



Journal of Hospitality, Leisure,
Sport & Tourism Education

Vol. 8, No. 2.

ISSN: 1473-8376

www.heacademy.ac.uk/johlste

RESEARCH NOTE

E-learning in tourism and hospitality: A map

Lorenzo Cantoni (lorenzo.cantoni@usi.ch), Nadzeya Kalbaska

(nadzeya.kalbaska@usi.ch) and Alessandro Inversini (alessandro.inversini@usi.ch)

Università della Svizzera italiana (University of Lugano), via G.Buffi 13, CH-6904 Lugano, Switzerland

DOI:10.3794/johlste.82.263

©Journal of Hospitality, Leisure, Sport and Tourism Education

Abstract

The impact of ICT on tourism and hospitality industries has been widely recognised as one of the major changes in the last decade: new ways of communicating with prospective tourists and of purchasing products became part of these industries' everyday lives. Little attention has been paid to the role played by new media in education in these fields. This research investigates the role of new media in education in these areas, harvesting and categorising online courses according to sub-domains in order to provide a clear overview of the field. Results provide a first picture of eLearning in tourism.

Keywords: e-learning; tourism; hospitality; training; online courses

Introduction

According to the European Union, eLearning can be defined as “the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration” (Commission of the European Communities, 2001, p. 1). Depending on the viewpoint of the researcher, it can encompass: (a) internet (online) education and training; (b) the use of information and communication technologies (ICT) in education and training; and (c) the capacity to transform education and training through the use of ICT (Cantoni, Botturi, Succi, & New MinE Lab, 2007; Cantoni & Tardini, 2006). In fact, all those perspectives can be applied in the field of tourism, a field in which ICT and the internet have had a great impact at all levels, and where acquiring new knowledge and skills is of the utmost importance for all players including tourists themselves.

Lorenzo Cantoni holds a PhD in Education and Linguistics. He is full professor at the University of Lugano, in the Faculty of Communication Sciences, Vice Dean and Vice-Director and of the Institute of Public and Educational Communication. He is also Director of the webatelier.net, a research and development laboratory of the University, which deals with a broad range of topics related to new media in communication, and of the NewMinELab: New Media in Education Laboratory.

Nadzeya Kalbaska has just finished her Master in International Tourism from University of Lugano, writing her thesis on benchmarking of online-training courses in hospitality and tourism field, whilst collaborating with webatelier.net on projects of eLearning and Tourism.

Alessandro Inversini holds a Master in Communication Sciences and Communication Technologies. He works as researcher at webatelier.net in the Faculty of Communication Sciences at the University of Lugano. His research activity primarily concerns usability, quality and new technologies of communication in cultural tourism. He is completing a PhD researching online communication in the field of cultural tourism.

The hospitality and tourism industry is therefore a very relevant area in which to study the role of eLearning, its penetration, usages, and future perspectives, not to mention success criteria and best practices (as well as problems and failures).

The paper is structured as follows: a literature review, description of the research design and methodology; results including proposal of a tentative map of current online training programmes in hospitality and tourism, a categorisation of them and an understanding of their main common characteristics; and conclusions, related issues that were identified and suggestions for future investigations.

Literature review

Tourism has always been described as an information intensive domain (Buhalis, 2000; Gretzel, Yu-Lan, & Fesenmaier, 2000), where information processing and gathering is essential (Sheldon, 1997) for day-to-day operations. Furthermore, recent advances of new technologies have radically reshaped the tourism industry (Buhalis, 2003), changing both ways of communicating with prospective tourists and ways of purchasing tourism goods (Werthner & Klein, 1999). On one side, tourists are using new media for communication purposes more and more, satisfying their information needs during all stages of consumption of tourism goods (i.e., before, during and after) (Gretzel, Fesenmaier, & O'Leary, 2006). On the other side, tourism managers understand that, if properly managed, new technologies can generate a tremendous added value for their organisations. Additionally, recent technological developments and the spread of the internet are having a notable impact on the education process: transforming educational curricula, learning materials and instructional practices (Sigala, 2002).

