

To Be or Not to Be Ethiculturally Sensitive in E-Learning: An Analysis to Knowledge Authoring

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Abstract: Using as a starting point Shakespeare's quotation, *to be or not be*, this paper aims to underline if higher education knowledge authors within distributed learning environments assume an ethical and cultural sensitivity. This research question reflects the existing ethical and social dilemmas that e-learning evolution imposes to knowledge "creators" (coordinators and tutors); although, the straightforward answer clearly acknowledges a negative attitude concerning ethicultural sensitivity! To promote a plausible and reliable justification the authors will shed some light over Silva's framework, namely the knowledge/content management layer, as well as some keen empirical examples from his PhD research project. The manuscript recognizes five sections: background (etymological roots and challenging the paradigm); e-learning (generations and knowledge authoring); knowledge flows; knowledge dimensions (political, economical, social/cultural and digital); and, argument (conceptual framework, ethicultural sensitivity and evidences).

Introduction

E-learning literature is vast and prosperous due to its wide analytical spectrum. Yet, the authors emphasize the subsequent explanations: "e-learning will here be defined as the use of ICT in higher education,

which aims mainly the independent use of technology by students” (Stahl, 2005, p. 21); or, “the thoughtful fusion of face-to-face and online learning experiences” (Garrison & Vaughan, 2008, p. 5).

Traditional e-learning enables a formal nature of education which the newest learning environments challenge in a continuum process, from “establish” to “emergent” (Wenmonth, 2006). According to Barnes & Tynan (2007) to compel formal education inside learner-centred learning environments 2.0 resumes a critic, since informality is a key feature of this e-learning generation (Pozgaj & Vlahovic, 2010). Likewise e-learning 3.0 characteristics will enhance this controversy, because it contravenes the limits of traditional educational organizations through increasing self-organised learning (Wheeler, 2009).

Thus “knowledge creators or authors” embrace a novel challenge: to be ethically sensitive. Ethical sensitivity is essential to ensure society expected outcomes (Weaver, 2007), as well as cultural sensitivity resumes a basis for societal development (Simmons, 2008). Despite the previous assumption e-learning literature seems to acknowledge little regard to this discussion, since it highlights merely design issues (Dolog & Sintek, 2004), or the knowledge creation process itself (Yoon & Song, 2009).

Concluding, this manuscript aspires to debate the relationship pertaining to knowledge authoring in e-learning, ethics and culture throughout some keen empirical examples from the first co-author PhD research. The paper will acknowledge five core sections: background (etymological roots and challenging the paradigm); e-learning (generations and knowledge authoring); knowledge flows; knowledge dimensions (political, economical, social/cultural and digital); and, argument (project aims and objectives, conceptual framework, ethically sensitive and evidences).

Background

Etymological Roots

The Online Etymological Dictionary (2010a) claims that knowledge is a combination of *know* (“learn from experience”), and *ledge* (“action or process”). In addition, the concept of *author* exhibits the following connotations: an “enlarger, founder, master or leader” or, even “who sets forth written statements” (Online Etymological Dictionary, 2010b).

Challenging the Paradigm!

Academic knowledge entails diverse normative perspectives which knowledge sociology has been debating. An illustrative example is Plato’s work *Protagoras*: “knowledge is the food of the soul” (Jowett, 1899); however, higher education highlights formal knowledge categories as mandatory (Weber, 1946). This level of formality can be bounded the traditional concept of *author*; although, knowledge society connectivity represents a new leap pertaining to academic knowledge taxonomies and knowledge authoring (Chodorow, 2000). A close-up scrutiny to distributed knowledge involves grasping three generic assumptions: distributed knowledge characteristics; authorship; and, the relationship among these assumptions.

According to Bonifacio, Bouquet & Cuel (2002) distributed knowledge characteristics are: autonomy (each person should have a high level of autonomy in order to manage its personal knowledge); and, coordination (everyone ought to share its knowledge with other individuals, through context understanding other than imposition). Foss & Foss (2008) refer that coordination leads to a broad understanding of authority (empowerment) despite knowledge heterogeneity. In fact, the correlation among distributed knowledge and authority is complex and contingent.

Michael Foucault (1969) argues that authorship as a concrete notion is not a reasonable assumption, since the core issue resumes the author functions and not the concept itself. To Foucault, *function*, entails a set of values or assumptions that govern the generation, distribution, classification and knowledge exploitation throughout four main features: is bounded to the legal system, as a result of transgressive behaviours; it depends

on the topic; it concerns the editorial attribution; it does not involve an individual. Furthermore, Holland (1993) refers that digital technology undermines the normative individual author.

Concluding, these assumptions lead to some critical milestones: who or what is authoring academic knowledge? And, it is ethically sensitive?

