileiras, a fim de que os cursos tenham um direcionamento de como preparar os profissionais para o mundo de hoje e do amanhã. Assim, as universidades conseguirão promover a inclusão da tecnologia na formação de turismólogos, quer seja para se adequar aos tempos de transformação digital, quer seja para garantir a empregabilidade de seus egressos.

Referências

- Ansarah, M. G. dos R. (2002). *Formação e capacitação do profissional em turismo e hotelaria: reflexões e cadastro das instituições educacionais no Brasil*. Editora Aleph.
- Catramby, T. C. V., Silveira, C. E., Almeida, M. V. D., Martins, P. C. S., Leal, S. R., Schulze, T. R., & Bittencourt, F. T. R. (2022). Fórum nacional de cursos superiores de turismo, hospitalidade e lazer: Relato de experiência. *Revista Brasileira dos Observatórios de Turismo*, 1(2), 43-58. <https://doi.org/10.59776/2764-5835.2022.4605>.
- Infante-Moro, A., Infante-Moro, J. C., & Gallardo-Pérez, J. (2019). The importance of ICTs for students as a competence for their future professional performance: The case of the faculty of business studies and tourism of the University of Huelva. *Journal of New Approaches in Educational Research (NAER Journal)*, 8(2), 201-213. <https://doi.org/10.7821/naer.2019.7.434>.
- Leal, S. R., Panosso Netto, A., & Trigo, L. G. G. (2012). Tourism education and research in Brazil. In *Tourism in Brazil* (pp. 173-188). Routledge.
- Masiero, L., Rangel, B. S., Silveira, C. E. & Medaglia, J. (2022). Tecnologia da informação e comunicação [TIC] em cursos de graduação em turismo: Uma análise multidimensional das ementas. *Marketing & Tourism Review*, 8(2). <https://doi.org/10.29149/mtr.v8i2.7351>.
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology & Tourism*, 22, 455-476. <https://doi.org/10.1007/s40558-019-00160-3>.
- Rangel, B.S.; Gardolinski, S.A.; Silveira, C.E. & Medaglia, J. (2023). Inovação e tecnologias da informação e comunicação: Relação empresas e cursos de graduação de turismo de Curitiba (PR). *Revista ReBOT*, 2(2), 143-163. <https://doi.org/10.59776/2764-5835.2023.5637>.

- Santos, G. E. de O., Leal, S. R., & Panosso Netto, A. (2015). O Brasil na literatura internacional de turismo: Análise das publicações em idioma inglês. *Revista Brasileira de Pesquisa em Turismo*, 9(3), 459-478. <https://doi.org/10.7784/rbtur.v9i3.854>.
- Silveira, C. E., Medaglia, J., & Massukado-Nakatani, M. S. (2020). O mercado de trabalho dos egressos de cursos superiores em turismo: Comparações dos dados de 2012 - 2018. *Revista Brasileira de Pesquisa em Turismo*, 14(2), 83-94. <https://doi.org/10.7784/rbtur.v14i2.1779>.
- Stylianou, C., & Pericleous, K. (2025). Reviewing the digital skills and readiness of hospitality and tourism graduates: A way of success. *Worldwide Hospitality and Tourism Themes*. <https://doi.org/10.1108/WHATT-12-2024-0300>.

ECOS DO TURISMO: *LIVES* INTERINSTITUCIONAIS DE INTERAÇÃO ACADÊMICA NO ENSINO APRENDIZAGEM DO TURISMO.

159

Noslin de Paula Almeida⁶⁰

Universidade Federal de Mato Grosso do Sul - UFMS
Brasil

⁶⁰ Doutor em Geografia - UNESP/ Rio Claro, Mestre em Desenvolvimento Local pela Universidade Católica Dom Bosco (UCDB), Bacharel em Turismo pela Faculdade de Comunicação e Turismo Hélio Alonso (FACHA) e Bacharel em Administração pelo Centro Universitário da Grande Dourados (UNIGRAN). Especialização em Marketing e Comércio Exterior (INPG/ UCDB) e em Gestão de Agência de Viagens pela Escuela PAX - Valência/ Espanha. Professor Associado 4 da Universidade Federal de Mato Grosso do Sul (Curso de Turismo ESAN/UFMS). Criador do Canal de entrevistas no Youtube "TUR QUEST".

Abstract

The "Ecos do Turismo" initiative, part of the university extension project "*Tur Quest*," aims to create a collaborative network among Brazilian universities to offer an elective distance learning (EAD) course focused on emerging and contemporary topics in tourism. Scheduled for the second semester of 2025, the course will consist of 15 weekly live sessions broadcasted on the *Tur Quest YouTube* channel. Each session will feature up to four professors from different universities, discussing themes such as over-tourism, adventure tourism, public tourism management, and sustainable tourism. Students will enroll in their respective universities but will attend classes online, learning from leading experts in the field. The project seeks to integrate some universities, involving several students from Brazil and abroad, fostering a dynamic and interactive learning environment. By leveraging digital tools and collaborative teaching, "Ecos do Turismo" aims to innovate tourism education, promote academic debate, and create a sustainable network of knowledge exchange. This initiative not only enhances access to high-quality education but also prepares students to address the challenges and opportunities of the tourism sector in the 21st century. The project represents a pioneering model for interdisciplinary and networked education, with potential applications in other fields of study.

Keywords

Tourism education, Distance learning, Collaborative networks, Emerging tourism topics, Educational innovation

O projeto de extensão universitária "*Tur Quest*", desenvolvido por meio de um canal no *Youtube*, tem como objetivo principal promover a discussão e a disseminação de conhecimentos sobre o ensino e a aprendizagem do turismo, explorar curiosidades da área e temas culturais de forma ampla e criar uma rede de interações com professores e acadêmicos de graduação. A iniciativa tem ganhado relevância ao criar um espaço de diálogo entre acadêmicos, profissionais e entusiastas do setor, por meio de entrevistas e debates que abordam diferentes perspectivas sobre o turismo no âmbito da formação básica do turismo, o que por hora é inerente aos programas de pós-graduação. Nesse contexto, surge a proposta "*Ecos do Turismo*", uma nova frente do projeto que busca ampliar o alcance e o impacto das discussões sobre temas emergentes e inerentes ao turismo. A ideia central é estabelecer uma rede colaborativa entre universidades brasileiras e, potencialmente, instituições internacionais, para oferecer através de uma disciplina optativa na modalidade de Educação a Distância (EAD), intitulada "*Ecos do Turismo*" ou outro nome que as instituições participantes considerarem adequado. A disciplina terá como foco os tópicos atuais e relevantes do turismo, com aulas semanais transmitidas ao vivo pelo canal, contando com a participação de professores especialistas de diferentes universidades.

