

The Role of ICT in Tourism Education: A Case Study of South African Secondary Schools

Asta Adukaite*,
Izak van Zyl**,
Lorenzo Cantoni*

* USI – Università della Svizzera italiana, UNESCO Chair in ICT to develop and promote sustainable tourism in World Heritage Sites, Lugano, Switzerland

** Cape Peninsula University of Technology, Cape Town, South Africa
{asta.adukaite; lorenzo.cantoni}@usi.ch, vanzyliz@cput.ac.za

Abstract

Tourism is a global major economic driver; developing and emerging countries are integrating it within the regular school curriculum, to foster social understanding and recognition of it, as well as to invite the youth to consider employment opportunities in the industry. The paper presents the case of South Africa, where Tourism has been introduced as a school subject in the 10-12 grades since 2000 and records huge uptake on the side of students and schools. The paper discusses how Information and Communication Technology (ICT) assists tourism teaching practices. The selected approach is through in-depth semi-structured interviews (n=24), which have unveiled that ICT by tourism teachers is recognized essential especially in poorly resourced schools for providing exposure to the tourism industry, however ICT integration is still limited. Major obstacles towards an extensive integration are: availability of technical resources, lack of training and confidence on the side of teachers, limited availability of labs space and time, as well as resistance on the side of learners to use their mobile phones, both for economic reasons (cost of data transfer), as well as for lack of skills.

Keywords: Tourism Education, Secondary Schools, ICT in Tourism Education, South Africa

1 Introduction

Tourism teaching is often introduced within formal education curricula as a consequence of the increasing economic contribution of the tourism industry to private and public sectors. This is especially the case in emerging economies in Asia and Africa (Hsu, 2015; Mayaka & Akama, 2015). The setting for this study is South Africa, an emerging/developing country with a growing tourism industry. Tourism growth in the country demands a skilled and professional workforce. This also implies that the local population should be aware of the nature and role of tourism, and should be able to critically evaluate its potential. Various strategies could be introduced to raise tourism awareness (Van Niekerk & Saayman, 2013); one of them is introducing tourism as a secondary school subject, which was done in schools throughout South Africa.

Very limited academic research has been done on the tourism subject in South African high schools (Van Niekerk & Saayman, 2013; Chili 2013, 2014). According to Chili (2013, p. 34), there is a “total disquiet with a particular literature in South African tourism education in schools. [...] it’s so scarce that it’s an area for concern ...” Moreover, there are no existing studies on how digital technologies are being used for tourism teaching practices in South Africa. This study aims to fill this gap by

answering the following research question: *To what extent does ICT support tourism teaching in South African high schools?*

2 Context

Following the end of apartheid in 1994, the South African government introduced more practical and vocationally oriented subjects such as Tourism, Hospitality, Business studies, and Agriculture for high school students in grades 10, 11 and 12. Post-apartheid South Africa suffered a lack of skilled human resources and major unemployment rates. Thus, more vocationally oriented high school subjects were proposed as a strategy to address these issues (Chili, 2013). Since 2000, Tourism as a subject has experienced significant growth in terms of the number of schools where it is taught, as well as the number of learners choosing it. The subject has grown from 120 schools and 2'968 learners in the year 2000 to 2'887 schools and 118'904 learners in 12th grade in 2014 (Umalusi, 2014). Tourism has become one of the most popular electives in high schools; up to 20% of all high school students are taking it (Shalem & Allais, 2014). Surprisingly, tourism is taught in all types of schools: from well-resourced private schools to under-resourced rural and township schools, even if it was anticipated that tourism would mainly benefit children from (previously) disadvantaged communities (Ibid.).

The South African education sector faces a number of systemic challenges, including unequal access to educational services, high cost of education and required infrastructure as well as a shortage of qualified teachers (Chigona et al., 2012). In response to these constraints, the national government has advocated for digital technologies in supporting local socio-economic development (Department of Education, 2004). However, the literature suggests a challenging and complex environment for the deployment of digital technologies in institutions of learning in South Africa (Russell & Steele, 2013). Research in Southern Africa has determined that the (ill) adoption of ICT can be attributed to a combination of ICT skill levels, content management proficiency, and pedagogical approaches (Van Zyl & Rega, 2011; Fanni, Rega, & Cantoni, 2013).

3 Methodology

This is an exploratory comparative case study. Fieldwork was conducted in ten schools in the Metro North District of the Western Cape, and six schools in Western District in the Eastern Cape of South Africa from April to June 2015. The districts were selected because of the diversity of their schools. Rural schools were not included in the sample due to accessibility constraints experienced by the main researcher. Selected institutions included different types of schools in regards to their socio-economic characteristics, due to the fact that tourism is taught in all schools – from well-resourced private to poorly-resourced disadvantaged communities schools.

