Tourism and ICT. Bibliometric Study

Subjects: Hospitality, Leisure, Sport & Tourism Contributor: Alba-María Martínez-Sala

The scientific production of digital literacy at the university level published in the Scopus database is analyzed, with a special emphasis on studies on tourism due to the relevance of information and communication technology (ICT) in said professional sector. For this, a bibliometric study of a pertinent sample is undertaken using a mixed methodology and based on a series of variables related to formal and content aspects. The last variable, reserved for the academic field under study, directly addresses the main objective as regards tourism. The results show a great global and multidisciplinary interest in digital literacy (DL), mainly from students. There is also a parallel between the integration of ICT into society and the growing evolution of case studies, as well as little interest in their development in specific areas such as tourism studies. Despite good results in general terms, the lack of specialization poses challenges that require greater involvement of training institutions in the sense of providing future professionals with the necessary tools to face them successfully, especially in sectors such as tourism where ICTs are a key piece.

Keywords: bibliometric ; digital literacy ; digital education ; educational technology ; higher education ; ICT ; tourism

1. Introduction

Technological development, and especially the 2.0 web model, is causing drastic changes in society in general [1][2][3]. Information and communication technologies (ICT) have been implemented in the day-to-day life of people, companies, etc., modifying all the processes related to interaction and socialization [4][5], but also other more specific processes, such as those concerning education [6][7][8]. The educational system needs to adapt to new scenarios resulting from the development and massive implementation of ICT both at a methodological level, adapting the teaching-learning processes, as well as the educational objectives in relation to the training of students [9][10]. Hence, there is not only a need to integrate ICTs into training processes, but also to equip students with the knowledge and skills necessary to optimize their use [11][12][13]. Today there are tools that allow learning processes to be much more personalized and more flexible [14]. In this specific case, ICT training as a cross-cutting element is the key to the correct future professional performance of graduates.

In this sense, at all educational levels and, especially at the university level ^{[15][16][17]}, the concept of digital literacy (DL) arises and refers to the safe and critical use of ICT that favors the achievement of objectives. This is not only related to learning, but also to the employability of students and their active participation in society ^{[18][19][20][21]}. Along the same lines, UNESCO proposes the following definition of DL:

"Digital literacy is the ability to define, access, manage, integrate, communicate, evaluate and create information safely and appropriately through digital technologies and networked devices for participation in economic and social life. It includes competencies that are variously referred to as computer literacy, ICT literacy, information literacy, data literacy, and media literacy."

^[22] (p. 132)

In this sense, in the university academic field, DL implies equipping students with the skills, knowledge, and attitude necessary to interact with digital tools and content in an effective, efficient, and ethical manner, while exploiting all their skills: informative, communicative, relational potential, etc. ^{[23][24]}. In the current globalized and virtually interconnected business context, the DL of students, as future protagonists of this market, must be incorporated into the university environment as one of the main formative objectives ^[17]. Its consideration is not only an important curricular innovation ^[25] [^{26]} but it is also an added value for both students and teachers, particularly when it is adapted to different fields of study ^{[17][27][28][29]}. Despite the demands and advantages described, many higher education institutions have not yet fully embraced DL as a fundamental literacy ^[30].

From the above, it is understood that notable interest exists in academic research on the literacy of university students $^{[1]}$ $^{[19][31]}$ characterized by a constant adaptation to the new demands derived from the changes experienced by the social environment, which are caused, to a large extent, by technological development $^{[10][16][19][32]}$. Another feature that defines research on literacy, and specifically on DL, is its focus or specialization in specific areas or disciplines in response to the different levels of demand that professional sectors require of graduates $^{[9][33][34][35]}$, including the tourist field $^{[36][37][38][39]}$ $^{[40][41]}$.

Higher education plays a key role in acquiring the skills necessary for students to be properly integrated into the professional context $\frac{[41][42]}{[42]}$. In this sense, DL must provide students, in general, with the necessary qualification to face the challenges of the digital information age $\frac{[15][43][44]}{[15][43][44]}$. This maxim acquires greater relevance among tourism students $\frac{[38][40]}{[38][40]}$ due to the growing impact that ICTs have had on the sector $\frac{[45][46][47][48]}{[46][47][48]}$ and because the forecast, based on the pandemic we are experiencing, is that it will keep growing $\frac{[49][50][51][52][53]}{[49][50][51][52][53]}$.