O "*Ecos do Turismo*" tem como principais objetivos promover a integração entre instituições de ensino superior, ampliar o acesso ao conhecimento de qualidade, fomentar o debate sobre questões contemporâneas, inovar no modelo de ensino e criar uma comunidade de aprendizagem engajada ainda na fase de graduação dos acadêmicos. A proposta prevê a oferta de uma disciplina optativa no segundo semestre de 2025, com duração de o mínimo quinze semanas. A cada semana, um tema emergente do turismo será discutido em uma aula transmitida ao vivo pelo canal do *Youtube* do *Tur Quest*. As aulas contarão com a participação de até quatro professores especialistas de diferentes universidades, dividindo a mesma tela, garantindo uma abordagem multidisciplinar e enriquecedora. A disciplina será oferecida através da plataforma *Google Classroom*, permitindo que alunos de diversas instituições se matriculem em suas respectivas universidades e assistam às aulas em conjunto, criando uma experiência de aprendizagem colaborativa e interinstitucional. Além das aulas ao vivo, os participantes terão acesso a materiais complementares, fóruns de discussão e atividades avaliativas, que serão gerenciadas de forma autônoma por cada uma das universidades parceiras.

A metodologia proposta pelo "*Ecos do Turismo*" representa uma inovação significativa no ensino do turismo, rompendo com o modelo tradicional em que um único professor aborda diversos temas ao longo de uma disciplina. Em vez disso, os alunos terão uma experiência dinâmica e diversificada, assistindo às aulas via rede mundial de computadores, onde, a cada semana, diferentes especialistas de diversas universidades discutirão temas específicos e emergentes do turismo. Essa abordagem permite que os estudantes aprendam diretamente com os melhores profissionais de cada área, ampliando sua visão e aprofundando seu conhecimento sobre os assuntos tratados. Por exemplo, em uma semana, especialistas em um determinado assunto poderão compartilhar suas pesquisas e experiências, enquanto na semana seguinte, professores focados em outros assuntos do turismo poderão transmitir seus conhecimentos, experiências, práticas e teóricas.

Essa rotatividade de especialistas não apenas enriquece o conteúdo, mas também expõe os alunos a diferentes estilos de ensino e visões sobre o turismo. Além disso, a transmissão das aulas ao vivo permite a interação em tempo real, criando um ambiente de aprendizagem colaborativo e acessível a estudantes de todo o Brasil e até do exterior. Além do mais, todo o conteúdo da disciplina ficará disponível no canal. Essa metodologia inovadora promove uma educação mais inclusiva, atualizada e conectada com as demandas do setor turístico. A cada semana, até quatro professores de diferentes instituições se revezarão para ministrar as aulas, garantindo uma abordagem multidisciplinar e diversificada, com diferentes pontos de vista e realidade.

A seleção dos temas e dos professores será realizada de forma colaborativa, envolvendo as instituições parceiras. Entre os temas importantes atuais, sugerimos: 1. Overturismo: O impacto do excesso de turistas em destinos populares e estratégias para gerenciar fluxos turísticos de forma sustentável; 2. Turismo Sustentável: Práticas e políticas para promover um turismo que respeite o meio ambiente, as comunidades locais e a cultura; 3. Turismo de Aventura: O crescimento do segmento de aventura e suas implicações para a segurança, infraestrutura e preservação de áreas naturais; 4. Turismo de Base Comunitária: Como o turismo pode empoderar comunidades locais e promover o desenvolvimento econômico inclusivo; 5. Turismo e Tecnologia: O papel da inteligência artificial, realidade virtual e outras tecnologias na transformação do setor turístico.; 6. Turismo Cultural: A valorização do patrimônio cultural e a promoção de experiências autênticas para os visitantes; 7. Turismo de Saúde e Bem-Estar: A ascensão de destinos focados em saúde, spa, retiros de yoga e bem-estar mental. 8. Turismo de Luxo: As tendências e desafios do mercado de luxo, incluindo a demanda por experiências exclusivas e personalizadas.; 9. Turismo de Eventos e Experiências: A importância de eventos, festivais e experiências únicas na atração de turistas; 10. Turismo e Mudanças Climáticas: Como o setor turístico está se adaptando às mudanças climáticas e reduzindo sua pegada de carbono; 11. Turismo Pós-Pandemia: Os impactos da COVID-19 no setor e as tendências que estão moldando a recuperação do turismo global; 12. Turismo de Gastronomia: O papel da culinária local como atrativo turístico e sua contribuição para a economia e a cultura; 13. Turismo e Segurança: Desafios relacionados à segurança dos turistas, incluindo questões de saúde, conflitos e desastres naturais; 14. Turismo e Inclusão: A promoção de um turismo acessível para pessoas com deficiência e a diversidade de públicos no setor; e, 5. Turismo e Geopolítica: Como questões geopolíticas, como conflitos, vistos e restrições de viagem, afetam o fluxo turístico global. Esses temas refletem as principais tendências e desafios do turismo contemporâneo no momento, sendo essenciais para a formação de profissionais preparados para atuar em um setor em constante transformação.

Os professores convidados trarão suas perspectivas e experiências, enriquecendo o debate e proporcionando aos alunos uma visão abrangente dos desafios e oportunidades do turismo contemporâneo. A implementação do "Ecos do Turismo" tem o potencial de gerar impactos significativos no ensino e na pesquisa do turismo, tanto no Brasil quanto no exterior. Entre os resultados esperados, destacam-se a formação de uma rede colaborativa, a ampliação do acesso ao conhecimento, o fomento ao debate acadêmico, a inovação no ensino de graduação e a integração entre teoria e prática.

No final de 2024, foi realizada uma iniciativa pioneira para testar e validar a proposta. Entre novembro e dezembro, foram conduzidos cinco programas piloto, que serviram como aulas demonstrativas e estão disponíveis no canal *Tur Quest* do *Youtube*, em uma *playlist* intitulada "Ecos do Turismo". Essas *lives* contaram com a participação de 17 professores de 11 universidades brasileiras, além de uma instituição internacional e uma entidade representativa do turismo de aventura. Cada professor participante e sua respectiva instituição estenderam o convite para os seus acadêmicos. A diversidade de participantes enriqueceu as discussões, trazendo perspectivas multidisciplinares e abrangentes sobre temas emergentes do turismo, como sustentabilidade, gestão pública, tecnologia e turismo de aventura. Os acadêmicos puderam conhecer as iniciativas relatadas pelos professores de outras universidades e assim, ampliar o olhar sobre determinada área e pesquisa do turismo.

A realização das *lives* foi marcada por uma excelente aceitação por parte do público, incluindo alunos, professores e profissionais do setor. As transmissões ao vivo permitiram interações em tempo real, criando um ambiente dinâmico e colaborativo de aprendizagem. Além disso, todas as universidades e instituições participantes demonstraram entusiasmo e interesse em integrar o projeto de forma mais ampla e estruturada, consolidando a proposta como uma iniciativa viável e inovadora no ensino do turismo. Esse piloto não apenas validou a metodologia proposta, mas também reforçou o potencial do "Ecos do Turismo" para se tornar uma referência na formação de profissionais do setor, conectando universidades, especialistas e estudantes em uma rede colaborativa de conhecimento. A experiência bem-sucedida desse teste serviu como base para a estruturação da disciplina que será oferecida no segundo semestre de 2025, ampliando o alcance e o impacto do projeto.

