

Is there a role for technology in hospitality studies at an independent South African hotel school?

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Abstract:

This study investigated the role of technology in the curriculum of hospitality studies at The International Hotel Schools, South Africa. The research followed a case study format based on the teaching, training and learning technologies used at the three campuses of The International Hotel School (IHS) in South Africa. The IHS is in competition with other accredited private higher educational colleges for a limited student-base and therefore must employ innovative teaching, training and learning methods to attract and educate students. The research design involved both a qualitative and quantitative approach; data collection was through questionnaires, focus group discussions and interviews over a one-year period, and involved both purposive and stratified random sampling. The findings support the need for improved technology in academic functions at the IHS campuses. The significance of the study is the emphasised role and use of relevant technology at the IHS.

Keywords: E-learning, hospitality studies, information and communications technology (ICT), open and distance learning (ODL), open educational resources (OER).

Introduction

The digital technology of the 21st century is characterised by the concepts of networks, connectedness, collaboration and community. Digital technology increases economies of scale and minimises the distribution costs of digital material, speeding up and intensifying the interactions between students and lecturers (Daniel, 2012:7). The author further suggests that the student of the 21st century seeks readily available and quick information, at a time and place convenient to him/her, usually from the internet and not necessarily from traditional educational sources.

Daniel (2012:7) had noted that students who see the use of technology in a positive light are more likely to be positive towards their studies, using a 'strategic approach' rather than a superficial attitude to their work. Materials for learning, such as textbooks and study notes could, therefore, be adapted. According to Butcher and Hoosen (2012:8) today's student should be an 'active participant' in education, and no longer merely the recipient of information. A Work Integrated Learning (WIL) technique forms part of the IHS study programme, where students following the management diploma or the Christina Martin Culinary Arts programmes spend time at a hotel. During the study it was observed that a trend by learners was developing to

utilise the internet to source information while studying, rather than spending time in a classroom being taught the required information, or in a library researching hard-copy material. Based on their observations of how students chose to learn, it was also deduced that there needed to be a shift from traditional teaching and learning methods, in order to accommodate the current learning needs of students. Butcher and Hoosen (2012:8) went on to say that new progressive educational institutions had incorporated the use of technology into teaching and learning, replacing the traditional tools, therefore allowing educators to keep abreast of the latest technological developments in fulfilling their obligations towards students (and, in South Africa, the enrolment and through-put rates required by the National Department of Education!).

This study, therefore, aimed to investigate how the role of technology has, and could continue to influence teaching, training and learning in hospitality studies at the three campuses of The International Hotel School in South Africa. The study looked at the role of technology with regards to teaching and training methods, the effects on the current hospitality curriculum adopted in 2012 by The International Hotel Schools, learning methods currently in use, and the ongoing influence of technological advances within the hospitality industry. To do the surveys the researchers obtained written permission from the Dean of the International Hotel School, and each participant was informed of the aim and objectives of the study, what their rights were including the right to withdraw from the study at any time, and the confidential nature of the study and the published findings. The results of the survey were made available to the management of the IHS and to each campus principal. The Ethics Committee of the Business and Management Sciences Faculty of the Cape Peninsula University of Technology also sanctioned the research.

Literature review

Educational institutions are constantly seeking ways of reducing costs while at the same time maintaining teaching/learning standards. Among the methods being investigated is open and online learning. It was Kitchenham (2004:10) who urged the 'valid and reliable' use of data to present arguments in favour of, or against, technology in the classroom, being the topic under review. Therefore, the type of literature reviewed for this study included relevant academic papers, books, journals, official reports and websites. Commonwealth of Learning (COL, 2012) produced articles on open educational resources (OER), discussing improvements to access, affordability, and quality of education on a global scale. Other articles included promotion of international support of open educational resources (Commonwealth of Learning Conference, 2012), improvements in e-learning programs, updated management programs, mobile technology in India, training and research in West Africa, skills development initiatives in Africa, flexible learning in the Caribbean, as well as the Commonwealth of Learning's three-year plan for development of learning. These areas were chosen by members of the COL as part of their strategy to foster governmental support for Open Educational Resources Internationally (OER).

