CHAPTER IV.
E-environment and Cyberspace. E-learning and Internationalisation in Higher Education

Innovative Educational Technologies, Tools and Methods for E-learning
Scientific Editor Eugenia Smyrnova-Trybulska
"E-learning", 12, Katowice–Cieszyn 2020, pp. 290–304
DOI: 10.34916/el.2020.12.25

E-LEARNING IMPLEMENTATION – FROM ACTION TO EQUITY IN AN INTERNATIONAL HIGHER EDUCATION INSTITUTION

Nuno Silva[1], **Izabel Alvarez**[2], **Paulo Pinto**[3]
[1]Universidade Lusíada de Lisboa,
[2]COMEGI – Universidade Lusíada de Lisboa, ISTEC, Lisboa,
[3]Universidade Lusíada de Lisboa
[1]nsas@lis.ulusiada.pt, [2]alvarez@edu.ulusiada.pt, [3]pjpinto@lis.ulusiada.pt
ORCID [1]0000-0003-0157-0710, [2]0000-0003-4381-6328,
[3]0000-0002-0675-6293

Abstract: *Considering that higher education institutions are key players within the learning society, it is reasonable to expect that Information and Communication Technologies (ICT) mean changes to lecturers, students and universities. This research combines culture, ethics and technology with the purpose of achieving "ethicultural" sensitivity, and educational equity at a international higher education institution with several campuses in Portugal and Angola. The empirical results seem to demonstrate that a pure technological perception about education condemns any e-learning paradigm, because "glocality" imposes combined ethical and cultural dilemmas and to minimise potential failures, it is crucial to involve all stakeholders to have "ethicultural" sensitivity as a prerequisite for mutual understanding in national and international successful e-learning implementation.*

Keywords: Higher education; Ethics, Culture, Equity, E-learning.

INTRODUCTION

According to Arias-Oliva et al. (2004, pp. 47), binomial ICT/education intends "to improve also the well-being of the entire world", and e-learning is globally recognised as a requirement for future social and economic development (Richards,

2004). Governments and educational institutions intend to use this vision of knowledge society (Lallana, 2004); however, to presume that technology by itself entails education is unrealistic and condemns any e-learning paradigm (Weaver, 2002) because novel technologies impose substantial ethical and social changes on education (Anderson, 2006).

These ethical and social changes are explicit in international distributed-learning environments as a result of tensions between global and local contexts; for instance, knowledge transfer procedures reveal unequal outcomes due to cultural constraints (values, language, etc.) (Altbach, 2004).

E-learning promotes the existence of e-University as a strategic response to novel educational context (MacKeogh, 2008; House of Commons, 2005); however, ICT development must cherish the ethical and cultural values as a precondition for social development (Sawhney, 2000).

Bearing in mind the cultural and ethical impact in each context, this research's conceptual framework combines culture, ethics and technology with the purpose of achieving full compliance concerning the social, organisational and educational equity objectives. In addition, determining the project boundaries is essential in order to develop a high quality in practical research.

1. THE RESEARCH

1.1. Research context

F i g u r e 1. Research overview

S o u r c e: Author, 2017.

The research is conducted in the international context of a University with several campuses in Portugal and Angola. The importance of e-learning is recognised by the educational institution as a way to promote organisational innovation; the project started some years ago and the last milestone comprised the idea of developing technological solutions and a curriculum that integrates ethical and cultural guidelines (consistent with the knowledge gap argument of Arias-Oliva et al., 2004). From

the analysis of figure 1, it is noticeable that there is a trade-off between planning and current ethical and cultural practices due to their influence in different contexts being open to e-learning.

1.2. Research strategy

This research underlines a three dimensional analysis (e-learning, ethics and culture) through an interpretative analysis of empirical data (following Walsham, 2006). It includes interviews, field notes, documents, focus groups and participant observation. This choice enabled an "action-case" methodological approach in order to balance interpretation and intervention (Braa & Vidgen, 1999; Davison, 1998) and facilitate findings comparison validation (Yin, 2009). Preliminary data collection was administered in September 2015 during a visit to Angola, and lasted for three years, in which the researcher completed various field procedures (grant credentials and access to case study site, field assignments and facilities analyses) (Yin, 2009), as well as developing personal contacts with locals (cultural and organisational context recognition). The data analysis was conducted within a broader framework of the hermeneutic cycle (Klein & Myers, 1999), which asserts the feedback process between the whole (the Institution) and the parts (campuses in Portugal and Angola).

2. LITERATURE REVIEW

The literature review presented in this chapter shows that educational technology is fast-moving and new insights are continuously appearing, and the search was repeated to produce a longitudinal review, sometimes influenced by emerging issues on data analysis.

2.1. E-learning

The current literature seems to neglect an important discussion: to examine issues on overlap of ethical and cultural quandaries related to e-learning implementation, namely across countries (Portugal and Angola in the context of this research).