E-learning

Generations

The evolution of e-learning technology engages a continuous process which is proven by its three generations: 1.0, 2.0 and 3.0. Following Reis (2010) e-learning 1.0 resumes *Computer Based Learning* instructions; e-learning 2.0 as an “interlocking set of open-source applications, where learning is becoming a creative activity and that the appropriate venue is a platform rather than an application” (Downes, 2005); and, e-learning 3.0 enables the introduction of semantic technologies that support contextual information and synchronization as regards to text, voice or images throughout workflow tools (Teten, 2007). So, “e-learning 1.0 acknowledges content distributed through asynchronous technologies, meaning unidirectional communication through top-down analysis; 2.0 engages interactive content through synchronous communication, leading to a bottom-up collaborative analysis; 3.0 resumes technologies for cooperation, enabling a transversal collaborative analysis” (Reis, 2010, p. 115). Nevertheless, the level of personalization of this technology is proportional to the collective assumption.

Knowledge Authoring

Learning environments include two major *knowledge creators*: the coordinator and tutor. Each *knowledge creator* engages a dissimilar level of responsibility depending on the educational system, as for instance: in Anglo-Saxon cultures the coordinator assumes a higher level of responsibility; contrarily, in Latin cultures higher levels of responsibility are bounded to the tutor (Wright, 2007). Wright (2007) also refers that a coordinator reveals a profound knowledge with reference to novel ICT utilization across curriculum and educational stages, as well as inter-personal expertise in developing, implementing and assessing the university e-learning program according to policies and guidelines. Hence, its responsibilities are: develop and supervise pilot programs; provide faculty training; establish quality standards; research and development; guarantee a communication policy; and, pursue grants. Gilly Salmon (2004) introduces a five stage model for e-learning about learners’ and tutors’ activities; although table 1 simply illustrates the second group activities.

| Stage | Tutors Activities |
|----------------------------------|--|
| Stage 1 (access and motivation) | Welcome and encouragement; guidance about technical support |
| Stage 2 (online socialization) | Introductions, ice-breakers, proceeding rules |
| Stage 3 (information exchange) | Facilitate structured activities, assign roles and responsibilities, support learning materials utilization, encourage debates, and summarize findings |
| Stage 4 (knowledge construction) | Facilitate open activities, facilitate the process, raise queries, and promote reflection |
| Stage 5 (development) | Support, respond only when necessary, and encourage reflection |

Table 1: Tutors activities (Adapted from Salmon, 2004)

From table 1 it is possible to criticize the work of Salmon as regards to ethicultural sensitivity. As a result, Amghar (2004) argues that in a multicultural environment, which is increased by distributed learning environments, ethicultural sensitivity ought to be compulsory. Yet, despite this refreshing contribution is the authors' belief that two queries arise: does not the coordinator face the ethicultural sensitivity challenge? And if these *knowledge creators* possess this characteristic, are morally obliged to be familiar with all ethical and cultural backgrounds?

Knowledge Flows

Knowledge flows in e-learning can be depicted through knowledge management models, as for instance: the SECI model (Nonaka & Takeuchi, 1994); or, Alan Fiske relational model (Haslam & Fiske, 1992). In spite of this argument, these models tend to neglect the ethical issues that knowledge creation imposes (Costa, Prior & Rogerson, 2010). Moreover, it is essential to comprehend the divergence among knowledge and content flows (Costa & Silva, 2010). Beyond this debate, it is obligatory to spotlight the underpinnings of knowledge maturation within distributed learning environments. Maier & Schimdt (2007) plead the following criteria for knowledge maturation: hardness (describes the alleged authenticity and consistency); interconnectedness/contextualization (connections to other topics become visible); commitment/legitimation (the audience and structure of support); teachability (immature knowledge compels dissimilar learning challenges).

Knowledge Dimensions

Political

Duderstadt (2001) refers that modern universities are *knowledge servers* due to their critical role is to produce, protect, merge, share and apply knowledge. Although, it is essential to emphasize the following query: who has strategic control in distributed environments over knowledge authoring? A potential reply, at some extent, is given by *The Recursive Model for Knowledge Development in Virtual Environments* (Adams, 2007), which highlights three dimensions: knowledge authority (strategic control concerning knowledge); lecturing approach (lecturing strategies); and knowledge approach (educational purposes and instructional intent). The expression, *at some extent*, resumes important critics: lecturing and knowledge dimensions clearly depend on knowledge authoring; and, it is possible to have *macro* (e.g. vendor or the university itself) and *micro* (e.g. coordinator and tutor) *knowledge creators*! If a *knowledge creator* assumes a non-ethicultural strategy it is reasonable to expect that ethical and cultural dilemmas will arise. Nonetheless, is ethicultural sensitivity an individual or institutional moral responsibility? Nowotny, Scott & Gibbons (2001), claim that to safeguard non-diversity values in universities is unsatisfactory and innocuous.