Frydenberg (2007:4) discussed a study conducted in 2007, on reasons why students withdrew from continuing education classes at the University of California-Irvine. The objective of that study was to determine the reasons for the University's high student 'drop-out rate'. The author examined online- and classroom-style learning to determine which of the two styles was more suited for students in order to better understand instructional methods, and to combat student withdrawal from continuing education. Daniel (2012:1), who was the President and Chief Executive Officer of the Commonwealth of Learning (institution) and former Assistant Director-General for Education for the United Nations Educational, Scientific and Cultural Organisation (UNESCO), said that

'... open education broke the iron triangle of access, cost and quality that had constrained education throughout history and had created the insidious assumption, still prevalent today, that in education you cannot have quality without exclusivity.'

He proceeded to discuss the meaning of 'openness' with regard to education; that it should be 'open' to all peoples, at all places, to new methods and divergent ideas. Madernach (2009:9) examined the impact of the instructor's personalised multimedia supplements on student engagement in an introductory college level online course. The research looked at the appropriate use of multimedia within an online course and endeavored to establish which methods would enhance student engagement. Hoadley (2009:1) researched curriculum approaches and discussed two models of a curriculum, namely competence curriculum, which highlighted the characteristics that students should demonstrate in a particular field, and performance curriculum which highlighted the required level of performance in a specific field, and the possibility of integrating the two to create an ideal curriculum model.

Latchem and Walker (2001:30) provided information and advice on the organisation and running of telecentres to promote e-learning more than a decade ago. Their work explained allowing access to learning for rural and disadvantaged communities, as well as future learning methods through the use of learning telecentres. McBrien and Jones (2009:5) explored the role of online learning with regards to distance education. These authors discussed this teaching tool from a student perspective, and looked at themes related to dialogue structure, learner autonomy and technical issues. The aim of their research was to enhance online distance learning education for students in higher education. The findings of the authors were that the students were positively open to online learning, and determined that this would enhance their learning abilities.

Park (2009:1) conducted a case study at Stellenbosch University (South Africa), to investigate an integrated technology platform to enhance the virtual mobility of postgraduate students within the African higher education context. The author discussed various approaches to virtual learning, including an integrated-blended approach (online and face-to-face classroom-based approaches), satellite-based technology, and web-based learning, in order to improve access to learning and academic achievement of post-graduate students. The research was conducted in 2007 and the objective was to show-case the university's blended approach to learning to the South African Department of Higher Education.

The South African Institute for Distance Education (SAIDE, 2000) considered the application of educational technologies in South Africa more than a decade ago. Their research focused on the planning and implementation of technology-enhanced learning, and discussed the implementation of this technology in other countries, and the challenges faced with the technology. The aim of that study was to look at improvements in order to successfully implement technology-enhanced learning. SAIDE (2002:2) then investigated the role of learning centres and learner-support in distance education. That study noted the methods and support needed to ensure that learners were able to engage optimally with the curriculum, and learn regardless of constraints, such as mobility and access to classroom learning. Within SAIDE (2009:4), the discussions were centred on the potential use of mobile phones in education within an African context. This study looked at learner-support, sustainability, implementation and financial implications, and also discussed the ability of educators to design and develop mobile learning opportunities for students.

Sharpley, McAndrew, Weller, Ferguson, Fitzgerald, Hirst, Mor, Gaved and Whitelock, (2012:2) discussed a series of reports that explored new forms of teaching, learning and assessments in an interactive context and for a technologically-based society. These authors followed a range of educational theories and practices, and how these would impact on education in terms of innovation. Butcher and Hoosen (2012:1) also considered the global trends and challenges in education, and stated that in today's computer-based society, knowledge and skills played a major role in reducing poverty and promoting growth. Faced with funding shortfalls, many educational institutions were looking to expand programs to new markets, and adopting a more market-orientated approach to offset their operational costs. Technological change have

brought, and continues to bring, profound changes in the roles that researchers, funders, research institutions, libraries and other intermediaries play in disseminating knowledge and providing access to quality-assured research outputs, in their goals and expectations, and in the services they provide and use. The principle of allowing adaptation of materials provided one mechanism among many for constructing the role for learners as active participants in educational processes, who learnt best by doing and creating, and not by passively reading and absorbing. Content licenses that encouraged activity and creation by learners through re-use and adaptation of any content could make a significant contribution to generating more effective learning environments.