In that sense, it is essential to understand the global perspectives of e-learning intervention, which needs a multi-stringed approach (Anderson & Grönlund, 2009). El-Sherbini and Azer (2008), for example, refers to the e-learning complex connections between strategies, design, and technologies, which encompass the following components of policymaking: strategic planning and vision; curriculum and content; use of the internet and acceptable use policies; quality assurance and accreditation; conductivity, infrastructure, and networks; professional development; intellectual property and copyright; cost, finance, and partnerships. Conversely, others authors focused on different lists of suggestions, such as factors as leadership, culture, structure, design and technology, as well as delivery management; Laurillard (2008) on cultural, intellectual and practical activities; or Khan (2005) which have pointed that it is important not to overextend the arguments to say that the e-learning process can be divided into two major phases: content development, and content delivery.

For each of these dimensions, organisational dilemmas (localisation, collaboration, etc.) should be considered associated with strategy and policy, namely to ensure equity

and access to education. Consequently, ethical and cultural sensitivities need a closer look that should highlight differences across institutions and countries, and furthermore help to shed light on new issues that may be of special relevance in the context of this research as for instance fairness and equity.

2.2. Technological infrastructure and services

The e-learning implementation at university settings is a complex task, which starts with a strategy for developing the basic technical infrastructure (de Vries, 2005). According to Blinco, Mason, McLean, and Wilson (2004, p. 2), this "infrastructure often describes a bottom layer of an architectural description or diagram, indicating network hardware components, communications processes, services and protocols". According to Anderson (2008), globally, the internet is a basic network infrastructure for e-learning; however, it is also necessary to consider components at local networks, as well as personal tools and equipment that make learning activity possible. Particular importance on this assumption assumes management systems, namely because the e-learning evolution involves four general categories of technological systems: Learning Management Systems (support administrative tasks) (Lassila & Poyry, 2007); Managed Learning Environment (including the whole range of information systems and processes, which contribute directly or indirectly to learning and learning management) (Winter, 2006); Learning Content Management Systems (allowing developers to store, manage and provide access to content used in e-learning) (Abazi-Bexheti, 2008); and Virtual Learning Environments (the components in which students and tutors participate in several online interactions, including online learning) (Weller, 2007).

Furthermore, other technological factors can affect the global use of e-learning. Macpherson, Homan, and Wilkinson (2005, p. 42), refers that while technology can be an enabler, it can also be a barrier when capacity and access are limited due to infrastructure issues (portals, repositories, digital libraries, search engines, and e-Portfolios). Or, specifically to the universities in developing countries (e.g. Angola in the context of this research), Suhail & Lubega (2011) refers that not only physical access to a computer and an internet connection, but also to the reliability of the connection and the bandwidth are the most critical issues that impede the process of technology integration. On the other hand, Nielsen (1997) refers to usability problems that may arise due to variations in behaviours and cultural differences, and Unwin (2008) mentioned the most important factors which includes training for teachers in e-learning at all levels, and awareness-raising about the value of e-learning (see value added section).

2.3. Computer-mediated communication (CMC)

According to Zhang (2004), CMC is transforming classrooms to make learning a more interactive, diverse and enjoyable experience. This can be through online interactive classrooms, interactive group discussions and tutor/student sessions, or empowering of students/teachers interactions by designing more flexible and intuitive interfaces (Klein & Huynh, 2004).

Following Weaver (2002), implementing a balanced approach is needed to avoid ignoring technology tools, or fixating too much on technology for e-learning.

2.4. Requirements for the e-University

As noted in the discussion above, e-learning embraces some challenges becoming a key element of higher education, which are enhanced if crossing national or regional boundaries.

The implementation of e-learning at the traditional universities have been discussed by several authors (e.g. Goodfellow & Lea, 2001) confirming that it makes a crucial contribution to higher education mission. From this perspective, it is vital to grasp the theoretical foundation of e-learning relevance in face of university role.

2.5. Internationalisation

Higher education institutions operate in a highly complex environment (political, economic, academic, social and cultural), namely in the face of internationalisation programs where private and for-profit institutions are flourishing. Nevertheless, the value added by international accreditation is improving a market position demonstrating quality when prejudices exist against institution or country. New approaches to educational technology has given rise to both quality and equity concerns as "… the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of higher education at the institutional and national levels" (Knight, 2008, p. 21). This is in line with the claim made by Arias-Oliva et al. (2004) that a higher education institution and its stakeholders should consider the advantages and disadvantages of educational technology as a way to ensure openness, equity and international understanding and to avoid the digital divide, cultural ignorance or insensitivity.