Economical

If e-learning is universally acknowledged as a requirement for future social and economic growth, providing a new significant basis for available education (Richards, 2004), which resumes knowledge as a key resource. Knowledge as a heterogeneous packet entails four features: tacitness; indivisibility; complementarity; and, appropriability (Antonelli, 2005). As regards to tacitness, knowledge can be simply tacit or codified. Noteboom (2002) refers that a degree of cohesion amid agents in sharing codes and languages interacts with its rank of tacitness. To Antonelli (2001), indivisibility resumes an array of probable appliances within a certain context, which is related to individual knowledge production as a result of accessing to external knowledge (complementarity) (Antonelli, 2005). Besides, Antonelli (2005) pleads a symbolism for economical advantages when a proprietary knowledge strategy (appropriability) exists. Even so, what dimension do *knowledge creators* value most? Ethical profit enables an ethicultural analysis or pure economical profit?

Social/Cultural

Modern educational circumstances compel continuous social interaction, which reflects numerous cultural backgrounds. Individuals attempt to look for commitment and mutuality in a vigorous endeavour for coherent self-learning (Slevin, 2005). This social interaction permits learning, since collaboration is the way to acquire knowledge (Kreijns, Kirschner & Jochems, 2003). Even so, literature advocates that cognitive outcomes arise from specific and diffuse social interaction (peer-to-peer, social networks, etc.), rather than social dynamics engaged by the *knowledge creator*. So, an imperative question arises: can we morally coerce *knowledge creators* to be ethically sensitive? Likewise, if a *knowledge creator* is sensitive regarding ethical and cultural issues can we expect an equivalent level of cultural sensitivity?

Digital

Jenkins (2006) argues that digital systems support a communal input and not an individual ownership, which is similar to knowledge social production. E-learning is transformed into distributed learning or distributed knowledge (Gâlea, Leon & Zaharia, 2003). This knowledge is distributed throughout various media and reveals a student-centred learning perception through a collective involvement (Mason & Rennie, 2008). Siemens (2004) invokes that Learning Management Systems (LMS) embrace two levels of analysis: Learning Knowledge Management Systems (LMS development as a consequence of social interface) (e.g. Hall, Paradise & Courtney, 2003; van Harmelen, 2006); Learning Oriented Knowledge Management Systems (LMS evolution at an instructional level) (Hall, 2005). Naturally this personalization implies a higher level of learner's diversity, and therefore enhancing the need for ethically sensitive regarding knowledge creation. Moreover, the authors claim that the distributed knowledge system must also accommodate ethical and cultural constraints, or else the outcome will be null.

Argument

Conceptual framework

To debate ethically sensitive in e-learning the authors introduce the e-university strategic implementation conceptual framework (Silva, Rogerson & Stahl, 2008) from the first co-author PhD research project, which aims to examine the ethical and cultural quandaries related to e-learning implementation in electronic universities, as well as to highlight their potential impacts in a flourishing or ineffective implementation through an empirical inquire comparison among Portugal and Angola.

This framework encompasses an interactive procedure of bottom-up and top-down feedbacks in order to promote a real time assessment through four layers: value added (a transversal cost/benefit ethical analysis which aspires to support information about the e-University project, as well as each layer); computer mediated communication (characterizes e-learning 2.0 features, leading to prosperous social interactions); knowledge/content management (highlights the knowledge and content creation procedures; although, is impracticable to detach distributed knowledge from the remaining layers); technological infrastructures and services (core technology that supports distributed knowledge systems, as well as back-office or administrative services). As a result of the research question, the authors will focus their attention into the impacts that constrain the knowledge/content management layer implementation.

Ethicultural sensitivity

Literature describes ethical and cultural sensitivity as multidimensional concepts pertaining to behaviour. For instance, Weaver (2007, p. 142) claims that ethical sensitivity is “a caring response, skill in identifying the ethical dimension of care, intuition regarding others’ comfort and well-being, and a component of moral care”. Or, entails and individual’s ability as Bebeau, Rest & Yamoore (1985, p. 226) point out: “involves an awareness that something one might do or is doing can affect the welfare of someone else (or may affect others’ welfare indirectly by violating a general practice or commonly held social standard)”. On the other hand, to Chen & Starosta (2000, p. 5) “cultural sensitive people are able to reach the level of dual identity and enjoy the differences and attempting to defend their own world views, and moving to emphatic ability to accept and adapt cultural difference”. Or, an assumption that miscellaneous cultures have unlike contexts for and perspectives on what is proper and respected (Betancourt, Green & Carrillo, 1999), which encompasses cultural relativism i.e., if a different culture does not agree with a particular ethical standard, so that standard should not be applied in that culture.