2. Tourism

In the era of digital information, the tourism sector has been one of the sectors that have given the greatest impulse for the introduction of ICT ^[54], undergoing a profound transformation, as a result of its integration ^{[55][56]}, with important repercussions for destination management and marketing ^{[57][58][59]}. The technological revolution has affected all agents in the sector, from professionals to consumers, and ICTs have become a key element in the competitiveness of tourism companies ^{[60][61]}. The challenge for this sector does not lie in accepting the advantages of ICT and integrating them, those that do not do so are doomed to failure, but in doing so in such a way that it is exploited its full potential ^[62]. For this reason, one of the most important challenges facing this industry is related to ICT training for new generations of tourism professionals ^[63].

Official studies related to this industry are relatively recent because for a long time it was not considered that the incorporation of this labor into this sector required specific training ^[64]. This has resulted in an industry in which its workers have been the least qualified academically compared to others ^[65]. However, in the evolution of tourism towards a crucial sector for the development of many countries ^{[66][67][68]}, the specialization and training of its professionals have become a key factor that guarantees the competitiveness of destinations ^{[63][69]}. This is how, in the face of the professionalization and modernization of a sector in which the demand for qualified personnel is constantly growing, educational institutions have been developing study programs to satisfy this need ^{[39][69][70]}. In these programs, skills and abilities related to ICT ^{[71][72][73][74]} are essential given the impact of these tools in the associated professional field ^{[39][63][75]}. In this regard, the agents that make up the tourism sector question whether the training of graduates of the tourism branch is appropriately adapted to the needs of an increasingly complex and competitive work environment ^[76] that requires a multitude of skills and competencies ^{[39][63][69][77][78][79]} among which those related to ICTs ^[63] stand out.

In this sense, research related to education, study programs, etc., of the tourism area is gaining prominence in the academic and professional fields ^{[69][76][80][81]} while those focused on challenges posed by the integration of ICT in this same industry ^[60]. Thus, the benefit of delving into those that combine both aspects and focus on the consideration of ICT as a fundamental part of the academic training of tourism students ^{[40][69]} and, consequently, on their DL is evident.

Research on education in specific fields and on some of its key aspects, such as DL, is frequent due to the interest in the academic and teaching fields [44][82][83][84]. Furthermore, technology is a recurring topic due to its implications in the evolution of teaching and the changes that this requires [1][44][85][86]. The circumscription to specific disciplines or branches of studies is due to the fact that the aforementioned implications vary among them [87][88]. In this sense, and as already indicated, in the field of tourism studies, DL is crucial given the incidence of ICT in this industry [67][89][90][91][92].

Based on the above, the main objective of this research consists of analyzing the scientific production on DL in higher education to describe it and, also, determine the degree of prominence of studies on tourism in this field. From the main objective, there are a series of specific objectives that are classified into two sections. The first section brings together those related to the descriptive aspects of the basic characteristics of the documents and that do not require consulting their contents, as is the case of the objectives of the second section.

O1 Formal descriptive objectives:

- O1.1: Determine the evolution of research on DL.
- O1.2: Classify research on DL according to the type of document.
- O1.3: Classify research on DL according to the productivity of the journals.

• O1.4: Classify research on DL according to the productivity of the authors.

O2 Descriptive objectives of the content:

- O2.1: Classification of documents according to their nature.
- O2.2: Classification of documents according to geographic scope.
- O2.3: Classification of documents according to the university population segment of the study.

The set of objectives related to the description and analysis of the literature on DL in higher education is completed with a series of objectives related to the study of DL in the area of tourism.

- O2.4: Classification of documents according to academic/teaching area (in which areas or discipline/s the study is carried out).
- O2.5: Determine the level of presence of research on DL in the field of studies related to the sector and industry of tourism.