Ivela (2011:1) investigated the implementation of e-learning at a University of Technology in South Africa, specifically the process of integrating Information and Communication Technologies (ICTs) into a curriculum. The author discussed the implementation of a Learning Management System (LMS), and also the approaches to the implementation of the LMS, as well as its successes and challenges. Ivela (2013), in another study, discussed the Cape Peninsula University of Technology's (CPUT, South Africa) experience in mainstreaming ICTs in teaching and learning. The author reported on how the ICTs were mainstreamed, the uptake of ICTs in teaching and learning as well as the challenges encountered, and also discussed the history of the evolution of on-line learning at CPUT. National Vocational Education and Training (VET, 2012:3) noted a proposed nationwide e-learning strategy that would be implemented in hospitality and tourism management studies at the state managed FET colleges in Australia. The strategy was a four-year plan highlighting the need for e-learning, and provided a step-by-step guide on the implementation, facilitation and assessment of e-learning.

There exists sufficient evidence in this short literature review of the role of ICTs in higher education to suggest the IHS in South Africa should investigate the trend for the purpose of improving teaching and learning on their three campuses.

Study methodology

This study used a multi-strategic blende approach of two sampling methods, namely purposive sampling, which is a non-probability sampling method, and stratified random sampling which is a probability sampling method. Purposive sampling was chosen because the study was considered to be relevant to this topic, as it enabled the selection of unique cases that were especially informative to the study aim, and to identify particular types of cases for in-depth investigation. One of the researchers is a lecturer at The International Hotel School (IHS) and is, therefore, able to select candidates from the IHS population who could produce the required data. Stratified random sampling requires that a population be composed of various clearly recognisable sub-populations called strata that differ from one another in terms of a specific variable, where each sub-population is a stratum. In order to draw a representative stratified random sample the strata is first identified (Welman, Kruger & Mitchell, 2005:61).The strata were the students and the academic staff of the IHS because implementation of technology discussed in this study would have an influence on both the learning methods of the students and teaching methods of academics. Using the stratified random sample the researchers would be more certain of obtaining a representative sample from a population with clearly distinguishable strata.

Quantitative information was sought in the form of survey questionnaires, which were sent to academics and students at the three campuses of The IHS. Qualitative data was gathered through focus group discussions held with all staff of The IHS, as well as interviews conducted with the Dean, Managing Principals, and Vice Principals of the three campuses of The International Hotel School. The study population, and therefore also the sample, was all the academic staff (lecturers and academic support staff) and students at The IHS campuses.

Research results and discussions

The data collected was grouped into themes, and according to the source of the information: academic and academic support staff and student questionnaires; focus group discussions with academic staff at the Annual General Conference of the IHS, and interviews with the senior management of the International Hotel School. The survey results are discussed according to the different groupings:

Analysis of academic staff responses

All 65 staff members were invited to complete the questionnaires, but only 17 lecturers and academic support staff chose to participate in the survey, representing 26% of the population, which could possibly place some doubt on the validity of the data collected. However, all academic and academic-support staff had already taken part in focus group discussions held at the annual IHS conference; staff may therefore have felt that they had already offered their input. The majority of participants were from The IHS Cape Town campus, who felt that their course would mostly benefit from improved technological teaching and learning methods, especially those who taught the Diploma in Hospitality Management and the Christina Martin Culinary Arts programs. The majority of academic-participants were in the academic section of The International Hotel School, including seven (7) lecturers, one (1) senior lecturer, and one (1) HOD/subject coordinator. Although the questionnaire was aimed more at lecturers, 47.1% of academic support staff also participated, emphasising that the role of technology in teaching and learning impacts all levels of staff at The International Hotel School. Sixty four percent of the participants believed that technology enabled students to be active participants in the educational process and that technology made a significant contribution to generating more effective learning environments.