According to Dunn and Marinetti (2007), if e-Learning ignores cultural factors it will inevitably lead to frustrating and ultimately ineffective learning experiences. Nevertheless, much of the literature concerned with cultural and cross-cultural issues relied on the classic works of Hall and Hofstede (Myers & Tan, 2002), and sometimes revealed there to be inadequate attention given to the dynamic nature of culture (Krishna, Sahay, & Walsham, 2004). Therefore, it is essential that cross-cultural issues in online learning be more critically examined (Rogers, Graham, & Mayes, 2007); students' cultural attributes affect how they perceive an online learning setting and how they present themselves online, cognitively, socially, and emotively (Wang, 2007). In addition, the ability to accommodate culturally-based learning differences is becoming an increasingly critical skill in this time of rapid globalisation and technology-influenced cross-cultural interactions (Parrish & Linder-VanBerschot, 2010, p. 15).

2.6. Equity

In an inter-organisational environment, the main ethical dilemma emerges from the fair allocation of resources and distributive justice whose judgements regarding fairness "represent the degree of equity or equality across parties' payoffs that are considered normatively acceptable or desirable within a situation" (Bazerman, Loewenstein, & White, 1992, p. 221). In this regard, the implementation of e-Learning technology can provide an equitable and equalising environment (Kanuka & Rourke, 2008). John Rawls' (1971) theory of justice and fairness enlightened the dilemmas of resource

distribution. According to Roberts (2002), it is vital to extend the narrow learning environment of campus-based education to wider resources, for instance: learning experiences, digital libraries, availability and liability. Nevertheless, distributive fairness is a complex concept that depends much on cultural values, precedents, and the context of the problem (Wierzbicki, 2010). However, literature in theories for cross-national equity in the sense of e-learning implementation is scarce.

2.7. Glocality

To debate XXI century high education is essential to investigate connectivity and interactivity as key features of the learning society (Webster, 2006a). For that reason, it is logical that governments or educational institutions, do not plan to mislay this prospect bounded to information society (Lallana, 2004), since e-learning is globally accepted as a prerequisite for future social and economic development, providing a new essential style, as a base level for accessible education (Richards, 2004). Moreover, the internationalization of campus and community is simultaneously a chance and a challenge that higher education institutions ought to deal today. Although, chronological data as regards to knowledge transfer in higher education institutions exhibits a wide array of unequal results, when it concerns cultural restrictions (Altbach, 2004). According to Hammond (2003) higher education institutions exist within political, cultural and social contexts which shape policy and practice. Even, information systems development and adoption efforts should involve participatory design, user satisfaction, and human relations (Kling & Scacchi 1980), if the objective is shifting paradigms for the university (Duderstadt, 1997) and change in the very structures of educational thinking (Andersson, 2008).

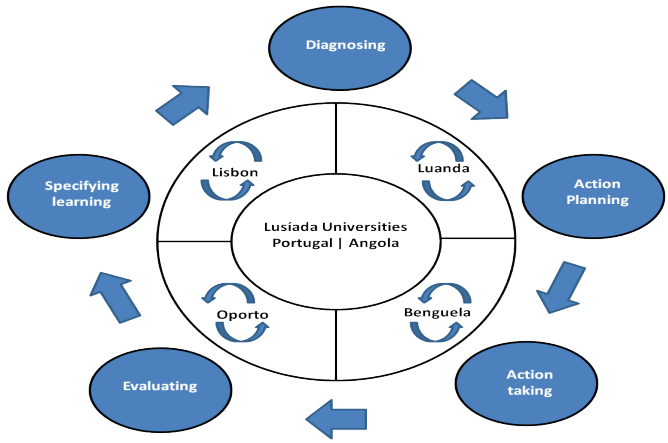
Even so, it is crucial to develop international normative rules for ethical education knowledge distribution, which is in line with Olsen's (2009) political glocalism: putting humanity's collective requirements ahead of vested interests' short term desires, humanity's collective priorities ahead of politicians' short term ambitions, and humanity's local needs and priorities equally balanced with global ones. The globalisation of education may necessitate further partnerships and collaboration. These partnerships can exist to ensure local support for e-Learning, and to address accreditation and certification issues (Uys 2000). The emergence of a global education marketplace can be understood as a consequence of informational society and globalisation (Friedman, 2005). Despite this global awareness, education is inevitably expressed within local dimensions (Altbach, 2004).

3. METHODOLOGY

The study of culture is very complex and ethics practice needs intervention. In that sense, the action-case approach (Braa & Vidgen, 1999) is the option that balance interpretation with intervention. However, it is vital to debate the concept of "hybrid", which the researcher defines as a concept with two sorts of components: case study and action research. This research assumes a qualitative analysis as a way to grasp and describe social phenomena and cultural milieus in which people live.

3.1. Research approach

The distinctive organisational setting of the Institution under study, provide an environment to investigate the ethical and cultural impact in an e-learning project. Understanding the trade-off between planning and current ethical and cultural practices is vital to promote an effective e-learning project, despite its multiple geographical locations. This contextual milieu is enclosed through an ICT joint implementation. Figure 2 represents the intertwining of the whole as the central Institution brand, the four localizations, and the action research cycles both in the "whole" and in the parts "local interventions":



F i g u r e 2. Research design in action-case method

S o u r c e: Author, 2017.