To achieve the stated objectives, a systematic literature review is carried out. This is a theoretical construct whose purpose is to review the relevant documents in the field obtained from the most relevant databases $\frac{[19][93]}{2}$.

3. Conclusion

In general terms, it can be concluded that publications on DLSC are approached from different research perspectives, and range from concrete descriptions of teaching–learning methodologies and procedures and how future teachers should use ICT, to more normative approaches ^{[9][16][43]} but they are not characterized by specialization and personalization that is crucial at the present time given the degree of professionalization of the current labor market. Organizations, in general terms, must adapt to the new challenges imposed by global economic, social, technological, etc. transformations while preserving their competitiveness ^{[61][94]}. For this, the development, access, and use of ICTs is not only a key factor but is necessary ^[95]. In the tourism sector, an industry that has become a source of economic and social development in many territories ^{[61][89]}, ICTs have generated new opportunities ^[96] but also the need for more trained professionals in this field who can exploit their full potential to the maximum ^[63].

The digital information age presents opportunities, but also challenges when it comes to destination marketing and management ^{[68][97][98]}. These challenges require the involvement of training institutions in the sense of providing future professionals with the necessary tools to face them ^{[40][41][69]} because human resources are crucial to achieving a real advantage in the global tourism industry, characterized by its volatility and competitiveness ^[99]. The results obtained represent a contribution to the academic and professional fields since scientific activity is evaluated with respect to DLSC in higher education, providing crucial information to tackle the challenges described ^{[44][85][100][101]}. Higher education and ICT must form an indissoluble pairing that serves as a model for the previous educational stages, becoming a source of theoretical and practical knowledge about DL, about how to turn students into expert professionals in the creation, development, and use of ICT. This is the goal pursued by this study and which has been materialized in a photograph of the evolution and current state of the scientific literature on DLSC, with special attention to studies on tourism. The meager results obtained in this regard contrast with the relevance of ICT in the corresponding sector, conferring added value to the line of research initiated in terms of its projection, since for tourism students the integration of ICT in their face training is crucial upon their incorporation into the professional field ^[40] and this process will not be successful unless their DL is previously undertaken.

Despite the achievement of the goal and objectives, the research carried out is not exempt from limitations that are established as next phases or future lines. These are mainly related to the sample that should be expanded to other relevant databases such as Web of Science (WOS) as well as to other teaching areas and disciplines, giving it a global approach and a new perspective that addresses the universal and global nature of the DL.

References

^{1.} Hinojo-Lucena, F.J.; Aznar-Díaz, I.; Cáceres-Reche, M.P.; Romero-Rodríguez, J.M. Artificial intelligence in higher educ ation: A bibliometric study on its impact in the scientific literature. Educ. Sci. 2019, 9, 51.