O projeto "Ecos do Turismo" representa uma iniciativa inovadora e ousada no campo do ensino do turismo, alinhada com as tendências contemporâneas de educação e com as demandas do setor. Ao propor uma disciplina que integra universidades, professores e alunos em uma rede colaborativa, o projeto busca não apenas ampliar o acesso ao conhecimento, mas também fomentar o debate e a reflexão sobre os desafios e oportunidades do turismo no século XXI. A utilização de ferramentas digitais e da educação na modalidade a distância permite que o projeto transcenda as barreiras geográficas, alcançando um público amplo e diversificado. Além disso, a participação de especialistas de diferentes instituições garante uma abordagem multidisciplinar e enriquecedora, que contribuirá para a formação de profissionais mais críticos, criativos e preparados para atuar em um setor em constante transformação. Por fim, o "Ecos do Turismo" tem o potencial de se tornar um modelo de referência para outras áreas do conhecimento, demonstrando como a colaboração entre instituições e a utilização de tecnologias digitais podem revolucionar o ensino e a aprendizagem. Com a adesão das universidades e a participação de seus professores, o projeto poderá atingir milhares de acadêmicos e gerar impactos significativos não apenas para os participantes diretos, mas para o setor do turismo como um todo, contribuindo para o seu desenvolvimento sustentável e inclusivo.

Referências

TUR QUEST. Canal no *YouTube*. Retirado de <https://www.youtube.com/@TurQuest5ev>. Acesso em: 14/02/2025.

A EXTENSÃO UNIVERSITÁRIA COMO EDUCAÇÃO CONTINUADA, TRANSFERÊNCIA DE TECNOLOGIA, INOVAÇÃO E ENGAJAMENTO SOCIAL NO ENSINO DO TURISMO

165

Erick Pusch Wilke⁶¹

Universidade Federal de Mato Grosso do Sul
Brasil

Fábio Orlando Eichenberg⁶²

Universidade Federal de Mato Grosso do Sul
Brasil

Luciana Correia Diettrich⁶³

Universidade Federal de Mato Grosso do Sul
Brasil

Lilian da Silva Paiva⁶⁴

Universidade Federal de Mato Grosso do Sul
Brasil

⁶¹ Doutor em Administração e Bacharel em Turismo. Docente no curso de Turismo da Escola de Administração e Negócios – ESAN na Universidade Federal de Mato Grosso do Sul, UFMS.

⁶² Doutor em Geografia e Bacharel em Turismo. Docente no curso de Turismo da Escola de Administração e Negócios – ESAN na Universidade Federal de Mato Grosso do Sul, UFMS.

⁶³ Doutora em Meio Ambiente e Desenvolvimento Regional e Bacharel em Turismo. Docente no curso de Turismo da Escola de Administração e Negócios – ESAN na Universidade Federal de Mato Grosso do Sul, UFMS.

⁶⁴ Doutora em Meio Ambiente e Desenvolvimento Regional e Bacharel em Turismo. Docente no curso de Turismo da Escola de Administração e Negócios – ESAN na Universidade Federal de Mato Grosso do Sul, UFMS.

Abstract

Higher education in Tourism in Brazil has evolved significantly since its inception in the 1970s, keeping pace with transformations in both the market and the academic realm. The National Curriculum Guidelines (DCNs) of 2019 emphasize the importance of the integration of teaching, research, and extension, with university extension emerging as a crucial bridge between academia and society. In the field of Tourism, this practice promotes the exchange of knowledge, innovation, technology transfer, and social engagement, contributing to sustainable development and cultural appreciation. The curricularization of extension, through Professional Environments, as implemented in the Tourism program at UFMS, has been an exemplary initiative. By incorporating extension activities into the curriculum, students develop theoretical and practical competencies in areas such as events, hospitality, travel agencies, and food services, thereby directly integrating into the labor market and entrepreneurship. This process enables the development of new practices, products, and methods, fostering innovation and social impact within the communities served. Although university extension offers significant benefits for the professional and civic formation of students, challenges such as resource scarcity, lack of academic awareness, and difficulties in engaging external stakeholders still compromise its potential. Overcoming these obstacles requires increased investment, intersectoral partnerships, and the promotion of extension initiatives, solidifying them as an essential pillar of higher education in Tourism and contributing to the strengthening of a more ethical, responsible, and sustainable sector.

Keywords

University extension, Curricularization, Tourism, Innovation, Student agency

O ensino superior em Turismo teve origem na década de 1970, com foco em pesquisar, planejar e gerir o fenómeno turístico ainda pouco conhecido cientificamente pelo sul global. Dos anos 1970, até o início dos anos 2000, o mercado de Turismo mudou vertiginosamente. Neste mesmo período a pesquisa e o ensino em Turismo avançaram a padrões muito similares ao europeu, sendo a “escola Brasil de ensino em Turismo” amplamente reconhecida.

Ensinar Turismo no Brasil, especialmente na última década tem exigido um *approach* com as forças de mercado e o mundo do trabalho que atuam e interatuam no setor. O ensino superior em Turismo, assim como todo o ensino superior no país, sempre foi pautado pelas reconhecidas “três dimensões da universidade – ensino, pesquisa e extensão, e suas relações internas com a sociedade”, (Constituição Federal, 1988) pautadas pela indissociabilidade entre si. No entanto, ainda que como veremos, orientam as Diretrizes Curriculares Nacionais (2006 e 2019) essa relação tende a ser truncada e quase sempre baseada em ações pouco continuadas.

As Diretrizes Curriculares Nacionais (DCNs) para o curso de Turismo, publicadas pelo Ministério da Educação (2019), reforçam a necessidade de integração entre ensino, pesquisa e extensão como um dos pilares da formação acadêmica. As DCNs destacam que as atividades de extensão devem estar inseridas no projeto pedagógico dos cursos, promovendo uma formação que seja ética, cidadã e comprometida com o desenvolvimento social e regional.

Frente as demandas das DCNs, observa-se que a extensão universitária desempenha um papel essencial no fortalecimento da relação entre a academia e a sociedade, promovendo a troca de saberes e contribuindo para o desenvolvimento social, cultural e econômico. No campo do Turismo, essa dimensão acadêmica assume particular relevância devido às características multidimensionais da área, que englobam aspectos econômicos, ambientais, culturais e sociais. Este texto aborda as práticas, desafios e contribuições da extensão universitária no ensino de Turismo no Brasil, com base nas diretrizes curriculares, estudos acadêmicos e experiências documentadas no curso de Turismo da Escola de Administração e Negócios (ESAN) da Universidade Federal de Mato Grosso do Sul (UFMS).

Neste interim, ao observar o que cita Castro (2013), tem-se que a extensão universitária é um processo educativo, cultural e científico que promove a interação transformadora entre a universidade e a sociedade. No campo do Turismo, essa interação é particularmente importante, pois permite que estudantes e professores contribuam para soluções inovadoras e sustentáveis frente aos desafios encontrados em diferentes territórios e comunidades turísticas.

Entretanto, para os autores Dias e Pereira (2015) deve-se destacar que a extensão universitária não é apenas um meio de transferência de conhecimentos, mas também um vetor de transformação social. Por meio de programas, projetos e ações de extensão, é possível fomentar o protagonismo comunitário, gerar renda e promover a valorização da cultura local, contribuindo para o fortalecimento do turismo sustentável e responsável.

Neste sentido, há que se compreender que o ensino de Turismo tem sido um campo do saber cada vez mais fluido, diversificado e desafiador. Trata-se de um ambiente acadêmico de inúmeras complexidades em que a pesquisa e o ensino, dentro de uma

lógica do saber, abrem espaço cada vez mais as práticas extensionistas que demandam um ensino inovador, engajado socialmente e principalmente com viés continuado no que tange aos métodos de formação.