The tourism and hospitality industry has been described as an industry with one of the highest levels of skill shortages and staff turnover (Higher Education Funding Council for England, 1998). Moreover, Boisevert (2000) identified training as a critical success factor for the hospitality industry, a factor which is considered to be expensive and time consuming. Despite all the above-mentioned aspects, little attention has been paid to the role that new technologies already play in the tourism learning sphere, now and in the future.

According to Haven and Botterill (2003), eLearning involves the delivery and administration of learning opportunities and support via computer, networked and web-based technology, to help individual performance and development. The advantages, challenges and opportunities of eLearning have been exploited as well as widely mentioned (e.g., flexibility in terms of time and place of delivery, continuous professional development, catalyst for institutional transformation) (Poehlein, 1996), while its relevance and advantages for tourism and hospitality education has been acknowledged in the recent years (Christou & Sigala, 2000; Kasavana, 1999). Sigala (2002) indicated that the Internet in general, and eLearning in particular, offers great flexibility to match specific conditions of work within the tourism and hospitality sector. Moreover, Cho and Schmelzer (2000) stated that eLearning prepares students of tourism and hospitality programmes to think critically, solve problems and make straight decisions, while being technologically competent.

Several attempts have been made to understand and represent the use of eLearning in hospitality and tourism. Braun and Hollick (2006) discussed how flexibly delivered online skills and knowledge sharing could help capacity building in the tourism industry. Haven and Botterill (2003) reviewed the existing and potential exploitation of virtual learning environments within hospitality, leisure, sport and tourism. Sigala (2001) reviewed and evaluated the evolution of practices in internet pedagogy in order to identify effective eLearning models for tourism and hospitality education.

Finally, the literature in the eLearning community was also investigated, but no research was found on the tourism subject. For instance, the database of articles and papers managed by the Association for the Advancement of Computers in Education (AACE), which lists 20,303 items, does not list any relevant articles in the tourism field (AACE, 2009).

Research design and methodology

Purpose of this study

Based on the literature review, the absence of an extensive research on eLearning in hospitality and tourism field was identified, as well as the lack of a map of online training courses, as a result, the general purpose of this study is to map and classify, according to formal criteria of knowledge map classification (Eppler, 2008), existing online courses in the field of hospitality and tourism, in order to understand their main characteristics, settings, intended users as well as the key aims of creating those courses by providers of the educational services.

Thus, the main research objectives were to: (a) identify the presence of online training courses in the hospitality and tourism domain; (b) group existing online trainings depending on their similarities, and (c) identify the main characteristics of each group.

In this research, only the most restrictive meaning of eLearning has been taken into consideration, in other words online learning, as it can happen through courses/training modules.

Methodology

In order to meet these objectives, as well as to consider the various types of existing online training programmes in the hospitality and tourism industry, a multiple case study research approach was used. The multiple case study research method was considered to be suitable for the study, which involves an in-depth evaluation of novel educational solutions within a real life context.

In order to select a representative sample for the research, an opportunistic model was used. Web addresses of courses were collected by the researchers from the first three result pages of two popular web search engines, Google and Yahoo! (ComScore, 2008), and 300 unique results were collected and analysed. Both search engines were accessed in a four day period in March 2009, from Lugano.

Selection of keywords

In order to create a map of existing online training courses, a set of specific keywords was identified based on the keyword selection method for characterising text document maps (Lagus & Kasaki, 1999). The keywords set corresponds to the general users' image of online training courses in the hospitality and tourism industry. Keywords were divided into three sub-categories (Figure 1) with the main aim of generating a clear map of all existing online training courses in the hospitality and tourism industry:

1. Keywords indicating that training happens totally or partially online: "eLearning", "Online", "Distance" and "Blended learning".
2. Keywords representing the setting in which the learning/teaching experience is taking place: "Course", "Training", "Program", "School", "College", "Institute", "University", "Corporate Education".
3. Keywords showing that the topic of the course is devoted to the tourism and hospitality industry: "Travel", "Tourism", "Hospitality", "Catering" (Restaurant, Fast Food), "Accommodation" (Hotel/Chain, B&B), "Transportation" (Cruise, Airline, Railway, Car rental), "Travel agent", "Tour Operator".