Knowledge creators have the social responsibility to achieve cultural authenticity about codified knowledge and images authoring, as a result of local training needs (Thomas, Mitchell & Joseph, 2002). Likewise, ethical sensitivity is not a synonymous with *ethical neutrality* since technology itself is not neutral (Tripathi, 2010); although, it resumes the various applications of that knowledge in local contexts (Korpel, 2004). Summing up, ethicultural sensitivity concerning knowledge authoring within educational organizations aims to evaluate the link between knowledge creation, as well as ethical and cultural sensitivity.

Evidences

Bearing in mind the aim of this manuscript the authors will refer the ethicultural dilemmas for each knowledge dimension through the glens of the potential *knowledge creators*.

The political dimension implies significant social dilemmas, as for instance: uneven regulatory actions; and, inequality relating to knowledge sharing. Uneven regulatory actions occur due to the dichotomy of Bologna Process in Portugal versus avoiding Bologna process in Angola. Empirical evidences of knowledge sharing inequality are the absence of syllabus in Angola.

Economical analysis derives from multiple assumptions: distinct Lusíada organizational structures; tutors hiring; and, bureaucratic procedures. Lusíada University is a non-profit corporation since 1986 in Portugal and, in Angola encompasses a profitable organization since its foundation (2001). Another important feature is the lack of specialists in Angola, and so tutors are extremely well paid: their wage implies 2/3 of a Portuguese *minimal wage* and *five* times of the Angolan *minimal wage*. This scenario raises another quandary (equity): education is restricted to wealthy social classes! With reference to the bureaucratic procedures these are extremely costly, difficult and complex, as well as the travelling arrangements (consistent with Britz & Poneis, 2010).

For the social/cultural dimension, the authors highlight the following empirical evidences: linguistic understanding; and knowledge cultural sensitivity. Due to the lack of specialists, tutors are mostly non-African natives leading to abundant linguistic issues: *pandilha* (Brazilian) instead of *folha de cálculo* (Portuguese) regarding Excel sheets; incorrect pronunciation by Cubans of Portuguese vocabulary from Arab etymological, as for instance *algarismo* versus *algoritmo*. In addition, despite Portuguese be the official language in Angola exist 42 dissimilar native dialects (Lewis, 2009).

The digital dimension resumes the distributed learning system, which is developed in Portugal (proprietary system), and utilized in both educational institutions. Its design has been revealing a profound lack of ethical and cultural sensitivity, namely concerning the infra-structure liability for knowledge distribution. The 2009 ICT for Development report (World Bank, 2009) resumes that in Portugal the number of internet subscribers (per 100 people) in 2007 was 15.2, and infrastructure liability (bits/second/person) was 4.790; although, in Angola these values were 0.3 for internet subscribers and 0.17 to infrastructure liability. So, the system design has been neglecting Angola’s infra-structure liability.

At last, the interaction involving the queries and their dilemmas resumes the subsequent conclusions: ethicultural sensitivity is an institutional moral responsibility, since Lusíada Universities share their mission and

principles. Then, Bologna procedures ought to be implemented in Angola in order to permit learners exchange, as well as curriculums need to embrace an ethical and cultural adaption; until now, *knowledge creators* clearly value the economical dimension; despite the assumption for an equal sensibility to every culture, *knowledge creators* do not assume multiple cultural identities, so are morally responsible for that scenario; it is vital to incorporate tools for *knowledge creators* focus on linguistic and liability issues, as well as learner's skills within the distributed knowledge system. In conclusion, *knowledge creators* (coordinators and tutors) have a moral responsibility to be ethical and cultural sensitive, in spite of dissimilar organizational contexts produce diverse remarks.

Conclusions

Distributed knowledge enables severe ethical issues and cultural dilemmas to 21st century educational institutions. This assumption is recognized by Arias-Oliva, González & Santiago (2004), which refer that these institutions and their stakeholders ought to deem the advantages and disadvantages of ICT. If education aspires to personify "the beliefs, traditions, customs, rituals and sensibilities along with the knowledge of why these things must be maintained" (Maison, 2007, p. 28), it is urgent that *knowledge creators* recognize the impact of their actions within distributed learning environments, because as empirical results demonstrate (e.g. Silva, 2008; Amgahr, 2004) that attitude is far from happening. This scenario will become even more critical in e-learning 3.0 environments due to the wisdom of crowds (Bojárs *et al.*, 2008), since Foucault perception will be an ultimate reality and semantic systems may develop knowledge.

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