Nesse contexto, Silva, Santos e Moura (2021) abordam o recente processo de curricularização da extensão nos cursos de Turismo pelo país, ressaltando os desafios e avanços das experiências brasileiras. A curricularização consiste na incorporação de atividades extensionistas à matriz curricular, por meio de programas, projetos, estágios e ou disciplinas, garantindo que pelo menos 10% da carga horária total do curso seja destinada a projetos que integrem os saberes acadêmicos às demandas da sociedade. Esse modelo busca superar a visão fragmentada das três dimensões acadêmicas, fortalecendo o papel social da universidade.

Partindo da premissa legal de institucionalizar a extensão universitária em Turismo, o curso de Turismo da UFMS, propôs no ano de 2022 um processo de revisão de seu Plano Pedagógico de Curso (PPC). Esta revisão teve, entre outras importantes ações, como proposta central, curricularizar a extensão prevista em lei específica nos limites de no mínimo 10 até 20% da carga horária total do curso de graduação ofertado pela IES.

Definiu-se no processo de curricularização que a extensão universitária em Turismo na UFMS seguiria os princípios de educação continuada, da transferência de tecnologia, da inovação e engajamento social, em que o aluno é o protagonista das ações extensionistas organizadas em programas, projetos, ações da seguinte maneira. Foram definidas dentro da estrutura do curso, um rol de disciplinas e áreas que seriam objeto da extensão universitária. Com isso, Eventos, Agências e Viagens, Hotelaria e Alimentação tem sido desde então, objeto da curricularização da extensão no curso de Turismo da UFMS.

O processo ainda inclui a oferta semestral de teoria e prática no mesmo ano para cada área. Ou seja, no primeiro semestre o aluno tem uma carga horária de 68h de teoria sobre a área escolhida e sequencialmente participa da chamada “Ambientação Profissional” da área com 68h, realizada em empreendimentos do setor privado, governamentais, do terceiro setor ou ainda em eventos realizados no contexto das denominadas Ambientações Profissionais.

As disciplinas de Ambientação Profissional, como materializadas pelo Curso de Turismo da UFMS, compartilham entre si alguns resultados notórios, embora em área diferentes. São eles o amadurecimento do aluno e o crescimento do senso de responsabilidade, uma vez que passam a compreender que assumem um conjunto de atividades, tarefas e entregas para membros externos a universidade, como empresários, autoridades e membros da comunidade; desenvolvimento do senso de iniciativa, proatividade e criatividade, uma vez que os alunos buscam de soluções inovadoras para problemas reais que necessitam invariavelmente serem resolvidos. Além disso, as ações extensionistas promovidas por meio da Ambientação elevaram a participação do aluno junto a sociedade. Os alunos compreenderam suas necessidades e demandas e, então, construíram soluções em equipe para a materialização mais adequada de cada ação. Foi possível perceber o aumento significativo do engajamento social, com o qual a comunidade respondeu às ofertas de extensão e se aproximou da universidade, descortinando as competências e atores presentes no curso de Turismo.

Destacam-se a seguir alguns dos resultados mais importantes das Ambientações Profissionais em Meios de Hospedagem e Eventos alcançados entre os anos de 2023 e 2024. Em Meios de Hospedagem, por exemplo, tem-se contribuído para a minimização do desperdício de insumos e resíduos produzidos por empreendimentos hoteleiros da cidade de Campo Grande, MS. Nesta intervenção extensionista, os alunos visitam as instalações dos empreendimentos, questionam as práticas vigentes e orientam a luz de normas técnicas internacionais, tal como a ISO 14001 as práticas de cada setor do empreendimento visitado. Ao final, tem-se um trabalho minucioso de retornar ao empreendimento alvo da ação os dados e informações geradas na Ambientação Profissional ao empreendimento alvo da ação extensionista, garantindo desta maneira a transferência de conhecimento e tecnologia, o engajamento social e a inovação dos processos cotidianos nestes empreendimentos.

A Ambientação Profissional em Eventos concentrou seus esforços em promover uma feira de negócios para pequenos empreendedores do turismo. A ideia central foi aproximar a oferta e a demanda específica do setor do turismo, vendedores e compradores interessados em comercializar destinos e atrativos turísticos, productos artesanais ou mesmo divulgar a sua marca e aproximá-la dos potenciais consumidores. Os alunos se envolveram diretamente com o planejamento, organização e execução de inúmeras ações até a realização do evento. Eles realizaram contatos e consolidaram inúmeras parcerias e apoios institucionais, tiveram que negociar e tomar decisões desafiadoras. Enquanto ação extensionista, a 1ª Feira de Turismo ExploraMS atingiu todos os objetivos, não somente aqueles relacionados a formação dos alunos, mas conseguiu atrair uma quantidade significativa de público e a satisfação dos empresários e expositores.

Esta metodologia parte do pressuposto de uma abordagem profissional enfocando o saber e o cotidiano da profissão em Turismo, em especial nas áreas que são objeto da extensão universitária em Turismo. Com isso partindo da sala de aula, o futuro gestor de Turismo pode refletir e compreender os desafios enfrentados dentro da sua profissão e contribuir com novas formas, métodos e técnicas que vigoram o processo de ensino-aprendizagem proposto, ensejando no que convencionou-se chamar de transferência de tecnologia.

Ha que se delimitar o termo tecnologia aqui utilizado, tendo em vista, o mesmo ser frequentemente associado a mega estruturas computacionais ou ainda a laboratórios ultramodernos. Observa-se que no processo de extensão universitária em Turismo outras tecnologias são possíveis de serem aprendidas e transferidas, tais como os saberes da natureza e da cultura, da hospitalidade, ou seja, um conjunto de métodos e técnicas que podem auxiliar no bem viver da comunidade receptora e consequentemente, alvo destas transferências tecnológicas.

Outro aspecto que interessa na curricularização da extensão universitária em Turismo é a inovação. Neste ponto o que tem-se experienciado na UFMS, curso de Turismo é a possibilidade de os alunos pensarem a partir da sala de aula, processos e práticas inovadoras, associadas ao mundo do trabalho nas áreas previamente definidas. Com isso, criando novos produtos, marcas, selos, sabores, e auxiliando os empreendimentos parceiros a melhorarem seus processos e práticas, quase em tempo real

Ademais a extensão universitária em Turismo gera engajamento social. Não na perspectiva deste ou daquele destaque individual, mas, no sentido coletivo. No sentido do protagonismo social dos envolvidos. O que se espera dos alunos protagonistas é promover uma sociedade cada vez mais ciente da importância do Turismo, por meio de ações de impacto em parceria com o setor privado e as organizações governamentais e do terceiro setor em prol das atividades ligadas a área extensionista. E o mais importante, a proposta de extensão universitária do curso de Turismo da UFMS, capacita estes alunos para gerarem novas intervenções de maneira continuada no mundo do trabalho ou até mesmo sugere que estes alunos empreendam no Turismo. Outrossim, para Castro (2013), a extensão também promove a formação de cidadãos mais conscientes e comprometidos com o desenvolvimento sustentável, o que é essencial para o fortalecimento do turismo como uma atividade econômica que respeite os princípios éticos e de responsabilidade socioambiental.