- 2. Darwish, A.; Lakhtaria, K.I. The Impact of the New Web 2.0 Technologies in Communication, Development, and Revolu tions of Societies. J. Adv. Inf. Technol. 2011, 2, 204–216.
- 3. O'Reilly, T. What is the Web 2.0. Design Patterns and Business Models for the Next Generation of Software. Available online: (accessed on 9 March 2021).
- 4. Morimoto, S.A.; Friedland, L.A. The lifeworld of youth in the information society. Youth Soc. 2011, 43, 549–567.
- 5. León, M.E.L.; Medina, H.S. Las TIC. Un nuevo escenario para el desarrollo local de las comunidades. Opcion 2016, 3 2, 71–94.
- 6. Dornaleteche, J.; Buitrago, A.; Moreno, L. Categorization, item selection and implementation of an online digital literacy test as media literacy indicator. Comunicar 2015, 22, 177–185.
- 7. Tur, G.; Urbina, S. La colaboración en eportafolios con herramientas de la Web 2.0 en la formación docente inicial. Cul t. Educ. 2016, 28, 601–632.
- 8. Stopar, K.; Bartol, T. Digital competences, computer skills and information literacy in secondary education: Mapping an d visualization of trends and concepts. Scientometrics 2019, 118, 479–498.
- 9. Peña-Acuña, B.; Martínez-Sala, A.-M.; Felipe Morales, A. Flexibilidad en Apps de cuentos de realidad aumentada. Uto pía Prax. Latinoam. 2020, 25, 225–243.
- 10. Ocaña-Fernández, Y.; Fernández, L.A.V.; Chiparra, W.E.M.; Gallarday-Morales, S. Digital skills and digital literacy: New trends in vocational training. Int. J. Early Child. Spec. Educ. 2020, 12, 370–377.
- Martínez-Sala, A.-M.; Alemany-Martínez, D. Integración eficiente de redes sociales como herramientas complementari as de aprendizaje y para la alfabetización digital en los estudios superiores de Publicidad y RR. PP. In El Compromiso Académico y Social a Través de la Investigación e Innovación Educativas en la Enseñanza Superior; Roig-Vila, R., E d.; Ediciones Octaedro: Barcelona, Spain, 2018; pp. 1126–1136. ISBN 978-84-17219-25-3.
- McMahon, M. Ensuring the development of Digital Literacy in higher education curricula. In Proceedings of the Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education, Dunedin, New Zealand, 23–26 November 2014; pp. 524–528.
- 13. Domingo-Coscollola, M.; Bosco-Paniagua, A.; Carrasco-Segovia, S.; Sánchez-Valero, J.-A. Fomentando la competenci a digital docente en la universidad: Percepción de estudiantes y docentes. Rev. Investig. Educ. 2019, 38, 167–182.
- Barrientos-Báez, A. GDS Amadeus. Propuesta de innovación didáctica. In TIC Actualizadas para una nueva Docencia Universitaria; Durán Medina, J.V., Durán Valero, I., Eds.; McGraw-Hill: New York, NY, USA, 2016; pp. 17–30. ISBN 978 8448612658.
- 15. Odede, I.; Jiyane, G. Exploring dimensional constructs of digital literacy skills for higher education. Libr. Philos. Pract. 2 019, 2019, 2806.
- 16. Spante, M.; Hashemi, S.S.; Lundin, M.; Algers, A. Digital competence and digital literacy in higher education research: Systematic review of concept use. Cogent Educ. 2018, 5, 1–21.
- 17. Katzlinger, E.; Niederländer, U. Supporting virtual learning for digital literacy: First experiences with a mobile app and g amification elements. Proc. Eur. Conf. e-Learn. 2018, 2018, 235–244.
- 18. Peled, Y. Pre-service teacher's self-perception of digital literacy: The case of Israel. Educ. Inf. Technol. 2020.
- 19. Sánchez-Caballé, A.; Gisbert-Cervera, M.; Esteve-Mon, F. The digital competence of university students: A systematic li terature review. Aloma 2020, 38, 63–74.
- 20. Almansa-Martinez, A.; Van-Zummeren Moreno, G.; Haro, R. Functionalities of Moodle and Edmodo in the Middle and H igher Educations. Rev. Comun. SEECI 2019, 50, 87–105.
- 21. Salas-Rueda, R.-A.; Salas-Rueda, R.-D. Análisis Sobre El Uso De La Red Social Facebook En El Proceso De Enseña nza-Aprendizaje Por Medio De La Ciencia De Datos Tt—Analysis on the Use of the Social Network Facebook in the Te aching-Learning Process Through Data Science Analises Sobre O Uso Da. Rev. Comun. SEECI 2020, 1, 1–26.
- 22. Law, N.; Woo, D.; de la Torre, J.; Wong, G. A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4. 2.; UNESCO: Paris, France, 2018.
- Julien, H. Digital literacy in theory and practice. In Encyclopedia of Information Science and Technology; Khosrow-Pour, M., Ed.; IGI Global: Hershey, PA, USA, 2018; pp. 22–32.
- 24. Neumann, M.M.; Finger, G.; Neumann, D.L. A conceptual framework for emergent digital literacy. Early Child. Educ. J. 2017, 45, 471–479.
- 25. Holt, D.; Smissen, I.; Segrave, S. New students, new learning, new environments in higher education: Literacies in the digital age. In Proceedings of the 23rd Annual Ascilite Conference of the Australasian Society for Computers in Learnin

g in Tertiary Education: Who's Learning? Whose Technology? Sydney, Australia, 3–6 December 2006; pp. 327–337.