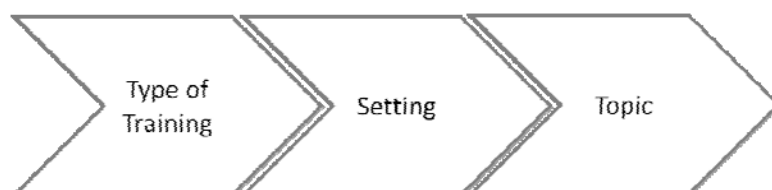


Figure 1: Keywords selection schema

The keywords from each subcategory were blended and used to perform the search activities. The first three result pages (30 results, with the normal search engine setting of 10 results per page) were taken into consideration and regarded as appropriate for the study, as they are considered relevant for end-users both from academia and from industry (iProspect, 2006). Removing duplicates and non-relevant results, keywords combinations were entered in the the search engines until 300 unique results were gathered. Finally, a matrix was created to be used as an instrument for the analysis of present online trainings courses and programmes.

Results

Many different classification criteria were tried (e.g., the topic of the course, its level, the technologies being used or its intended audiences) but none of them was able to provide a convincing map, being either not mutually exclusive (e.g., different audiences for the same course, or more than one technology used), or not collectively exhaustive, or ill-defined (e.g., course level, and sometimes also course topic).

The only criterion that proved to be well-defined, offering at the same time the characteristics of being mutually exclusive and collectively exhaustive (i.e., able to capture all 300 results) was based on the course provider. Four different providers' categories were modelled: Academic, Corporate, Destination Management Organisation and Independent:

1. Academic: all online training courses whose provider is an officially registered academic/educational establishment. This category comprises courses such as the Tourism and Travel Management Associate Diploma at Chemeketa Community College (for links to the online courses mentioned in the article see Appendix), the Hospitality and Tourism Management degree programme at Sheffield Hallam University, and the Diploma in Tourism Management at Nelson Marlborough Institute of Technology.
2. Corporate: online training, whose provider is a company or an institution working in the tourism field, and manages online training for its own employees as well as for travel agents who sell its products. Examples are Académie Accor North America Corporate Training, Royal Caribbean Cruise Lines Corporate University, and Hilton University.
3. Destination Management Organisation: courses offered by destination management organisations (national, regional or local) to travel agents and travel operators, who sell the country (region, city, etc.) as a tourist destination. For example, the South Africa tourism expert course or the Switzerland Travel Academy.
4. Independent: associates with all the courses, whose provider is a third party other than an academic institution, a tourism enterprise, or a destination management organisation. Nevertheless, the topics of the course lie within the tourism and hospitality industry. For example, the Gourmet Cooking and Catering Program or the Certificate Course in Ecotourism/Food and Beverage Management.

Exploring the four areas of the map

A frequency descriptive analysis was used to understand the presence of each category among the selected 300 online training courses. 116 results (39%) of 300 in total belong to the Independent category, 114 (38%) correspond to Academic; 39 courses (13%) belong to Corporate, and 31 (10%) are courses organised by destination management organisations (Figure 2).

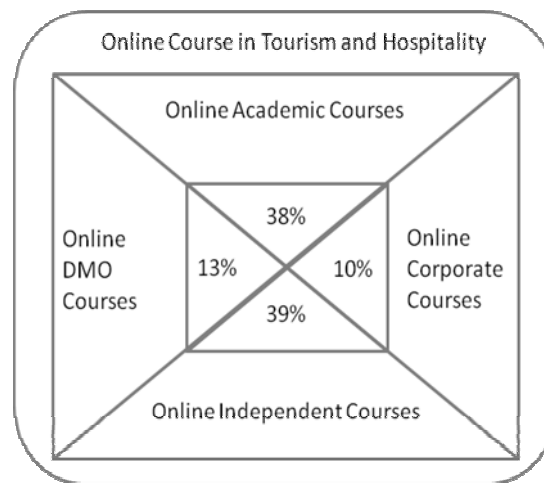


Figure 2: Classification of online course in the tourism domain

Academic

As mentioned above, Academic online courses are those training programmes, whose provider is an officially registered academic/educational establishment. Within the 114 academic online courses, five subcategories were identified (Figure 3). These were (a) Master (14%), (b) Bachelor (28%) and (c) Associate (29%) programmes, with the possibility for the user to get an officially recognised diploma upon successful completion of them. In addition, there were (d) a range of separate courses (11%) and (e) single courses (18%), and in both cases these are not part of an academic diploma programme, but still give the possibility for a user to get an officially registered certificate or a transcript.