4. EMPIRICAL RESULT

The empirical evidence emerged within the context of the Institution under study, where the implementation levels of ICT embedded in within a e-university organisational climate (e.g. portal, videoconferencing, webstorage, webmail, messaging, etc.). The homogeneity of the Institution under study leads to an ethical dilemma, as what is proper and correct in one culture may be ineffective in another. Globalisation and technological development have simultaneously pressured local cultures and global ethics, moving between push and pull strategies, as this research's findings exemplify in the following figure.

4.1. E-learning strategy

From a research point of view all the technical problems encountered were already stated in the literature. However, ethical and cultural overlaps are far more specific and complex in the cross-cultural environment of the University under study. For example the perceived value of an equitable e-Learning project (different stages of implementation) due to different cultural settings needs an ethicultural evaluation if it persists the intent to share the same brand.

4.2. Technological infrastructures and services

Through data analysis it is possible to recognise several ethical issues and social dilemmas. The core for all linkages is ICT infrastructure liability and adoption, leading to a necessary comparison of Angola and Portugal. The differences were easily perceived throughout the field work as the following problems demonstrated: lack of equipment maintenance, software piracy, electricity power outage, limited network and bandwidth infrastructure, unsatisfactory performance and high internet service cost. Nevertheless, the campuses in Portugal possess a proprietary academic management system which Angola has been using, although the system design does not report any ethical and cultural sensitivity. In fact, the majority of system modules are not applied in Angola and the system design simply neglects requirements for equity (Kanuka & Rourke, 2008). In addition, in regard to the existing government funding in Portugal (e-Europe Action Plan) all network infrastructure was updated with most modern technology, where global vendors were engaged. In Angola no funding was available, so more one equity problem emerged. Meanwhile, the free e-Learning platform (Moodle) was chosen for the whole Institution in Portugal and Angola, which confirms that the high cost of commercial e-Learning platforms limits their use in education (Vrasidas, 2004). However, the implementation plan remains to be completed in Angola, not because the opportunity costs but as a result of different strategies and organisational cultures (evidence based on the leadership environment).

Several other problems were found relating to licensing software even for administrative or academic use. For instance, the Microsoft campus agreements signed in Portugal are not valid for the campuses in Angola, because the localisation comes under other geographic reseller (usually in South Africa). Furthermore, several participants commented that in the Angolan society software piracy is widespread. Perhaps African Ubuntu ethics influence this scenario (Capurro, 2008a), but from the point of view of western ethics it might be said that in terms of deontological theory the act of copying software is always wrong, whilst in utilitarian theory it is justified if it has a beneficial effect on a society as a whole.

4.3. Knowledge/Content management

In Angola, pre-Bologna curricula are still utilised and have been since 2001 despite the existing negotiations to adopt the current ones. In fact, the intended consequence of the Bologna Process in Europe, which is not being pursued in Angola, creates a remarkable social dilemma: the current curricula and programs require a resynchronisation in order to truly allow knowledge sharing and distribution.

Other inconveniences have been reported regarding linguistic understanding, since lecturers are mostly non-African natives. The most frequently occurring nationalities are Portuguese, Brazilian, Cuban, Russian, and Eastern Europeans. This is furthered by the 42 different native dialects that exist in Angola (Lewis, 2009), and in spite of the fact that Portuguese is the official language, student's communication is based on their own dialects. This quandary is increased because Portuguese content development happens only in Portuguese and replicates the Bologna Process; therefore ignoring local needs (absence of cultural sensitivity). Moreover, the absence of spe-

cialists (teachers) compels the University of Angola to hire those from abroad, and so these teachers are extremely well paid: their wages is five times that of the Angolan minimum wage. This scenario raises another quandary (equity): education is restricted to the wealthy social classes. This dilemma is clearly made greater because the bureaucratic procedures necessary to get a visa are extremely costly, difficult and slow, as are travelling arrangements (consistent with Britz & Ponelis, 2010). These problems enable the teachers to demand even higher wages. Moreover, these teachers are clearly less culturally knowledgeable because the previous requirements (visa and travelling costs) often prevent them from having travelled previously to Angola in order to understand local culture.

4.4. Computer-mediated communication

The importance of videoconferencing to this e-Learning environment was a key piece of evidence of efforts to minimize inequity problems on collaborative communications. In fact, the Polycom technology implementation in the whole Institution solved the lack of interactive communication systems for sharing content and perform good teaching with low internet bandwidth in Angola and enabled an educational environment equity. Nevertheless, it has been used most regularly between the campuses of Lisbon and Oporto (in Portugal) for management meetings, and was for a while largely ignored for lessons. Several political and cultural impacts led to different implementation outcomes, namely between the campuses in Portugal and Angola, and local initiatives must be identified and supported, for example, the formal inauguration day in Angola, or the privacy complaints in auto-attendant configuration. Furthermore, since its use becomes more effective, emerging issues must be considered to enhance cultural understanding of how collaboration happens. Indeed, as how bandwidth updates make feasible the use of internet to access to certain kinds of multimedia content, also the use of videoconferencing methods of contact between students and lecturers may change, and new pedagogical insights generate impacts on the traditional academic culture.