- Pugacheva, N.; Kirillova, T.; Kirillova, O.; Luchinina, A.; Korolyuk, I.; Lunev, A. Digital paradigm in educational manage ment: The case of construction education based on emerging technologies. Int. J. Emerg. Technol. Learn. 2020, 15, 96 –115.
- English, J.A. A Digital Literacy Initiative in Honors: Perceptions of Students and Instructors about its Impact on Learning and Pedagogy. J. Natl. Coll. Honor. Counc. 2016, 17, 125–155.
- 28. Starčič, A.I.; Cotic, M.; Solomonides, I.; Volk, M. Engaging preservice primary and preprimary school teachers in digital storytelling for the teaching and learning of mathematics. Br. J. Educ. Technol. 2016, 47, 29–50.
- 29. Varga-Atkins, T. Beyond description: In search of disciplinary digital capabilities through signature pedagogies. Res. Le arn. Technol. 2020, 28, 1–19.
- 30. Murray, M.C.; Pérez, J. Unraveling the Digital Literacy Paradox: How Higher Education Fails at the Fourth Literacy. Issu es Informing Sci. Inf. Technol. 2014, 11, 85–100.
- Recio Muñoz, F.; Silva Quiroz, J.; Abricot Marchant, N. Análisis de la Competencia Digital en la Formación Inicial de est udiantes universitarios: Un estudio de meta-análisis en la Web of Science. Píxel-BIT Rev. Medios Educ. 2020, 125–14
 6.
- Oliveira, C.; Lopes, J.; Spear-Swerling, L. Teachers' academic training for literacy instruction. Eur. J. Teach. Educ. 201 9, 42, 315–334.
- 33. You, Y. Online technologies in dance education (China and worldwide experience). Res. Danc. Educ. 2020.
- 34. Hunma, A. Students make history every day just by sitting on these steps: Performative spaces and re-genring in the s outh. Educ. Chang. 2018, 22, 1–25.
- 35. Shopova, T. Digital literacy of students and its improvement at the university. J. Effic. Responsib. Educ. Sci. 2014, 7, 26 –32.
- Phuapan, P.; Viriyavejakul, C.; Pimdee, P. An analysis of Digital Literacy Skills among Thai University Seniors. Int. J. E merg. Technol. Learn. 2016, 11, 24–31.
- 37. Avello, R.; López, R.; Gómez, M.; Espinosa, G.; Vázquez, S. Necesidades de formación en TIC de los docentes de las escuelas de Hotelería y Turismo cubanas. IJERI Int. J. Educ. Res. Innov. 2014, 1, 15–28.
- 38. Avello-Martínez, R.; López-Fernández, R.; Alpizar-Fernández, R. Sistema de formación continua para la alfabetización digital de los docentes de la escuela de hotelería y turismo de Cienfuegos. Rev. Educ. Distancia 2016.
- 39. Avello-Martínez, R.; López Fernández, R. Digital literacy for teachers in Cuban Tourism and Hotel Management School s. Some experiences on its development. RUSC. Univ. Knowl. Soc. J. 2015, 12, 3.
- 40. Cowie, B.; Khoo, E. Digital tools disrupting tertiary students' notions of disciplinary knowledge: Cases in history and tou rism. Educ. Sci. 2014, 4, 87–107.
- 41. Infante-Moro, A.; Infante-Moro, J.; Gallardo-Pérez, J. The acquisition of ICT skills at the university level: The case of the Faculty of Business Studies and Tourism of the University of Huelva. Pixel-Bit Rev. Medios Educ. 2021, 29–58.
- 42. Pérez-Mateo, M.; Romero, M.; Romeu-Fontanillas, T. Collaborative construction of a project as a methodology for acqui ring digital competences. Comunicar 2014, 21, 15–23.
- 43. Lea, M.R. Reclaiming literacies: Competing textual practices in a digital higher education. Teach. High. Educ. 2013, 18, 106–118.
- 44. Rodríguez Jiménez, C.; Sanz Prieto, M.; Alonso García, S. Technology and higher education: A bibliometric analysis. E duc. Sci. 2019, 9, 169.
- 45. Huertas, A.; Marine-Roig, E. Differential destination content communication strategies through multiple Social Media. In Information and Communication Technologies in Tourism 2016; Inversini, A., Schegg, R., Eds.; Springer: Cham, Switze rland, 2016; pp. 239–252.
- 46. Ivars-Baidal, J.A.; Celdrán-Bernabeu, M.A.; Mazón, J.-N.; Perles-Ivars, Á.F. Smart destinations and the evolution of ICT s: A new scenario for destination management? Curr. Issues Tour. 2019, 22, 1581–1600.
- 47. Petrović, J.; Milićević, S.; Djeri, L. The information and communications technology as a factor of destination competitiv eness in transition countries in European Union. Tour. Econ. 2016, 23, 1353–1361.
- 48. Marine-Roig, E.; Huertas, A. How safety affects destination image projected through online travel reviews. J. Destin. M ark. Manag. 2020, 18, 100469.
- 49. Martínez-Sala, A.-M. ¡Hay turismo después del COVID-19!: Una crisis para la reflexión y el cambio. Desarro. Econ. So c. 2020, 9, 43–53.