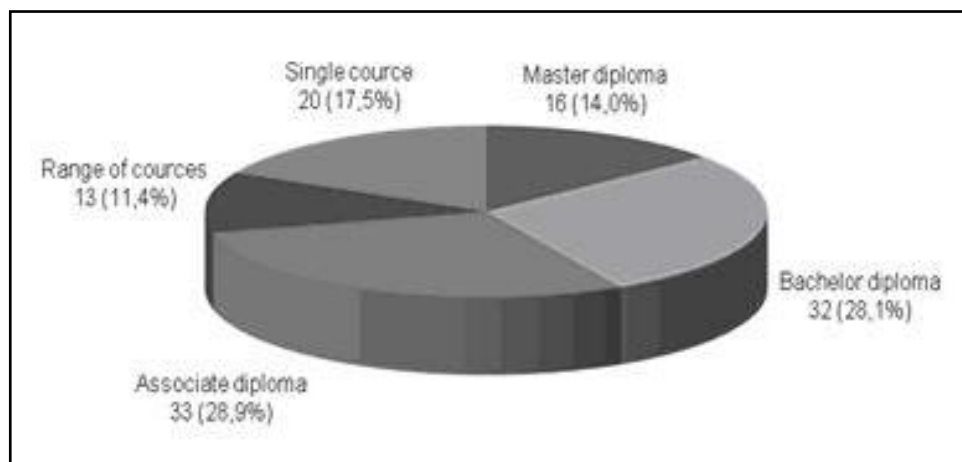


Figure 3: Types of academic course

Academic online training courses offer a wide range of topics such as Hotel and Restaurant Administration (e.g., Institute of Applied Science and Technology – SIAST), Mobility Management (e.g., Open University Business School), several courses on computer reservations systems (e.g., Hayton College; Canadian Tourism College), Casino management (UMassOnline). The main target of academic courses are young people, who would like to receive interactive educational materials as well as to engage with tutors in a way that still leaves the possibility for them to look for a part-time employment, enabling a certain flexibility in terms of time and place of where receiving academic instructions. A second target group consists of tourism employees, who are looking for long-life learning opportunities, in order to enhance and deepen their professional skills with a theoretical background.

Corporate

In this group are all the courses whose main provider is a company or an institution working in the tourism field, and managing online training for its employees and/or for travel agents, who sell its tourist products. Among the overall result of 39 corporate courses, 14 were for internal training, created to train the employees of a company, while 25 served as specialist external training platforms for travel agents.

As for the academic provider, there is a slight difference in their distribution. In corporate internal training the majority - 8 companies (58%) out of 14 - are airline companies, followed by fast food enterprises. While in corporate external trainings the majority – 9 companies (36%) out of 25 – lie within the cruising industry, followed by hotel establishments with 6 training courses (24%).

It is important to mention that many corporate training platforms, as well as trainings offered to partners and sellers, may be hosted in intranets, hence not reachable by search engines' "crawlers", which index the web pages. While the three other categories are externally focused, and interested in being found by prospective users/clients, corporate training does not need to attract external visitors as they have already pre-defined audience: employees of tourism and hospitality enterprises.

In fact, no activity is likely to be undertaken by a company to get a better search engine ranking for its employees' training activities. In many cases pages devoted to the employees' training are excluded by search engine "crawlers". As a result, search engines are not allowed to include them in their indexes and users outside of the company are not able to participate in the course.