A guisa de conclusão, acredita-se que a extensão universitária do curso de Turismo da UFMS tem um impacto significativo na formação profissional e na inserção dos egressos de Turismo no mercado de trabalho, e, com isso, corrobora o que Pivetta e Isaia (2008) destacam: que as experiências extensionistas proporcionam aos estudantes uma visão mais ampla e crítica sobre o setor, capacitando-os para atuar em diferentes contextos e demandas. A participação em projetos de extensão nas Ambientações Profissionais permite que os discentes da UFMS desenvolvam uma compreensão mais profunda das realidades sociais e culturais, além de habilidades práticas que são valorizadas pelo mercado.

Referências

- Castro, M. R. S. (2013). Extensão universitária e sua aplicação no ensino de Turismo: Práticas e desafios no Brasil. *Revista Brasileira de Extensão Universitária*, 10(2), 45-59.
- Dias, M. A., & Pereira, J. F. (2015). A extensão universitária como vetor de transformação social no Turismo. *Turismo em Análise*, 26(1), 10-24.
- Ministério da Educação. (2019). *Diretrizes curriculares nacionais para o curso de Turismo*. Brasília: MEC.
- Pivetta, M., & Isaia, S. M. (2008). Formação acadêmica e mercado de trabalho: Um estudo sobre a inserção de egressos de turismo. *Revista Educação e Pesquisa*, 34(3), 527-544.
- Silva, R. C., Santos, L. P., & Moura, J. A. (2021). Curricularização da extensão universitária em cursos de Turismo: Uma análise das experiências brasileiras. *Encontro Nacional de Pesquisa em Turismo, Anais*, 1(1), 112-128.

HYBRID LEARNING IN TOURISM AND HOSPITALITY: INTEGRATING FIELD PRACTICES AND COLLABORATIVE CLASSROOM EXPERIENCES

171

Carolina Guerrero Reyes⁶⁵

Universidad Pedagógica Nacional
Colombia

Katheryne Aldana Villalobos⁶⁶

Universidad Pedagógica Nacional
Colombia

⁶⁵ Full-time professor at Universidad Pedagógica Nacional of Colombia. PhD Student in Tourism Studies at Externado University in Colombia, Magister in Education and Social Development, Bachelor in Spanish and foreign languages. The line of research focuses on leisure, tourism, cultural studies, and social and community development. Coordinator of the seedbed research group “*Vivir para Contarla*”: Theoretical and practical approaches to the pedagogy of tourism. Co-founder of *Fundación Colibries*, an organization dedicated to pedagogy for social innovation aimed at strengthening culture and local development.

⁶⁶ Full-time professor at the Universidad Pedagógica Nacional. PhD Student at Jaume I University, Master in Development Studies and Management. Specialist in Planning, Management, and Control of Social Development, and Bachelor in Recreation. She has experience in environmental and social projects through leisure, recreation, play, and agriculture. She has worked with public and private institutions, as well as social and community organizations, engaging with diverse population groups. Currently, she is part of the interdisciplinary group *Environmental Thinking and Curriculum* at the Universidad Pedagógica Nacional, leader of the research group *Aminetu Haidar Human Rights*, coordinator of the *Wayra Agro-Recreational Project*, and instructor in the project *Teachers as Builders of a Sustainable and Peaceful Colombia* at the Universidad Pedagógica Nacional of Colombia.

Abstract

Hybrid learning has emerged as a transformative approach in tourism and hospitality education, blending online, in-person, and experiential learning to enhance student engagement and professional readiness. This pedagogical experience explores the integration of field practices with collaborative classroom experiences to create a comprehensive learning model that bridges theoretical knowledge with real-world applications. Through a systematization of experience approach, we analyze student outcomes from a tourism and hospitality topics included in the subjects of the Bachelor program such as English, Play and Plastic Explorations, Urban Agriculture and Creative Industries combining case studies, and immersive fieldwork. Data collected from class's performance assessments. It is suggested that hybrid learning enhances problem-solving skills, adaptability, and industry-specific competencies. Results indicate that students benefit from the articulation of online learning while gaining hands-on experience through structured site visits, and collaborative projects. Key findings highlight the effectiveness of blended methodologies in fostering critical thinking, teamwork, and practical expertise. The study also identifies challenges, including logistical limitations and the need for faculty training in hybrid pedagogies. Best practices for successful implementation are discussed, emphasizing the importance of technological integration, industry partnerships, and reflective learning strategies. This study contributes to the evolving discourse on hybrid education by demonstrating its potential to bridge academic and professional gaps in tourism and hospitality. The findings offer valuable insights for educators and students are seeking to optimize learning experiences and training approaches preparedness in an increasingly dynamic and digitalized sector.

Keywords

Hybrid learning, Tourism education, Experiential learning, Field practices, collaborative learning, Hospitality training

Resumo

A aprendizagem híbrida emergiu como uma abordagem transformadora na educação em turismo e hospitalidade, ao combinar modalidades online, presenciais e experiências práticas para aumentar o engajamento dos estudantes e sua preparação profissional. Esta experiência pedagógica explora a integração de práticas de campo com atividades colaborativas em sala de aula, a fim de criar um modelo de aprendizagem abrangente que articule o conhecimento teórico com aplicações no mundo real. Por meio da sistematização da experiência, analisamos os resultados obtidos por estudantes em temas de turismo e hospitalidade abordados em disciplinas do curso de Licenciatura, como Inglês, Jogos e Explorações Plásticas, Agricultura Urbana e Indústrias Criativas, combinando estudos de caso e trabalho de campo imersivo. Os dados foram coletados a partir das avaliações de desempenho em sala de aula. Sugere-se que a aprendizagem híbrida potencializa habilidades de resolução de problemas, adaptabilidade e competências específicas do setor. Os resultados indicam que os estudantes beneficiam da articulação entre o ensino online e as experiências práticas realizadas por meio de visitas técnicas e projetos colaborativos. As principais conclusões destacam a eficácia das metodologias híbridas no desenvolvimento do pensamento crítico, do trabalho em equipa e da expertise prática. O estudo também identifica desafios, como limitações logísticas e a necessidade de formação docente em pedagogias híbridas. São discutidas boas práticas para a implementação bem-sucedida, enfatizando a importância da integração tecnológica, das parcerias com o setor e de estratégias de aprendizagem reflexiva. Este estudo contribui para o debate em evolução sobre a educação híbrida ao demonstrar o seu potencial para aproximar os mundos académico e profissional no campo do turismo e da hospitalidade. Os resultados oferecem insights valiosos para educadores e estudantes que buscam otimizar experiências de aprendizagem e estratégias de formação num setor cada vez mais dinâmico e digitalizado.

Palavras-chave

Aprendizagem híbrida, educação em turismo, aprendizagem experiencial, práticas de campo, aprendizagem colaborativa, formação em hospitalidade.