- 50. Williams, C.C. Impacts of the coronavirus pandemic on Europe's tourism industry: Addressing tourism enterprises and workers in the undeclared economy. Int. J. Tour. Res. 2020, 1–10.
- 51. Huertas, A.; Oliveira, A.; Girotto, M. Crisis communication management by the national tourist organizations of spain an d italy in the face of COVID-19. Prof. Inf. 2020, 1–19.
- 52. Villa, F.G.; Litago, J.D.U.; Sánchez-Fdez, A. Perceptions and expectations in the university students from adaptation to the virtual teaching triggered by the covid-19 pandemic. Rev. Lat. Comun. Soc. 2020, 2020, 99–119.
- 53. Tejedor, S.; Cervi, L.; Tusa, F.; Parola, A. Education in times of pandemic: Reflections of students and teachers on virtu al university education in Spain, Italy and Ecuador. Rev. Lat. Comun. Soc. 2020, 2020, 1–21.
- 54. Gössling, S. Tourism, technology and ICT: A critical review of affordances and concessions. J. Sustain. Tour. 2021.
- 55. Zaidan, E. Analysis of ICT usage patterns, benefits and barriers in tourism SMEs in the Middle Eastern countries: The c ase of Dubai in UAE. J. Vacat. Mark. 2016, 23, 248–263.
- 56. Ukpabi, D.C.; Karjaluoto, H. Consumers' acceptance of information and communications technology in tourism: A revie w. Telemat. Inform. 2017, 34, 618–644.
- 57. Gössling, S. Tourism, information technologies and sustainability: An exploratory review. J. Sustain. Tour. 2017, 25, 102 4–1041.
- 58. Fernández Paradas, R.; Sánchez Guzmán, R. La revolución Youtube y su influencia en la construcción de las identida des locales por medio de la Semana Santa. Rev. Cienc. Comun. Inf. 2018, 23, 53–66.
- 59. Walls Ramírez, M. Aportes de la comunicación para la difusión del patrimonio cultural. Rev. Cienc. Comun. Inf. 2020, 2 5, 49–55.
- 60. Gjika, I.; Pano, N. Effects of ICT in Albanian tourism business. Acad. J. Interdiscip. Stud. 2020, 9, 252-263.
- 61. Milićević, S.; Petrović, J.; Dordević, N. ICT as a factor of destination competitiveness: The case of the republics of form er Yugoslavia. Manag. Mark. 2020, 15, 381–392.
- 62. Porter, M. Strategy and the Internet. Harv. Bus. Rev. 2001, 3, 2-19.
- 63. Bilotta, E.; Bertacchini, F.; Gabriele, L.; Giglio, S.; Pantano, P.S.; Romita, T. Industry 4.0 technologies in tourism educati on: Nurturing students to think with technology. J. Hosp. Leis. Sport Tour. Educ. 2020.