In this paper, qualitative data that resulted from in-depth semi-structured interviews with tourism teachers (n=19) at the 16 visited schools is reported. Furthermore, 5 interviews were conducted with government officials involved in tourism subject planning and coordination: National tourism curriculum coordinator, Western Cape tourism curriculum coordinator, two tourism subject advisors in Western Cape, and one tourism subject advisor in Eastern Cape.

A semi-structured questioning approach was used to ensure consistency among respondents while allowing a degree of flexibility. Interviews lasted from 30 to 75 minutes and were conducted in English. All the interviews were audio recorded and later transcribed. The transcripts were analysed by coding them using inductive thematic coding (Corbin & Strauss, 2008) through analysis software NVivo 10.

4 Results

In total, 19 tourism teachers were interviewed (12 in the Western Cape and 7 in the Eastern Cape), of which 16 were female and 3 were male. On average, respondents reported 6 years and 4 months (M:6, SD: 3.6) of experience in teaching tourism, ranging from 15 to only one year of experience. Only two teachers were fully dedicated to tourism subjects, all the others taught also other subjects like geography, business studies, languages, consumer studies, and history. Only three respondents had formal education related to tourism.

Even though the study revealed that all interviewed tourism teachers had some kind of material access to technology, less than a half of the interviewed teachers (n=9) integrated technology for tourism teaching on a regular basis. They used: data projector, computer, internet, presentation software, and YouTube videos. The majority of schools where ICT was integrated within the teaching experience were either private or ex model C (previously advantaged schools). Four teachers used technology occasionally (couple of times per year). However, they did not have any operational technology in the classroom so either brought their own laptop and internet data connection device, or took students to the computer lab. Lastly, six teachers did not use any ICT: their teaching was mainly textbook-based.

Three main themes emerged from the interviews regarding the role of ICT for tourism teaching: (i) importance of ICT to provide touristic exposure to students and increase their interest in the subject, (ii) technology anxiety of the teachers, (iii) role of mobile phones.

ICT for providing tourism experience and engagement

Tourism has a reputation of being “*an easy subject*”, which in some way becomes a “*dumping ground*” for academically weak students or those who try but eventually cannot cope with other subjects. According to interviewed teachers, students rarely choose the subject because they are interested in it. Another common issue was the fact that students rarely had any touristic experience. Therefore, it becomes challenging for them to relate to the subject’s content. The national Education Department suggests overcoming this by introducing various teaching strategies, educational trips, practical projects and technology supported teaching. However, the resources to facilitate this are scarce, especially in township and rural schools.

The majority of respondents agreed that ICT (especially multimedia content such as videos and pictures) play a major role in overcoming learners’ (and teachers’) lack of tourism exposure: “*Technology is our only hope to give a child some kind of experience of a tourism industry [...] be it movies, or showing video clips, power points that kind of thing, but it needs to be interactive like 3D hotel room. This exposure is much better than nothing at all.*” (Teacher, EC Township school).

Moreover, ICT has the potential to engage and increase their interest in the subject: *“They love it a lot, these sessions in computer lab, even the atmosphere in these lessons would change, because they are so interested and they are so excited, and even if the bell rings they don’t want to leave.” (Teacher, EC Township school).*

Technology anxiety

The majority of tourism teachers has no formal training in the subject or in teaching methodologies (Umalusi, 2014). Technology anxiety emerged as a major impediment for ICT integration into tourism teaching. This lack of skills made interviewees uncomfortable and even intimidated to use ICT. As noted by a tourism subject coordinator: *“One of the reasons why the teachers are not using the technologies is because they themselves feel uncomfortable.”* This argument emerged during the interviews with teachers as well, regardless of the type of school. For instance, one teacher reported: *“I teach in the traditional method and it proved to be quite difficult when somebody suggests you can do this x, y and z with technology and I ‘oooops’ I don’t know how to use this kind of media and I am just going to be in my little comfort zone and just, you know, do my work.” (Teacher, WC private school).*

Mobile phones

All interviewed teachers reported that their schools have mobile phone policies that disallow their use in the classroom. However, some teachers made an exception for tourism classes and occasionally allowed students to use their phones, mainly for information search: *“For educational purposes I allow them, if we don’t have computers in the classrooms that’s our next best thing. The other day I had to take out my phone, because we were doing Kalahari Desert, I was trying to demonstrate them, it’s easy as this, just google Kalahari. I told this to my principal, what other way I could do? In my class I totally allow it. I am for cell phones in the classroom.” (Teacher, WC township school).* Moreover, mobile phones play a big role, especially in less resourced areas, for practical projects that students must deliver for the subject. Teachers reported that students would mainly use community libraries or their cell phones for this purpose. However, several teachers raised concerns that students lack know-how in using their mobile phones for learning. Furthermore, students are hesitant to use their own internet data for learning, due to its cost. As stated by four respondents, students mainly prefer to use their cell phones for socialising, mainly WhatsApp and Facebook, and for listening to music. *“[...]they are coming from disadvantaged backgrounds, but many of them have smartphones, however, I still noticed even those who have smartphones would struggle using it for learning purposes. [...] I ask them to open the internet and certain website, they don’t know how to do it. When I say let’s google, they don’t understand what I mean.” (Teacher, EC township).*