To further map this category, both in terms of eLearning penetration in the industry and in terms of investigating and understanding the public that use this service, a survey seems to be more suitable as it would allow deeper insights of the courses.

Destination Management Organisation

This category refers to the training courses created by destination management organisations on three levels: national (representation of a country), regional (administrative and geographical part of the country), and local (capital, city or even a smaller tourist destination).

The geographical distribution is almost equal: national training courses such as the Mauritius Tourism Training course or the South Africa tourism expert course comprise 45% of the total number (14 courses out of 31), regional courses, such as the Scotland Tourist Board Training or South Pacific Specialist online training for travel agents account for 29% (9 courses) and local courses, such as Abu Dhabi Tourism Champions or Puerto Vallarta e-learning Campus generate 26% (8 courses).

The main target is travel agents who, with the help of such training, should be able to better communicate and sell the country as a tourist destination, improving the service and knowledge level they can offer to their customers. The main topics presented in these courses cover areas such as: factual information about the country (history, geography, political organisation, culture, languages, etc.), presentation of the main attractions, formalities (health issues, visa, custom), information on accommodation, catering, and entertainment.

Independent

The next category is associated with all the courses whose provider is a third party other than an academic institution, a tourism enterprise, or a destination management organisation, but the main topic of the course remains within tourism and hospitality industry.

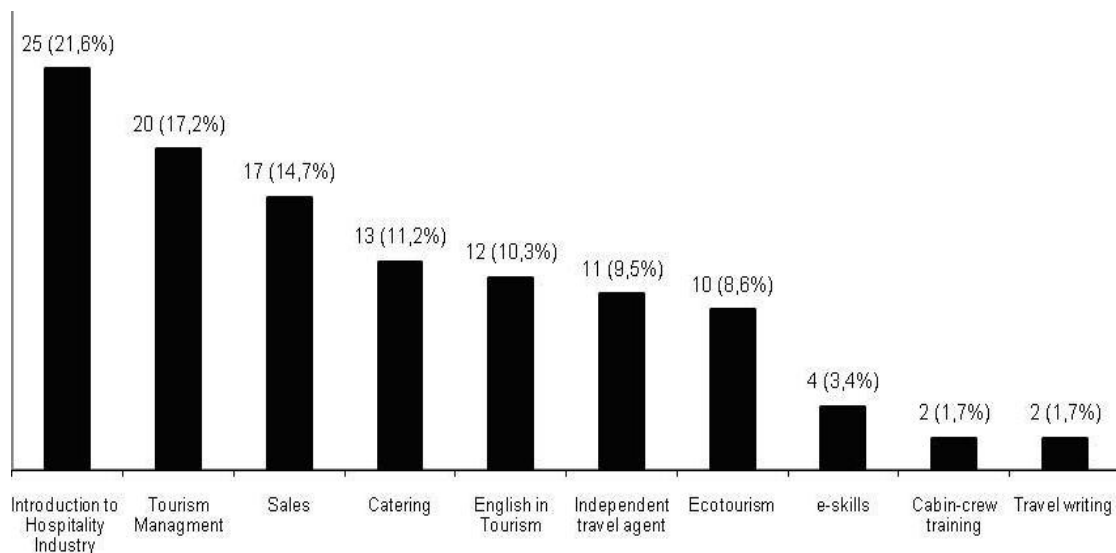
There is no one clearly identified target in this category, as the courses could be used by all the users interested in the industry: from school children checking their geography

knowledge, to university students trying to pass a test and get a certificate in English Language in Tourism and Hospitality, to adults who are eager to challenge themselves and get a certificate in Amadeus Online Training or pass a Culinary Tourism Course, to senior people who are interested in travel writing.

While a wide variety of topics are covered in this area, 10 main sub-categories can be identified:

- introduction to hospitality industry
- tourism management
- sales and retail activities
- catering
- foreign languages (mainly English) in tourism
- independent travel agent trainings
- eco-tourism or sustainable tourism development
- e-skills development
- cabin crew training
- travel writing

In Graph 1, the sub-categories are shown according to their presence in the analysed sample:



Graph 1: Independent training subcategories

Conclusions and Limitations

This research has assessed the presence of eLearning courses in the hospitality and tourism fields, classifying existing online courses according to their providers in four different groups: academic, corporate, destination management organisation, and independent. Each group has also been qualitatively further described according to its relevant audiences and training topics.