- 64. Cooper, C.; Shepherd, R. The Relationship Between Tourism Education and The Tourism Industry: Implications for Tour ism Education. Tour. Recreat. Res. 1997, 22, 34–47.
- 65. Baum, T. Human resources in tourism: Still waiting for change. Tour. Manag. 2007, 28, 1383–1399.
- 66. Buhalis, D.; Amaranggana, A. Smart Tourism Destinations Enhancing Tourism Experience Through Personalisation of S ervices BT—Information and Communication Technologies in Tourism 2015; Tussyadiah, I., Inversini, A., Eds.; Springe r: Cham, Switzerland, 2015; pp. 377–389.
- Gretzel, U.; Sigala, M.; Xiang, Z.; Koo, C. Smart tourism: Foundations and developments. Electron. Mark. 2015, 25, 17 9–188.
- Gretzel, U.; Yuan, Y.-L.; Fesenmaier, D.R. Preparing for the New Economy: Advertising Strategies and Change in Desti nation Marketing Organizations. J. Travel Res. 2000, 39, 146–156.
- 69. Balbuena, A.; Salinas, D.S.; Suasnavas, M.G. Explorando la posibilidad de implementar un posgrado de turismo en Loj a (Ecuador). Rev. Espac. 2019, 40, 2017–2021.
- 70. Abdul-Ghani, M. Hospitality and Tourism Education in the Making. J. Teach. Travel Tour. 2006, 6, 71–87.
- Agüero Pérez, M.M.; López Fraile, L.A.; Pérez Expósito, J. Challenge Based Learning como modelo de aprendizaje pr ofesionalizante. Caso del programa Universidad Europea con Comunica +A. Vivat Acad. 2019, 149, 1–24.
- 72. Sabich, M. De los libros de texto a los portales educativos: Un análisis sociosemiótico sobre sus estrategias discursiva s. El caso de Introducción a la Comunicación y Educar. Perspect. Comun. 2015, 8, 59–93.
- 73. Cuéllar Santiago, F.; López-Aparicio Pérez, I. Vieo Art as a methodological tool and creative catalyst. The acquisition of competences in Media Literacy with the help of emotions. Vivat Acad. 2020, 151, 127–156.
- 74. Gordillo, A. Comunicación y Educación en contextos mediados: Nuevos desafíos para la construcción y difusión del co nocimiento. Perspect. Comun. 2015, 8, 7–23.
- 75. García-Marín, D. Transpodcast universe. Narrative models and independent community. Hist. Comun. Soc. 2020, 25, 1 39–149.
- 76. Assante, L.M.; Huffman, L.; Harp, S.S. A Taxonomy of Academic Quality Indicators for U.S.-Based 4-Year Undergradua te Hospitality Management Programs. J. Hosp. Tour. Res. 2009, 34, 164–184.