4.5. Value added

The ICT implementation enabled value added services as a competitive advantage to help attract new students, namely having better access to information. The objective of the e-U Virtual Campus (www.e-u.pt) was to encourage the production, access and sharing of knowledge through a wireless network, and access to lessons, articles, papers, notes, and service anytime and from anywhere through the internet. However, the physical distribution of facilities among all the campuses of the Institution could benefit from a solution with components of blended approach.

The use of the e-Learning platform Moodle for placing online content of the traditional classes showed only an added value related to access, privacy and security, since lecturers can make content available only for students who must take the respective access rights for course units, while the use of the shared folder allows content to be accessible to read by all lecturers and students. Regarding the educational outcomes, existing practice places little interest in the use of e-Learning tools, but the aspects of funding, quality, reputation, image and modernity justified the invest-

ment. This value-added service improved the market position by international accreditation of the Universities.

4.6. Equity dilemmas

The Institution under study, Lusíada Universities, is a Portuguese brand of private universities, with academic co-operation agreements leading to internationalisation, namely in Portugal (Europe) and Angola (Africa). The shared common organisational culture follows the vision of the founder of Lusíada Universities, as is clear from the motto (although it is slightly altered in Angola), the newsletters and the social events. This way has achieved a very positive reputation around the Portuguese speaking world!

Regarding technological infrastructures and services, all necessary components were installed in Lisbon and Oporto (network, internet, portal, single sign-on, videoconference, etc) and all features integrated with the existing legacy system, in particular the SIGUL (academic management software). E-Learning has been developed in-house based on an open source culture, and has been implemented in Portugal since 2008 (Oporto), and 2010 (Lisbon). In Luanda and Benguela (Angola), not all necessary components were installed (only a restricted network, low bandwidth internet, and videoconference), and e-Learning platform has been implemented only in 2012 (Benguela), despite no features or functionalities are integrated. However, the e-Learning platform is not yet in Luanda (year of 2017), leading to a different organisational environments. So, at this level emerges an inequality dilemma between the resources available for students and lectures in each campus.

The leadership drives an organisational culture and cultural awareness designed to avoid failure and reconcile the inconsistencies between different local policies and different quality proposals. For example, the curricula equity and the uncompromising defence of quality in teaching assume special relevance in terms of the moral and ethical stance. With eventual differences, the problem raises questions related to the reputation of the University brand, given its globality. One of the most critical needs for establishing effective quality in Angola is human capacity for development, *"technology starts at the moment that is installed, the human factor has to play its role, so they can use it… it only lacks the human upgrade"* (informant comment in Luanda, Angola). On the other hand, Academic integrity in Angola is very problematic.

Additionally, the importance of diversity is recognised in the Declaration of Principles of the World Summit on the Information Society (2003), and by UNESCO's Universal Declaration on Cultural Diversity (2001). Therefore, diversity in higher education relies on the trade-off between homogeneity and heterogeneity between educational contexts, leading to the concept of glocality.

Equality and equity are utilitarian perspectives which focus on the consequences or ends (utilitarian case for global equality), often ignoring the means by which these ends are achieved.

4.7. Glocality

The emergence of a global education marketplace can be understood as a consequence of informational society and globalisation (Friedman, 2005). Despite this

global awareness, education is inevitably expressed within local dimensions (Altbach, 2004), or at least focusing on a certain global region (the European Bologna Process is an example), in which it is feasible to distinguish different local perspectives regarding the process itself (Rogerson, 2004b), as well as concerning the main issues around education in that region: cultural diversity, ethics and values, mobility, intercultural communication, organisational cooperation, economical value, and the government's education policy. Following Meyrowitz (2005), "glocality" (global dimension with multiple local dimensions) engages a whole new range of ethical and social issues in education.

This quandary is increased because Portuguese content development is only created in Portuguese and replicates the Bologna Process, therefore ignoring local needs (absence of cultural sensitivity). In addition, this social dilemma is amplified because local managers consider it a minor question, which is the main reason for sharing curricula and programmes. Beyond these claims, lecturers are confronted with an ethical issue in the choice between the use of global references (even digital) over a combination of global and local didactical references.

This is concurrent with the claim made by Arias-Oliva et al. (2004) that higher education institutions and their stakeholders should consider the advantages and disadvantages of ICT, pertaining to educational practices, as a way to ensure openness, equity and international understanding.