Resumen

El aprendizaje híbrido ha surgido como un enfoque transformador en la educación en turismo y hospitalidad, al combinar modalidades en línea, presenciales y experiencias prácticas para aumentar el compromiso de los estudiantes y su preparación profesional. Esta experiencia pedagógica explora la integración de prácticas de campo con actividades colaborativas en el aula, con el objetivo de crear un modelo de aprendizaje integral que articule el conocimiento teórico con aplicaciones en el mundo real. A través de la sistematización de la experiencia, analizamos los resultados obtenidos por estudiantes en temas de turismo y hospitalidad abordados en asignaturas del curso de Licenciatura, como inglés, Juego y Exploraciones Plásticas, Agricultura Urbana e Industrias Creativas, combinando estudios de caso y trabajo de campo inmersivo. Los datos fueron recolectados a partir de las evaluaciones de desempeño en el aula. Se sugiere que el aprendizaje híbrido potencia habilidades de resolución de problemas, adaptabilidad y competencias específicas del sector. Los resultados indican que los estudiantes se benefician de la articulación entre la enseñanza en línea y las experiencias prácticas realizadas a través de visitas técnicas y proyectos colaborativos. Las principales conclusiones destacan la eficacia de las metodologías híbridas en el desarrollo del pensamiento crítico, el trabajo en equipo y la experiencia práctica. El estudio también identifica desafíos, como limitaciones logísticas y la necesidad de formación docente en pedagogías híbridas. Se discuten buenas prácticas para una implementación exitosa, enfatizando la importancia de la integración tecnológica, las alianzas con el sector y las estrategias de aprendizaje reflexivo. Este estudio contribuye al debate en evolución sobre la educación híbrida al demostrar su potencial para acercar los mundos académico y profesional en el ámbito del turismo y la hospitalidad. Los resultados ofrecen valiosos aportes para educadores y estudiantes que buscan optimizar las experiencias de aprendizaje y las estrategias de formación en un sector cada vez más dinámico y digitalizado.

Palabras clave

Aprendizaje híbrido, Educación en turismo, Aprendizaje experiencial, Prácticas de campo, Aprendizaje colaborativo, Formación en hospitalidad

The Bachelor program in Recreation and Tourism, from Universidad Pedagógica Nacional of Colombia, guides its inquiry lines into the meaning of recreation and tourism in a completely different direction, avoiding any form of essentialism. Thus, it considers recreation and tourism as ways of questioning and approaching the contemporary world rather than as a set of specific characteristics that distinguish one thing from another. For the program, recreation and tourism are defined more as an observational standpoint - perspectives - or as forms of inquiry that encompass not only processes of entertainment, relaxation, and vacations but also educational, ethical, political, and social dynamics.

Within the vast dimensions the recreation and tourism studies, the bachelor program has a focused line purpose to contribute to the positioning of individuals in their historical moment and geographical location (historical-geographical awareness on the globe), as well as to enhance or promote their capacity for agency in alignment with their creative potential. This evokes "recreation" as the rethinking of structures and the inherent creativity of the human being that includes tourism as a part of the whole (Documento Maestro Licenciatura en Recreación, 2012).

With the intention to array the future bachelors in recreation, the academic subjects known as '*creative prodding spots*', the pedagogical experience presented, explores the integration of field practices with collaborative classroom experiences to create a comprehensive learning model that bridges theoretical knowledge with real-world applications for tourism and hospitality from the subjects of the Bachelor program in Recreation such as *Play* and *Plastic Explorations, Urban Agriculture, Creative Industries* and *English*. (Documento Maestro Licenciatura en Recreación, 2012).

Through a systematization of experience approach, student outcomes are analyzed from tourism and hospitality topics included in the subjects mentioned. To reach a hybrid design, the lessons contain the Postmethod (Kumaravadivelu, 2006) and the Project based Learning (Markham, 2011) approaches to create the learning experience by exploring and discovering potential situations of innovation. Following contemporary adaptation in education, the main aim of the subjects is to articulate the digital world and the learning skills that might be focused on, such as critical thinking, collaboration, and creativity (Festiawan, *et al.*, 2024). Technology integration supports flexible and innovative learning, and the lesson planning is adjusted to comprehend the global needs in terms of tourism and recreation, giving a wide range to digital literacy. Professors play a role as facilitators encouraging student exploration. Education is oriented towards developing character and the ability to think independently, preparing generations for future challenges. Hybrid learning encourages students to use technology as a support for analogical decision making.

Urban Agriculture and Sustainability Contexts: A Perspective on Sustainability

This elective course is open to students from all programs at Universidad Pedagógica Nacional. Methodologically, it integrates theory and, primarily, ecological agriculture techniques, considering them as experiences of leisure and recreation. The participants

come from different academic backgrounds; the course not only emphasizes technical knowledge but also highlights the dimension of leisure, enjoyment and recreation, providing meaningful learning experiences in a real-world setting: “Wayra Agro-recreational” project as urban gardening.

Throughout the course, students receive theoretical foundations, which are applied in activities such as planting, maintaining, and harvesting. However, at times, technology-mediated teaching has been incorporated, including synchronous sessions where students apply their knowledge in their immediate environment, as apartments, houses and residential complexes. To support this process, digital platforms like Microsoft Teams and social media platforms have been used allowing students to share images, questions, experiences and recommendations among peers. As a part of the classroom project, students design proposals that integrate agricultural experiences with their fields of study. This has led to innovative initiatives such as:

- Rainwater collection systems.
- Handmade products: artisanal soap, wine, essential oil.
- Implementation of a small urban garden / orchard.
- Creation of educational booklets in multiple languages
- Pedagogical workshops for various populations incorporating perspectives from Physical Education, biology, tourism, among others.

Finally, through field and reflective logs, students analyze the challenges and lessons learned, enabling them to develop a deeper understanding of agricultural processes and their impact on everyday life.

Cultural Industries

Throughout the semester students collaboratively organize a cultural event based on the theoretical framework developed in class. They conduct a series of interviews with the program alumni, other students, scholars, professors or professionals in the fields of recreation and tourism, and with the aim of making the event a platform to highlight the dynamics of the artistic and cultural sectors, as well as the opportunities available for bachelors. This activity represents a group of challenges that foster teamwork, creativity and cultural management. The development of the event combines visits to cultural places (virtual and non-digital) and analyzing business models and management strategies. In addition, digital tools are used for dissemination, research and documentation of the process.

Play and Plastic Exploration

This is one of the first subject students take at the beginning of the Bachelor program. They explore a variety of games and artistic experiences in public spaces, experimenting with material and visual narratives. These experiences serve as a foundation for future experimentation in the classroom based on their discoveries and personal interests. For

instance, Padlets and Forums are used to document the creative process and share their explorations passing to practice the playful expressions they discover.

Integrating Recreation and Tourism Activities into English Learning

From communicative and functional approaches, for English sessions, a cross-disciplinary project will be implemented, focusing on recreational and tourism activities that students can create and develop in English. This initiative aligns with the disciplinary field of trainee recreation educators.

The methodology supporting this process is based on post-method pedagogy, as proposed by Kumaravadivelu (2006). This approach facilitates effective teaching and learning across various disciplines and promotes a progressive development of experience. Unlike traditional, standardized methods, the post-method framework rejects an idealized, one-size-fits-all learning approach. Instead, it fosters a dynamic, context-sensitive learning process that acknowledges students' individual experiences, behaviors, opinions, cultural backgrounds, and aspirations, while encouraging active and continuous communication.