- 77. Durán Medina, J.F.; Vega Baeza, M.R. Las tecnologías de la información y de la comunicación en las facultades de ed ucación. Ilu 2013, 18, 313–326.
- 78. Arroyo-Vázquez, N.; Gómez-Hernández, J.-A. La biblioteca integrada en la enseñanza universitaria online: Situación e n España. Prof. Inf. 2020, 1–11.
- 79. Calvo-Rubio, L.-M.; Ufarte-Ruiz, M.-J. Percepción de docentes universitarios, estudiantes, responsables de innovación y periodistas sobre el uso de inteligencia artificial en periodismo. Prof. Inf. 2020, 29, 1–14.
- 80. Gursoy, D.; Swanger, N. An Industry-Driven Model of Hospitality Curriculum for Programs Housed in Accredited Colleg es of Business. J. Hosp. Tour. Educ. 2004, 16, 13–20.
- Gursoy, D.; Swanger, N. An Industry-Driven Model of Hospitality Curriculum for Programs Housed in Accredited Colleg es of Business: Part II. J. Hosp. Tour. Educ. 2005, 17, 46–56.
- 82. Akçayır, M.; Akçayır, G. Advantages and challenges associated with augmented reality for education: A systematic revi ew of the literature. Educ. Res. Rev. 2017, 20, 1–11.
- 83. Repiso, R.; Fonseca-Mora, M.C. Aproximación Bibliométrica del Desarrollo e Impacto de la Investigación Internacional en Alfabetización Audiovisual (1960–2011). Rev. Cient. Comun. Tecnol. Emerg. 2012, 10, 43–61.
- Lorenzo Lledó, G.; Scagliarini Galiano, C. Revisión bibliométrica sobre la realidad aumentada en Educación. Rev. Gen. Inf. y Doc. 2018, 28, 45–60.
- 85. Fernández Batanero, J.M.; Reyes Rebollo, M.M.; Montenegro Rueda, M. Impact of ICT on students with high abilities. Bibliographic review (2008–2018). Comput. Educ. 2019, 137, 48–58.
- Bond, M.; Zawacki-Richter, O.; Nichols, M. Revisiting five decades of educational technology research: A content and a uthorship analysis of the British Journal of Educational Technology. Br. J. Educ. Technol. 2019, 50, 12–63.
- Bhatt, I.; MacKenzie, A. Just Google it! Digital literacy and the epistemology of ignorance. Teach. High. Educ. 2019, 24, 302–317.
- 88. Elphick, M. The impact of embedded ipad use on student perceptions of their digital capabilities. Educ. Sci. 2018, 8, 102.
- 89. Martínez-Sala, A.-M.; Cifuentes Albeza, R.; Martínez-Cano, F.J. Las redes sociales de las organizaciones de marketing de destinos turísticos como posible fuente de eWOM. Observatorio 2018, 12, 246–271.
- 90. López, E.P.; Barrientos, A.; Martínez, J.A. La transformación digital del turismo. Rev. Occident. 2020, 464, 52-66.
- 91. Lerario, A.; Varasano, A.; Di Turi, S.; Maiellaro, N. Smart Tirana. Sustainability 2017, 9, 2338.
- 92. Li, Y.; Hu, C.; Huang, C.; Duan, L. The concept of smart tourism in the context of tourism information services. Tour. Ma nag. 2017, 58, 293–300.
- 93. Vangrieken, K.; Dochy, F.; Raes, E.; Kyndt, E. Teacher collaboration: A systematic review. Educ. Res. Rev. 2015, 15, 17 –40.
- 94. Drăgoi, M.C.; Andrei, J.V.; Mieilă, M.; Panait, M.; Dobrotă, C.E.; Lădaru, R.G. Food safety and security in Romania–an econometric analysis in the context of national agricultural paradigm transformation. Amfiteatru Econ. 2018, 20, 134–15
 1.
- Bejtkovský, J.; Copca, N. The Employer Branding Creation and HR Marketing in Selected Healthcare Service Provider s. Manag. Mark. 2020, 15, 95–108.
- Manente, M.; Minghetti, V. Destination management organizations and actors. In Tourism Business Frontiers. Consume rs, Products and Industry; Buhalis, D., Costa, C., Eds.; Elsevier Butterworth-Heinemann: Oxford, UK, 2006; pp. 228–23 7.
- 97. Pike, S.; Page, S.J. Destination Marketing Organizations and destination marketing: Anarrative analysis of the literatur e. Tour. Manag. 2014, 41, 202–227.
- 98. Minghetti, V.; Buhalis, D. Digital Divide in Tourism. J. Travel Res. 2009, 49, 267-281.
- Mayaka, M.; Akama, J.S. Systems approach to tourism training and education: The Kenyan case study. Tour. Manag. 2 007, 28, 298–306.
- 100. González-Zamar, M.D.; Abad-Segura, E. Implications of virtual reality in arts education: Research analysis in the conte xt of higher education. Educ. Sci. 2020, 10, 225.
- 101. Mayes, R.; Natividad, G.; Spector, J.M. Challenges for educational technologists in the 21st century. Educ. Sci. 2015, 5, 221–237.

Retrieved from https://encyclopedia.pub/entry/history/show/22860