CONCLUSION

This research study began with an initial "ethicultural" concern for the introduction of e-learning technologies in Lusíada Universities in Portugal and Angola. The curricula equity and the uncompromising defence of quality in teaching assume special relevance in the moral and ethical stance of an educational institution and the role of leadership in creating that culture of values.

The curricula equity and the uncompromising defence of quality in teaching assume special relevance in the moral and ethical stance of an educational institution and the role of leadership in creating that culture of values.

From the educational point of view, language is the main problem in knowledge transfer, both because of the local dialects in Angola and the influence of Portuguese Language variations in Angola (in particular the Brazilian variation).

The research aims and objectives were based on a practical exploration and resolution of current ethical and cultural problems involving in such endeavours and international research. The research design structure appears to respond optimistically in special innovative data collection and analysis methods, as well as the conceptual framework which was developed. In fact, the empirical outcomes reveal a considerable number of ethical issues and cultural dilemmas that substantiate the research aims and objectives. Given the nature of the research problem, as well as the insights introduced throughout the action case longitudinal approach, it is imperative to recognise two significant claims: (i) there is a lack of e-Learning literature in the cul-

tural contexts of study; and (ii) the evolution of e-Learning implementation enhances ethical dilemmas, both individual and organisational.

The analysis, based on implementation levels according to the conceptual framework, successfully differentiated the stages of e-Learning, and the specific ethical and cultural impacts regarding each one of the project components. Interventions were made acknowledging e-Learning methodologies practice in order to promote problem solving and mutual agreement between all stakeholders, as well as to reply positively to ethical and cultural needs for successful implementation. In relation to the practical elements of collaboration, the evidence shows that a more holistic and longitudinal approach is justified. In fact, the use of research to improve learning and lecturers' professional practice highlighted several problems repeated over short periods of time, usually single academic semesters. Also unfortunately, the rate of technological change does not necessarily imply the same rate of implementation and equity. Acknowledging different organisational cultures in Portugal and Angola is to point out differing perceptions concerning IT management for equality.

REFERENCES

A b a z i - B e x h e t i, L. (2008). Development of a learning content management system. *International Journal of Systems Applications, Engineering & Development*, *1*(2), 1–5.

A l t b a c h, P. G. (2004). Globalization and the university: Myths and realities in an unequal world. *Tertiary Education and management*, *10*(1), 3–25.

A n d e r s o n, T. (2006). Higher education evolution: Individual freedom afforded by educational social software. In M. Beaudoin (Ed.). *Perspectives on the Future of Higher Education in the Digital Age* (pp. 77–90). New York, NY: Nova Science Publishers. Retrieved from http://auspace.athabascau.ca/bitstream/2149/1071/1/higher_education.pdf.

A n d e r s o n, T. (2008). Towards a theory of online learning. In T. Anderson (Ed.), *Theory and practice of online learning* (2nd edition, pp. 45–74). Edmonton, AB: AU Press.

A n d e r s s o n, A. (2008). *Letters from the field: e-Learning students change of earning behaviour*. In Sri Lanka and Bangladesh, 7th European Conference on e-Learning (ECEL), Agia Napa, Cyprus.

A n d e r s s o n, A. & G r ö n l u n d, A. (2009). A conceptual framework for e-learning in developing countries: A critical review of research challenges. *The Electronic Journal of Information Systems in Developing Countries*, *38*(8), 1–16. Retrieved from http://www.ejisdc.org/ojs2/index.php/ejisdc/article/viewFile/564/291.

A r i a s - O l i v a, M., G o n z á l e z, L., S a n t i a g o, R., & T o r r e s, T. C. (2004). University challenges in Information Society. In T. W. Bynum et al. (Eds.). *ETHICOMP2004: Challenges for the Citizen of the Information Society*. Vol. 1 (pp. 38–48). Syros: University of the Aegean.

B a z e r m a n, M. H., L o e w e n s t e i n, G. F., & W h i t e, S. B. (1992). Reversals of preference in allocation decisions: Judging an alternative versus choosing among alternatives. Special Issue: Process and outcome: Perspectives on the distribution of rewards in organizations. *Administrative Science Quarterly*, *37*, 220–240.

B l i n c o, K., M a s o n, J., M c L e a n, N., & W i l s o n, S. (2004). Trends and issues in e-Learning infrastructure development. White Paper, ALT-I-LAB, California. Retrieved from http://www.jisc.ac.uk/uploaded_documents/Altilab04-infrastructureV2.pdf.

B r a a, K. & V i d g e n, R. (1999). Interpretation, intervention, and reduction in the organizational laboratory: A framework for in-context information system research. *Accounting, Management, and Information Technologies*, *9*(1), 25–47.

B r i t z, J. J. & P o n e l i s, S. R. (2010). It's not what you know it's where you're from: A case for social justice in the international flow of knowledge with specific reference to African scholars. In T. W. Bynum et al. (Eds.). *ETHICOMP 2010: The backways, forwards and sideways changes in ICT,* University Roviri i Virgili, Tarragona, 58–69.