The data collected supported the notion that technology played an important role in both teaching and learning at The IHS. The majority of the participants (70%) preferred interactive classrooms as a teaching method, but classroom-based teaching was still important as this was the second most popular teaching method chosen. Most of the participants (47.4%) used technology in daily teaching, and while the results showed that, although there is a need for technology in teaching and learning, lecturers still preferred to accept work as hardcopy. This was probably due to the necessity for hard copy submissions in the assessment and moderation processes in place at The International Hotel School, as all work done by students needed to be verified and moderated. Face-to-face communication is the preferred method of communication between academic staff and students.

Participants felt that the current technology was insufficient, and highlighted areas of concern to be Wi-Fi systems that were often down, computer laboratories being unavailable to students or unattended for security reasons, and participants not being provided with laptop's with the latest technological capabilities. The findings also suggested the need to upgrade or change the current technology being used at The International Hotel School, as only half of the academic staff-participants felt that the technology being used met the service requirements of the hospitality industry. It was fortunate that The International Hotel School was partially aligned with the current technological demands of the hospitality industry, and students were therefore adequately prepared. Additional comments centred on the fact that laptops should be provided to participants to enable them to better access technology to improve teaching, while one participant still believed that online textbooks would be beneficial. The survey data showed that it would be advantageous for The International Hotel School to invest in advanced teaching tools, specifically iPads and interactive whiteboards, as this was a popular choice among

academic staff, specifically lecturers. The internet and online e-books were shown to be the most popular trends in accessing learning resources.

Analysis of student responses

The students following the management diploma or the Christina Martin programmes number about 150. Hospitality students across all three campuses were invited to participate in the survey. The link was sent to approximately 150 students but only 20 chose to participate; the findings, therefore, represent only 13% of the student population. Unfortunately, no students at the Durban or Sandton campuses responded to the requests for information and the survey results, therefore, may be open to an element of bias. As with the academic responses, all comments in this questionnaire related only to the Diploma in Hospitality Management and Christina Martin Culinary Arts courses.

The findings suggest that the students' understanding of technology, within the context of this study, was that it made a significant contribution to learning in general. It could therefore be deduced that technology was in fact needed in learning at The IHS. Fifty five percent (55%) of the respondents preferred classroom-based learning, 45% preferred interactive classrooms, and 30% prefer online-learning and in-service training (students were able to indicate more than one option as being relevant to them). These results were similar to those of the academic staff, whereby the majority of respondents preferred classroom-based and interactive classroom teaching, suggesting that both students and lecturers had similar preferences towards teaching and learning styles. All of the respondents made use of technology (computers, cell phones, iPads, Podcasts) as a means of studying.

Data analysis showed that students preferred studying from textbooks and handout notes from lecturers. This could be because students did not trust online notes, or that The International Hotel School did not effectively make use of online notes and the blackboard computer program. The majority of participants (75%) preferred to submit their class work and assignments as an e-mail copy, in contrast to academic staff where the majority stated that they preferred students to submit their work as hard copy, and that this preference could be due to the assessment, moderation and verification processes conducted at The International Hotel School.

iPads continue to be the advanced technological choice of both sets of respondents, and learners preferred accessing and submitting work digitally. More than half of participants (57%) felt that the technology provided by The IHS was sufficient to assist them with their learning. Additional comments suggest that students were frustrated with the internet and printers not working effectively, supporting academic staff views that the technology provided by The IHS was unreliable and insufficient. Respondents believed that iPads would be most beneficial to teaching and learning, and 63% of participants felt that the technology provided by The International Hotel School was aligned with the requirements of the hospitality industry. Student responses also suggested that The IHS used technology that was closely aligned with hospitality industry needs, and adequately prepared them for employment in this industry.