The post-method approach restructures learning relationships through three key pedagogical parameters: (i) Particularity which recognizes unique teaching and learning practices emerge from specific contexts. (ii) Practicality that encourages innovative and interactive learning methods; and (iii) Possibility which aim to explore diverse perspectives in problem-solving within the teaching and learning process.

Project-Based Learning (PBL) Approach: As part of the research and project development process, students will engage in Project-Based Learning (PBL). This methodology enables students to identify real-world problems and critically analyze them through continuous supervision and inquiry, ultimately leading to viable solutions. The PBL process follows a 10-step structure throughout the semester, as outlined by Markham (2011).

Furthermore, technology-integrated teaching strategies will be used to enhance and facilitate autonomous learning. These digital tools provide structured content and encourage active student participation in both classroom discussions and collaborative projects. To have a successful implementation, students should: (i) define the type of activity to be carried out; (ii) establish the objective of the activity; (iii) determine the type of materials required for their project. (iv) choose a format to present their findings.

As the line of inquiry set, students will deliver a presentation that integrates language learning and research, fostering a comprehensive learning experience. This process is designed to enhance students' competencies in the following aspects: (i) Autonomy, as they conduct independent research; (ii) Oral presentations using English-language to communicate their findings and developing confidence in delivered a spoken discourse in real-life contexts. (iv) Technological and Educational Tool Utilization – Leveraging user-friendly, accessible online resources for learning, and presenting.

To create positive impact in solution seeking, students are guided to follow some simple steps for PBL construction according to Markham (2011). First (1) students choose a relevant, real-world topic that aligns with course objectives and motivates engagement, and the group collaboratively formulates a guiding question. Then (2) they formulate their working groups, and following the general question, they discuss and choose their situation of interest. After (3) the working groups define the planning phase and deliverables, and their expected final product is determined, ensuring alignment with course competencies, they must present advances each term. To start with the inquiry question (4), students conduct independent research, gather information and real-world insights, receiving ongoing feedback and guidance. After (5) findings are discussed according to the deliverables agreed. After that, (6) As a result of the inquiry process becoming a product, students must present it as the final achievement of the workgroup. The final stage of the process set on a collective response to the main question – based on the findings from all groups. Co-Evaluation and Self-Assessment where students reflect on their progress and evaluate both their individual and group contributions to the project.

How is hospitality conceived for our teaching process? Based on the principles from the program and constructions elaborated in the subjects mentioned the hospitality is considered as a practice of mediation that allows the connection of disciplines and approaches developed within contexts shaped by different times and territories (Lynch, Molz, McIntosh, Lugosi, & Lashley, 2021). This potential of hospitality—to create interconnections between diverse contexts and cultural narratives—represents a paradigm shift from the traditional notion of the *guide*, associated with conventional tourism, to the idea of *mediators* who foster intercultural dialogue through practices related to hospitality.

The Systematization of Experiences as a review and analysis about the teaching processes, for the subjects at the Bachelor program in Recreation and Tourism, showed that Hybrid Learning contributes to motivation and develop critical thinking through research and collaborative work, combining digital tools and face to face strategies to have a wider vision of real contexts.

The base for tourism studies and fields related are real-world situations, in our case, the lines of inquiry are set on local and regional contexts, seeking information online and contrasting with the actual context studied.

Educational mediation is a protocol linked to hospitality. It becomes possible to develop a pedagogy of tourism. The aim is to promote dialogical encounters that re-create cultural expressions or manifestations integrated into the social practices of the territories—encounters with the other, with others, and with the community (Escobar, 2003). Hospitality fosters dialogue and communication that stimulate emotions and feelings, generating well-being and contributing to the improvement of relational systems and the enrichment of the experience. This occurs within a pedagogical exercise where both host and visitors co-construct the meaning of their experiences.

References

- Escobar, A. (2003). Mundos y conocimientos de otro modo. El programa de investigación de modernidad/colonialidad latinoamericano. *Tabula Rasa*, 1(1), 51-86. Retrieved from <https://www.redalyc.org/articulo.oa?id=39600104>.
- Festiawan, R., Festiawan, E. S., Sumanto, E., Febriani, A. R., Permadi, A. A., Arifin, Z., & Pratama, K. W. (2024). The hybrid learning system with project based learning. *Retos*, 1009-1015.
- Kumaravadivelu, B. (2006). *Understanding language teaching: From method to postmethod*. Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.
- Lynch, P., Molz, J., Mcintosh, A., Lugosi, P., & Lashley, C. (2021). Theorizing hospitality: A reprise. *Hospitality & Society*, 3(11), 249-270. doi:https://doi.org/10.1386/hosp_00046_2.
- Markham, T. (2011). Project based learning: A bridge just far enough. *Teacher Librarian*, 2(39), 38-42. Retrieved from <https://www.proquest.com/openview/c1fb978702898324f288f75dba836879/1?cbl=38018&pq-origsite=gscholar>.
- Recreación, L. (2012). Documento Maestro. Bogotá: Universidad Pedagógica Nacional.

LA CREACIÓN DE CONTENIDO DIGITAL COMO HERRAMIENTA METODOLÓGICA DE ENSEÑANZA DE TURISMO. CASO: UNIVERSIDAD DE GUAYAQUIL

180

José Alonso Hidalgo León⁶⁷

Universidad de Guayaquil
Ecuador

⁶⁷ Máster en Dirección y Gestión Turística; Máster en Planificación y Diseño de Destinos y Productos Turísticos (Universidad de Coruña, España); Ingeniero en Gestión Turística y Hotelera (UEES, Ecuador); actualmente Docente Titular Agregado en la Carrera de Turismo de la Facultad de Ciencias Administrativas de la Universidad de Guayaquil, Ecuador.

Resumen

La digitalización ha generado transformaciones significativas en la educación universitaria, promoviendo la interactividad y autonomía de los estudiantes. En este contexto, la creación de contenido digital se ha consolidado como una herramienta clave en la enseñanza del turismo, facilitando el acceso a materiales personalizados y adaptativos. Entre sus beneficios, destacan la accesibilidad y flexibilidad, ya que los estudiantes pueden acceder a los materiales en cualquier momento y lugar, impulsando el aprendizaje de nuevas destrezas. Sin embargo, su implementación enfrenta desafíos como la brecha digital entre docentes y estudiantes, y la necesidad de garantizar la calidad del contenido generado. Para superar estos retos, se recomienda el uso de herramientas accesibles, el diseño de materiales atractivos y estrategias que fomenten la participación activa. Este estudio realizado en la carrera de Turismo de la Universidad de Guayaquil en Ecuador evidenció que la gran mayoría de los estudiantes valoran positivamente la creación de contenido digital, ya que les ha permitido transformar su perspectiva profesional y fomentar la adquisición de nuevas habilidades. Se concluye que esta herramienta metodológica representa una oportunidad para optimizar el proceso de enseñanza-aprendizaje en turismo en esta institución de educación superior, aunque requiere planificación académica, formación docente y acceso a infraestructura tecnológica y servicios digitales adecuados.