C a p u r r o, R. (2008a). Intercultural information ethics: Foundations and applications. *Journal of Information, Communication and Ethics in Society*, *6*(2), 116–126.

C a p u r r o, R. (2008b). Information ethics for and from Africa. *Capurro*. Retrieved March 20, 2010, from http://www.capurro.de/africa.html.

D a v i s o n, R. (1998). *An action research perspective of group support systems: How to improve meetings in Hong Kong* (Unpublished doctoral dissertation). University of Hong Kong, Hong Kong.

D e V r i e s, J. (2005). *E-learning strategy: A framework for success*. BlueStreak Learning, LLC. Retrieved from http://www.bluestreaklearning.com/pdf/E-LearningStrategyarticle.pdf.

D u d e r s t a d t, J. J. (1997). The future of the university in an age of knowledge. *Journal of Asynchronous Learning Networks*, *1*(2), 78–88.

D u n n, P. & M a r i n e t t i, A. (2007). Beyond localization: Effective learning strategies for cross-cultural e-learning. In A. L. Edmundson (Ed.). *Globalized e-Learning cultural challenges* (pp. 255–266). NY: Idea Group.

E l - S h e r b i n i, A. M. & A z e r, M. A. (2008). E-learning policies strategies tools and content development: A case study. *IEEE Multidisplinary Engineering Education Magazine*, *3*(3), 87–93.

F r i e d m a n, H. H., F o g e l, J., & F r i e d m a n, L. W. (2005). Student perceptions of the ethics of professors, *Electronic Journal of Business Ethics and Organization Studies*, *10*(2), 10–15. Retrieved from http://ejbo.jyu.fi/pdf/ejbo_vol10_no2_pages_10-15.pdf.

G o o d f e l l o w, R., L e a, M. R., G o n z a l e z, F., & M a s o n, R. (2001). Opportunity and e-quality: Intercultural and linguistic issues in global online learning. *Distance Education*, *22*(1), 65–84.

H a m m o n d, N. (2003). Learning technology in higher education in the UK: Trends, drivers and strategies. In M. Van der Wende & M. van der Ven (Eds.). *The use of ICT in higher education: A mirror of Europe* (pp. 109–122). Utrecht: Lemma Publishers.

House of Commons (2005). *UK e-university: Third report of session 2004–2005*. London: House of Commons.

K a n u k a, H. & R o u r k e, L. (2008). Exploring Amplifications and reductions associated with e-learning: conversations with leaders of e-learning programs. *Technology, Pedagogy and Education*, *17*(1), 5–15.

K h a n, B. H. (2005). *Managing e-Learning: Design, delivery, implementation and evaluation*. Hershey, PA: Information Science Publishing.

K l e i n, H. K. & H u y n h, M. Q. (2004). The critical social theory of Jürgen Habermas and its implications for IS research. In J. Mingers & L. Willcocks (Eds.). *Social theory and philosophy for information systems* (pp. 157–237). Chichester: Wiley.

K l i n g, R. & S c a c c h i, W. (1980). Computing as social action: The social dynamics of computing in complex organizations. *Advances in Computers*, *19*, 249–327.

K n i g h t, J. (2008). *Higher education in turmoil: The changing world of internationalization*. Rotterdam: Sense Publishers.

K r i s h n a, S., S a h a y, S., & W a l s h a m, G. (2004). Managing cross-cultural issues in global software outsourcing. *Communications of the ACM*, *47*(4), 62–66.

L a l l a n a, E. (2004). *An overview of ICT policies and e-strategies of select Asian economies*. New Delhi: APDIP.

L a s s i l a, A. & P o y r y, P. L. (2007). Online education and learning management systems from service: Centered perspective source. In V. Koskov (Ed.). *Proceedings of IASTED International Conference Web-Based Education* (pp. 322–330). Anaheim, CA: ACTA Press.

L a u r i l l a r d, D. (2008). Technology enhanced learning as a tool for pedagogical innovation. *Journal of Philosophy of Education*, *42*(3–4), 521–533.

L e w i s, M. P. (2009). *Ethnologue: Languages of the world* (16th ed.). Dallas, TX: SIL.

M a c K e o g h, K. (2008, April). E-learning and the Lisbon strategy: An analysis of policy streams and policy making. *Paper presented at the Jean Monnet International Conferences on European Union Policies in the Making*, Krakow, Poland.

M a c p h e r s o n, A., H o m a n, G., & W i l k i n s o n, K. (2005). The implications and use of e-Learning in the corporate university. *Journal of Workplace Learning*, *17*(1/2), 33–48.

M e y r o w i t z, J. (2005). The rise of glocality: New sense of place and identity in the global village. In K. Nyíri (Ed.). *A Sense of Place: The Global and the Local in Mobile Communication* (pp. 21–30). Vienna: Passagen Verlag.