5 Discussion and Conclusions

Even though ICT was recognised as being of great value for tourism teaching in South African high schools, its integration is still limited. The main reason that prevented tourism teachers from using ICT were large classes (in township areas up to 50 students per classroom). Moreover, computer labs are mainly reserved for IT-related subjects. Secondly, technology anxiety emerged as a potential impediment: none of the interviewed teachers had training on how to integrate technology for

teaching purposes. Interesting findings emerged with regards to mobile phone usage during tourism classes. Even though all visited schools had strict policies against the use of mobile phones, some teachers made occasional exceptions. Despite various challenges, the majority of respondents recognised the value and benefits of the subject: some of them invested their own resources to buy technology such as data projectors and laptops. Other teachers bought travel magazines, collected travel brochures, sought discounts for transportation and touristic attractions in order to enhance learners' experience and understanding of the tourism sector.

This study echoes similar challenges in tourism education reported in other developing or emerging countries, for example in Asia (Hsu, 2015). Similar results are reported by Harrison (2015) about tourism education in the South Pacific: he emphasised the lack of touristic exposure of tourism learners, and the challenge of striking the right balance between vocational and academic topics in tourism education. Research findings are also in accordance with a study by Mayaka and Akama (2015) on tourism education in Kenya. The authors concluded that the full potential of ICT in designing and facilitating tourism curricula is far from being apprehended.

6 References

- Chigona, W., Bladergroen, M., Bytheway, A., Cox, S., Dumas, C., Van Zyl, I.J. (2012). Educator discourses on ICT in Education. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 2012, Vol. 8, Issue 2, pp. 107-119.
- Chili, N. S. (2013). Tourism education: Factors affecting effective teaching and learning of tourism in township schools. *Journal of Human Ecology*, 41(1): 33-43.
- Chili, N. S. (2014). The Ecology of Teaching: Efficiency, Efficacy and Effectiveness of Teaching and Learning of Tourism in Township High Schools. *Journal of Human Ecology*, 48(2): 299-312
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage
- Department of Education (2004). White Paper on e-Education. Transforming Learning and Teaching through Information and Communication Technologies. *Government Gazette*, No. 26726.
- Fanni, F., Rega, I., Cantoni, L. (2013). Using Self-Efficacy to measure primary school teachers' perception of ICT: results from two studies, *International Journal of Education and Development using ICT*, vol. 9, no. 1, 100-111.
- Harrison, D. (2015). Educating tourism students in the South Pacific: changing cultures, changing economies. *The Routledge Handbook of Tourism and Hospitality Education*, Dredge, D., Airey, D., Gross M.J.(Eds.), pp. 225-234.
- Hsu, H. C. C. (2015). Tourism and hospitality education in Asia. *The Routledge Handbook of Tourism and Hospitality Education*. Dredge, D., Airey, D., Gross M.J.(Eds.), pp. 197-209.
- Mayaka, M. A., Akama J. S. (2015). Challenges for tourism, hospitality and events higher education curricula in Sub-Saharan Africa: the case of Kenya. *The Routledge Handbook of Tourism and Hospitality Education*. Dredge, D., Airey, D., Gross M.J.(Eds.), pp. 235-262.
- Russell, S. E., & Steele, T. (2013). Information and Communication Technologies and the Digital Divide in Africa: A Review of the Periodical Literature, 2000-2012. *Electronic Journal of Africana Bibliography*, 14(1), 1-31.
- Shalem, Y., & Allais, S. (2014). *Vocational subjects in the secondary curriculum -- what criteria count?* Paper presented at the European Conference on Educational Research, Porto, 2nd – 5th September 2014, Porto.
- Umalusi (2014). Council for Quality Assurance in General and Further Education and Training. What's in the CAPS package? Tourism.
- Van Niekerk, M., & Saayman, M. (2013). The influences of tourism awareness on the travel patterns and career choices of high school students in South Africa. *Tourism Review*, 68, 19-33.
- Van Zyl, I., Rega, I., (2011) Critical approaches and varied impacts: Understanding the role of educational technology in disadvantaged schools, *Proceedings of IDIA 2011, Lima, Peru*.