The research used blended qualitative-quantitative methodology to tackle the research goals presented above, collecting cases in order to design an overall map of the explored territory.

To follow up this research, the four areas could be further articulated. As a result of the set of keywords used, online courses aimed at practitioners were highlighted, but many others exist aimed at improving and enriching tourists' own experience (e.g. offering a better understanding of modern art, or insights into artistic movements). This remark is closely connected with the distinction between formal and informal training, where neither curricula nor proper courses/modules are offered, but a large variety of learning experiences, very often not explicitly labelled as teaching or learning.

In this article, only courses or modules have been taken into consideration. With the increasing use of so called Web2.0 (O'Reilly, 2005), informal education and knowledge sharing are becoming more and more important, so blogs, podcasts, wikis and social networks have started to play an important role in life-long learning, up-skilling and knowledge gathering within the travel and tourism community. Future research efforts should also include these types of learning tools and strategies.

Further investigations could be focused in two main directions. Different research strategies could be adopted in order to provide maps with finer granularity. In particular, the corporate area should be approached through surveys to assess eLearning penetration (Cantoni & Succi, 2008) and taught topics, while destination management organisations could be analysed one at a time, at least at the national level, to provide a comprehensive picture of their online offers. The same can be said about the academic area, where individual universities and schools can be studied in given areas.

Future research might also deal with a double dimension analysis in all the four areas: each area can be investigated *vertically*, understanding learners, type of content, strategies and so on; the investigation could also be *horizontal*, in order to take into consideration all the providers and technologies used by them in order to train specific learners.

Results of this study are of interest for both the academic and the professional communities involved in Tourism and eLearning. For the academic community, the study offers a first map of online courses in tourism and hospitality, showing at the same time the relevance of the researched field and promising future research directions. For the professional community, results provide a clear picture of an important market, whose development can yield to a higher professionalization of the industry and, as a consequence, to a better service being offered to all tourists.

References

- Association for the Advancement of Computing in Education (2009). Retrieved August 17, 2009, from: <http://www.editlib.org/>
- Boisevert, L. (2000). Web-based learning: The anytime anywhere classroom. *Information Systems Management*, 17(1), 35-40. doi:10.1201/1078/43190.17.1.20000101/31212.5
- Braun, P., & Hollick, M. (2006). Tourism skills delivery: Sharing tourism knowledge online. *Education + Training*, 48, 693-703. doi:10.1108/00400910610710100
- Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management*, 21(1), 97-116. doi:10.1016/S0261-5177(99)00095-3
- Buhalis, D. (2003). *eTourism: Information technology for strategic tourism management*. Harlow, England: Prentice Hall.
- Buhalis, D., & Spada, A. (2000). Destination management systems: Criteria for success. *Information Technology and Tourism*, 3(1), 41-58.
- Cantoni, L., Botturi, L., Succi, C., & New MinE Lab. (2007). *E-learning: Capire, progettare, comunicare*. Milan, Italy: Franco Angeli.
- Cantoni, L., & Succi, C. (2008). A Map of eLearning Acceptance (MeLA) and a Corporate eLearning Readiness Index (CeLeRI). *iJAC – International Journal: Advanced Corporate Learning*, 1(1), 39-47.
- Cantoni, L., & Tardini, S. (2006). *Internet*. London: Routledge.
- Cho, W., & Schmelzer, C. D. (2000). Just-in-time education: Tools for hospitality managers of the future? *International Journal of Contemporary Hospitality Management*, 12, 31-37. doi:10.1108/09596110010305000
- Christou, E., & Sigala, M. (2000). Exploiting Multimedia for Effective Hospitality Education. *EuroCHRIE Spring Conference Proceedings*. Dublin, Ireland: Dublin Institute of Technology.
- Commission of the European Communities (2001). *Communication from the Commission to the Council and the European Parliament: The eLearning Action Plan - Designing Tomorrow's Education*. Brussels, Belgium: COM.
- ComScore. (2008, March). *comScore releases December U.S. search engine rankings*. Retrieved August 17, 2009, from <http://www.comscore.com/press/release.asp?press=2016>
- Eppler, M. J. (2008). A process-based classification of knowledge maps and application examples. *Knowledge & Process Management*, 15, 59-71. doi:10.1002/kpm.299
- Gretzel, U., Fesenmaier, D. R., & O'Leary, J. T. (2006). The transformation of consumer behavior. In D. Buhalis & C. Costa (Eds.), *Tourism business frontiers*, (9-18). Boston, MA: Elsevier Butterworth-Heinemann.