Palabras clave

Creación de contenido, Educación universitaria, Turismo, Enseñanza-aprendizaje, Digitalización

Abstract

Digitalization has generated significant transformations in university education, promoting interactivity and student autonomy. In this context, the creation of digital content has become a key tool in tourism education, facilitating access to personalized and adaptive materials. Among its benefits, accessibility and flexibility stand out, since students can access the materials at any time and place, boosting the learning of new skills. However, its implementation faces challenges such as the digital divide between teachers and students, and the need to ensure the quality of the content generated. To overcome these challenges, the use of accessible tools, the design of attractive materials and strategies that encourage active participation are recommended. This study conducted in the Tourism career at the University of Guayaquil in Ecuador showed that the vast majority of students value positively the creation of digital content, as it has allowed them to transform their professional perspective and promote the acquisition of new skills. It is concluded that this methodological tool represents an opportunity to optimize the teaching-learning process in tourism at this higher education institution, although it requires academic planning, teacher training and access to technological infrastructure and adequate digital services.

Keywords

Content creation, University education, Tourism, Teaching-learning, Digitization,

La carrera de Turismo es ofertada desde el año 2018 por la Facultad de Ciencias Administrativas de la Universidad de Guayaquil, y está compuesta por nueve niveles de estudio, cada uno de ellos con una duración de dieciséis semanas. La planta docente está conformada por dieciocho docentes, tres de ellos cuentan con un título de doctorado y los quince restantes poseen títulos de maestría.

La educación superior en la actualidad, integra diversas herramientas tecnológicas y digitales, generando así, novedosos modelos de enseñanza-aprendizaje. La creación de contenido digital, es una de las herramientas disponibles para la docencia universitaria en el contexto de las ciencias sociales, y más aun en el ámbito del turismo, ya que el mismo dota al creador de contenido de amplios insumos para la elaboración de piezas digitales de calidad. Por otro lado, esta herramienta digital permite dinamizar la experiencia educativa y el contacto con el docente, sobretodo en asignaturas con un componente práctico-experimental, en las que se necesita la disponibilidad de materiales didácticos innovadores y personalizados, pudiendo adaptarlos a diferentes estilos de aprendizaje, inclusive para estudiantes con necesidades educativas especiales.

Introducción

El avance tecnológico y la digitalización han propiciado cambios significativos en la educación universitaria. Según Cabero-Almenara y Llorente-Cejudo (2021), el aprendizaje digital potencia la interactividad y la autonomía del estudiante, desarrollando habilidades y promoviendo un papel más activo en la construcción, generación y transferencia del conocimiento. En este sentido, la creación de contenido digital se ha convertido en una herramienta clave para docentes y estudiantes de turismo, incitando cambios relevantes en la educación universitaria.

Beneficios de la Creación de Contenido Digital

Accesibilidad y Flexibilidad

Los estudiantes que acceden a contenido digital tienen disponibilidad a diversos materiales en cualquier momento, dentro y fuera del campus universitario, y desde cualquier lugar del mundo, promoviendo el aprendizaje autónomo principalmente, así como la creación de contenido de autoría propia (Salinas, 2022).

Aprendizaje Adaptativo

La creación de contenido digital y las diversas aplicaciones para ello, permite a los docentes, la generación de materiales específicos, adaptables y que respondan a distintos estilos de aprendizaje, promoviendo así, la personalización del proceso enseñanza-aprendizaje (Rodríguez, & García, 2023).

Interactividad y Gamificación

Elementos interactivos, como simulaciones y videojuegos educativos, han demostrado aumentar la motivación y la retención del conocimiento en estudiantes universitarios se ve incrementada cuando estos utilizan materiales digitales, simuladores, videos educativos y otros elementos interactivos (Prensky, 2021).;

184

Desafíos en la Implementación

- Brecha digital

Es necesario entender que existe una brecha digital entre docentes y estudiantes, entre docentes de la misma carrera o unidad educativa, y entre estudiantes, ya que no todos poseen las mismas competencias y habilidades digitales, lo que pueda generar obstáculos en la implementación de materiales creados digitalmente (Gros & García-Peñalvo, 2022).

- Calidad del contenido

Es necesario evitar la información sin sustento académico ni contrastación, y promover la creación de materiales fiables y válidos en el ámbito académico (Area-Moreira, 2020).

Mejores Prácticas para la Creación de Contenido Digital

- Uso de aplicaciones de edición y producción de contenido multimedia, de accesibilidad gratuita, principalmente, y amigables con los usuarios (p. ej., Canva, Capcut, Airbrush, etc.).
- Diseño de materiales visualmente atractivos y de excelente comprensión.
- Implementación de estrategias para la evaluación de la participación activa de los estudiantes.

Metodología

Se aplicó una encuesta a los estudiantes del último nivel de estudios de la carrera de Turismo de la Universidad de Guayaquil, obteniendo la participación de 60 de 70 estudiantes matriculados en el noveno ciclo, quienes han tomado asignaturas en las que la creación de contenido digital ha sido una herramienta metodológica por parte de los docentes. El cuestionario constó de 10 ítems y se utilizó una escala de Likert

Resultados

- Un 90% de los estudiantes consultados consideran que la creación de contenido digital les ha permitido pensar diferente como futuro profesional de turismo.
- Existe una alta relación entre la creación de contenido en clase y el interés en el aprendizaje de otras herramientas de generación y publicación de materiales multimedia.

- El aprendizaje de nuevas habilidades para la creación de contenido digital motivó a los estudiantes a descubrir habilidades que creían que no podían desarrollar.
- Se valora la relación de la obtención de habilidades para la creación de contenido digital y el planteamiento de diferentes aristas de opinión por parte del creador de contenido.
- Existe una alta valoración para los docentes que utilizaron material digital de autoría propia durante el desarrollo de las sesiones de clase.

Conclusions

La creación de contenido digital en la enseñanza universitaria en turismo, significa una relevante oportunidad para mejorar la experiencia educativa, y el contacto con el docente, tanto en las asignaturas presenciales, así como en las virtuales, promoviendo la interacción con y entre los estudiantes, el desarrollo de nuevas habilidades y la accesibilidad a los materiales generados por los docentes. No obstante, su implementación requiere de una política pedagógica que se apegue al modelo educativo de la institución de educación superior, capacitación y formación docente, infraestructura tecnológica adecuada, dotación de servicios digitales, acceso a aplicaciones de uso gratuito para estudiantes y docentes, así como una planificación académica que garantice su aplicación durante las horas de clase programadas y su efectividad en el proceso enseñanza-aprendizaje.

Referencias

- Area-Moreira, M. (2020). *La educación en la sociedad digital*. Editorial Síntesis.
- Cabero-Almenara, J., & Llorente-Cejudo, C. (2021). *Tecnología educativa y aprendizaje en red*. Ediciones Pirámide.
- Gros, B., & García-Peñalvo, F. J. (2022). *Educación en la era digital: retos y oportunidades*. *Revista de Educación a Distancia*, 22(68), 1-18.
- Prensky, M. (2021). *Enseñar a nativos digitales: la nueva educación para una sociedad globalizada*. Ediciones SM.
- Rodríguez, J., & García, L. (2023). *Innovación educativa y tecnología: Estrategias para el aprendizaje universitario*. Editorial Universitaria.
- Salinas, J. (2022). E-learning y la transformación digital en la educación superior. *RIED. Revista Iberoamericana de Educación a Distancia*, 24(3), 50-70.