M y e r s, M. D. & T a n, F. B. (2002). Beyond models of national culture in information systems research. *Journal of Global Information Management*, *10*(1), 24–32.

N i e l s e n, J. (1997). Usability testing. In G. Salvendy (Ed.). *Handbook of human factors and ergonomics* (pp. 1543–1568). New York, NY: Wiley.

O l s e n, L. T. (2009, July). Seattle 10 years on: Go glocal. *Club of Amsterdam Journal*, *119*. Retrieved July 13, 2009, from http://www.clubofamsterdam.com/press.asp?contentid=799.

P a r r i s h, P. & L i n d e r - V a n B e r s c h o t, J. A. (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *International Review of Research in Open and Distance Learning*, *11*(2), 1–19.

R a w l s, J. (1971). *A theory of justice*. Harvard: Harvard University Press.

R i c h a r d s, C. (2004). From old to new learning: Global dilemmas, exemplary Asian contexts, and ICT as a key to cultural change in education. *Globalization, Societies and Education*, *2*(3), 337–353.

R o b e r t s, P. (2002). Image informatics: Ethical issues in the Virtual University. In I. B. Alvarez, S. Rogerson, J. A. Lopes, & T. W. Bynum (Eds.). *Proceedings of ETHICOMP 2002: The Transformation of Organisations in the Information Age, Social and ethical implications* (pp. 841–852). Lisbon, Portugal.

R o g e r s, P. C., G r a h a m, C. R., & M a y e s, C. T. (2007). Cultural competence and instructional design: Exploration research into the delivery of online instruction cross-culturally. *Educational Technology, Research and Development*, *55*(2), 197–217.

R o g e r s o n, S. (2004a). The ethics of software development project management. In T. W. Bynum & S. Rogerson (Eds.). *Computer ethics and professional responsibility* (pp. 119–128). Oxford: Blackwell.

R o g e r s o n, S. (2004b). The Virtual World: A tension between global reach and local sensitivity. *International Journal of Information Ethics*, *2*, 1–7. Retrieved from http://www.i-r-i-e.net/inhalt/002/ijie_002_22_rogerson.pdf.

S a w h n e y, N. (2000). Understanding ethics in development: Rational reasoning and cultural attitudes. *Massachusetts Institute of Technology*. Retrieved July 12, 2011, from http://pubs.media.mit.edu/pubs/papers/DevEthics.pdf.

S u h a i l, N. A. & L u b e g a, J. T. (2011). Optimization technique for implementation of blended learning in constrained low bandwidth environment. In A. Tatnall, O. C. Kereteletswe, & A. Visscher (Eds.). *IFIP Advances in Information and Communication Technology. Lecture Notes in Computer Science* (pp. 166–173). Boston, MA: Springer.

U n w i n, T. (2008). *Survey of eLearning in Africa based on a questionnaire survey of people on the eLearning Africa database in 2007*. UNESCO Chair in ICT for Development. London: UNESCO. Retrieved from http://www.gg.rhul.ac.uk/ict4d/workingpapers/elareport.pdf.

U y s, P. M. (2000). *Towards the Virtual Class: Key management issues in Tertiary Education* (Unpublished dissertation). Victoria University of Wellington, New Zealand. Available online: http://www.globe-online.com/philip.uys/phdthesis.

V r a s i d a s, C. (2004). Issues of pedagogy and design in e-learning systems. *Proceedings of ACM Symposium on Applied Computing* (pp. 911–915). 14 to 17 March, Nicosia, Cyprus. Retrieved from https://mailserver.di.unipi.it/ricerca/proceedings/AppliedComputing04/Papers/T14P01.pdf.

W a l s h a m, G. (2006). Doing interpretive research. *European Journal of Information Systems*, *15*(3), 320–330.

W a n g, M. (2007). Designing online courses that effectively engage learners from diverse cultural backgrounds. *British Journal of Educational Technology*, *38*(2), 294–311.

W e a v e r, P. (2002). Preventing e-Learning failure. *Training and Developmnet*, *56*(8), 45–50.

W e b s t e r, F. (2006a). *Theories of the information society* (3rd ed.). London: Routledge.

W e l l e r, M. (2007). *Virtual learning environments: Using, choosing and developing your VLE*. London: Routledge.

W i e r z b i c k i, A. (2010). *Trust and fairness in open, distributed systems*: *Studies in computational intelligence series*. Vol. 298. Heidelberg, Berlin: Springer Verlag.

W i n t e r, M. (2006). *Learning management systems in the workplace: A research report*. Tertiary Accord of New Zealand Research. Retrieved from http://www.tanz.ac.nz/pdf/LMS_Final.pdf.

Y i n, R. K. (2009). *Case study research: Design and methods* (4th ed.). London: Sage Publications.

Z h a n g, D. (2004). Can e-Learning replace classroom learning? *Communications of the ACM*, *47*(5), 75–79.