- Gretzel, U., Yu-Lan, Y., & Fesenmaier, D. R. (2000). Preparing for the new economy: Advertising strategies and change in destination marketing organizations. *Journal of Travel Research*, 39, 146-156. doi:10.1177/004728750003900204
- Haven, C., & Botterill, D. (2003). Virtual learning environments in hospitality, leisure, tourism and sport: A review. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 2(1), 75-92. doi:10.3794/johlst.21.36
- Higher Education Funding Council for England (1998). *Review of hospitality management*. London: HEFCE.
- iProspect. (2006, April). *iProspect*. Retrieved August 17, 2009, from <http://www.iprospect.com>
- Kasavana, M. (1999). Educating and empowering through web-based technology. *Lodging*, 59-60.
- Lagus, K., & Kasaki, S. (1999). Keyword selection method for characterizing text document maps. *Ninth International Conference on Artificial Neural Networks Proceedings (ICANN'99)*(pp. 371-376). London: IEE Press
- O'Reilly, T. (2005, September). *What Is Web 2.0?* Retrieved August 17, 2009, from <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>
- Poehlein, G. (1996). Universities and information technologies for instructional programmes: Issues and potential impacts. *Technology Analysis and Strategic Management*, 8, 283-290. doi:10.1080/09537329608524251
- Sheldon, P. (1997). *Tourism information technology*. Oxford, England: CAB.
- Sigala, M. (2001). Re-engineering tourism education through internet: From virtual classes to virtual communities. *Tourism Society Conference in Tourism Education*. Guildford, England: University of Surrey.
- Sigala, M. (2002). The evolution of internet pedagogy: Benefits for tourism and hospitality education. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 1(2), 29-45. doi:10.3794/johlst.21.4
- Werthner H., & Klein S. (1999). *Information technology and tourism: A challenging relationship*. New York: Springer Verlag.

Appendix: Weblinks to online courses

- Académie Accor North America Corporate Training
www.elementk.com/documentView.asp?docid=9
- Canadian Tourism College www.tourismcollege.com
- Certificate course in Ecotourism/Food and Beverage Management
www.acseduonline.com/courses/
- Diploma in Tourism Management at Nelson Marlborough Institute of Technology
<http://ecampus.nmit.ac.nz/moodle/course/category.php?id=150>
- Gourmet Cooking and Catering Program www.pcdi.ca/courses/2f/
- Hayton College www.hayton.com.au
- Hilton University <http://lms.hilton.com/landingpage/index.html>
- Hospitality and Tourism Management degree programme at Sheffield Hallam University
www.rdi.co.uk/distance-learning/hospitality-tourism-degree.html
- Institute of Applied Science and Technology (SIAST)
http://programs.siastr.ca/vc/cont_ed_programs_courses
- Open University Business School www.open.ac.uk
- Royal Caribbean Cruise Lines Corporate University www.remote-learner.net/node/102
- South Africa tourism expert course <http://www.safundi.net/>
- Switzerland Travel Academy <http://elearning-st.myswitzerland.com/>
- Tourism and Travel Management associate diploma at Chemeketa Community College
http://learning.chemeketa.edu/course_descriptions/catalog/34/default.htm
- UMassOnline www.umassonline.net/degrees/Online-Degree-Bachelor-Hospitality-Tourism-Management.cfm

Submitted 22 June 2009. Final Version 17 August 2009. Accepted 2 September 2009.