Analysis of the data obtained suggested that there was a need for technology in learning, as virtual classroom and e-books proved to be popular choices. More than half of the participants were of the opinion that the technology provided by The IHS was aligned to the present curriculum, and supported academic staff views. It can therefore be deduced that both the questionnaire respondent-groups were of the opinion that the current technology provided by The IHS was aligned with hospitality industry requirements. However, students did note that the current technology was inconsistent, and there was a strong desire to move towards a paperless system. Participants also commented that the internet was slow and that the use of iPads would be beneficial. It would, therefore, be beneficial if The IHS relooked at their internal

processes and decided on the best option of submitting and accepting class-work and assignments. Face-to-face communication was the preferred method for students, and was consistent with academic preferences.

Analysis of the focus groups

A focus group meeting of all 65 academic and academic support staff was held on 29 September 2013 at the Annual General Conference of The International Hotel School. The discussions of the focus groups centred on the use of Information and Communication Technologies (ICTs) for teaching and learning. Sixty five (65) participants attended and were divided into groups of five (5) or six (6), where the discussions were led and moderated by the Managing Principal of the IHS Online Campus of the International Hotel School. The discussions can be briefly summarised as follows:

- E-learning had shown a growth from 68 enrollments in 2011 to 654 enrollments in 2013 and it is projected that by 2016 The International Hotel School would have 2700 e-learning enrolments. The implication of this was that the institution would need to ensure that sufficient e-learning systems were in place, and that academic staff acquired sufficient knowledge and training to prepare and conduct e-learning.
- E-learning was initially only used for the traineeship and distance-learning programs, but would now be extended to include the Diploma and Higher Certificate courses. Students could also enroll to do single subjects or specialisation courses online. This meant that there would be a reduction in face-to-face learning, and the implications of this would still need to be established, as this process has just started.
- Based on the success of online learning and its growth, The International Hotel School needed to introduce its e-learning programs to other African countries. Currently The IHS was investigating possible growth in Zimbabwe, Botswana, Zambia and Namibia. The International Hotel School was also considering the introduction of the Modular Objective Orientated Dynamic Learning environment (Moodle), an e-learning software package which assists in creating online learning courses that were both interactive and collaborative. The growth meant a need for a larger staff complement of trained academics and advanced e-learning systems and software.

Analysis of interviews with senior IHS staff

The interview with the Dean of The International Hotel School noted that more research into the role of technology in the teaching, training and learning of students was needed at The IHS as there is insufficient information on this topic.

The interviews with the Managing Principals and Vice-principals revealed that:

- Technology provided by IHS was insufficient to enhance teaching of, and learning by, students.
- Technology needed to be incorporated through the use of podcasts, electronic portfolios, interactive whiteboards, electronic books and Moodle learning platforms.
- The IHS faced a major challenge with the current technology since access to technology was limited, outdated, and there were insufficient maintenance and security controls, and funding of especially expensive electronic equipment, including Moodle.
- Academic staff did not have sufficient knowledge of the use of technology, and little support was offered.
- Most participants believed that the current curriculum was aligned with technological advancements in the hospitality industry, but this needed to be updated and better integrated.
- Subjects should not be added to the curriculum to meet industry requirements. However, the current subjects should be better integrated with the use of technology.

- Learning through a more flexible and blended approach to learning needed to be researched and adopted.

Findings

Based on the data obtained, the study suggests that:

- An investigation should be conducted with ALL IHS staff about the improved use of technology in teaching and learning, specifically relating to the Diploma in Hospitality Management and the Christina Martin Culinary Arts programs, under the leadership of the Dean, who is responsible for all academic programmes at the IHS..
- A teaching strategy should be developed and implemented to allow for the use of iPads, interactive whiteboards and digitally integrated data projectors for the benefit of both academic staff and students.
- An investigation of the internal processes with regards to assessments, moderation and verification should be done to establish whether students' work could be submitted digitally as opposed to hard copy.
- A training and support program on the use of technology in teaching and learning should be provided for academic staff.
- Integration of various technologies such as iPads, interactive whiteboards and digitally integrated data projectors in the teaching and learning of hospitality studies should be investigated to ensure the most efficient and effective teaching/learning method at the IHS
- Online learning notes and guides for students in hospitality studies should be a priority to produce cost-effective teaching/learning at the IHS.
- The IHS should assess, moderate and verify the work of all IHS students online to comply with teaching/learning requirements, and ensure cost-effectiveness.

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