A PRACTICE FIELD FOR TEACHING ELECTRONIC MARKETING

Luis Vaz and Nuno David
ISCTE-IUL - Lisbon University Institute
Department of Information Science and Technology, Lisboa, Portugal
luis.m.vaz@mail.telepac.pt, nuno.david@iscte.pt

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Abstract: Professionals in electronic marketing make intensive use of information and communication technologies. An intensity that makes the teaching of electronic marketing somewhat challenging and specific when compared with other disciplines. Teaching electronic marketing will only be effective if the learning environment reaches similar levels of technological intensity as the discipline itself. This suggests that electronic marketing might be particularly appropriate to the use of e-learning as a teaching instructional model. However, this carries risks and further challenges, resulting from difficulties in obtaining positive results whenever learning is supported by e-learning platforms. If one wants to achieve lower failure risks and effective and motivated learning, the e-learning model should be provided with features that strengthen it pedagogically. This paper proposes a practice field for teaching electronic marketing, embedded and tested in an e-learning platform provided with learning activities that implement a practice field.

1 TEACHING ELECTRONIC MARKETING

The application of the traditional teaching systems to the field of electronic marketing (EM) presents instructional failures that will keep students from obtaining important knowledge and skills needed in their professions (Miller *et al.*, 2003). These insufficiencies become more pronounced when the traditional model is used in disciplines where students need to apply their knowledge in positions that require environments with high technological intensity (De Wulf *et al.*, 2000). In a society where information and communication technologies (ICT) are present in all professions, the use of inadequate teaching models tends to be widespread (Bundy, 1998).

For EM professionals, the core activity of their business consists of electronic mail, interaction social sites, and the internet in general, where they promote products and services. The use of these tools requires skills, literacies and practical abilities that the normal teaching model – in which the transmission is focused on the professor – does not provide.

Aware of this fact, several teachers in higher education are including in their teaching models new learning activities, generically and transversally to many disciplines, such as case studies, teamwork, and assignments using ICTs, thus promoting the use of information technologies and reinforcing communication and access to contents via internet sites.

But even with these efforts it proves difficult to reproduce in a suitable pedagogical way the nature of the interactions with ICTs, necessary for the good fulfilment of disciplines with high technological intensity, particularly in the EM case.

Alerted to these difficulties, as well as to the increasing exigency on teaching EM, teachers are required to find a solution to this problem, whose importance is becoming more and more urgent (Oliveira and Guimarães, 2010; Conole *et al*., 2007). Teachers are asked to find and test instructional models with innovative characteristics. Innovation which ought to be intensively supported on ICTs. Notwithstanding, the application of technology may increase the risk of failure, lowering teachers' and institutions reputation rates, whenever pedagogical innovation based on ICT fails. Failures risks and the potential for resulting frustrations are well illustrated

in cases described in biography related to the application of information technologies to education with e-learning approaches (Law, 2004; Huk et al., 2002; Romiszowski, 2004; Dowes, 2005).

The analysis of failures reveals a poor design of many e-learning supporting systems which are not backed up by any idea of the teaching model the learning system is meant to be based (Penna and Stara, 2007). Failures in the effectiveness of e-learning are also the result of an excessive focus on contents when designing the learning solutions (Brennan 2003).

But what really influences the success or failure of the e-learning is the careful consideration of the pedagogy subjacent to the construction of the learning model, i.e how does learning work online (Dalziel, 2005). Pedagogy has a central role in the success of e-learning (Govindasamy, 2001). Only through the insertion of pedagogy in the design of e-learning will we create learning models where students really learn. The e-learning platform should be provided with an instructional model based on recognized paradigms of teaching theory, consolidated by learning activities, intensively supported on ICTs. One way to implement these paradigms in an e-learning solution consists of adopting a model where education is based on the practical use of specific skills that students are intended to learn (Lee, 2009).

2 PRACTICE FIELDS

In order to implement this paradigm, we propose a practice field (PF) where situated learning is based on real learning activities.

PFs are especially appropriate to teach EM insofar as they grant specific knowledge on the practical use of ICTs for developing marketing activities. A PF also grants a high-maturity education model, promoting alignment among perceivable results, teaching, learning activities and evaluation (Biggs, 2003).

The development of learning environments supported on PFs arose from the need for developing learning based not only on concepts but on real activities, applied by students in their professional lives (Barab and Duffy 2000). Practice models were indicated, for example, as the best way, to develop learning within organizations (Kofman and Senge 1993). Other fields include the teaching of project management (Winston and Spiro, 1993) and the teaching of medicine supported on ICTs (Garde et al., 2005). In the models proposed by Winston and Spiro students develop authentic activities related to management. Our approach is a "hands on" approach, where students develop authentic activities that are in fact identical to the ones they will develop in their professional practices of EM.

The PF we propose in this article has an architecture that comprises three characteristics important for teaching disciplines with high technology intensity: (1) it must be integrated in an e-learning environment extended with an intelligent tutoring system; (2) practices should be authentic; (3) dynamics created by the PF at the cognitive, social and emotional dimensions should be maintained by a narrative supported by hypermedia means of the e-learning platform. Figure 1 shows the proposed architecture for the case of EM.

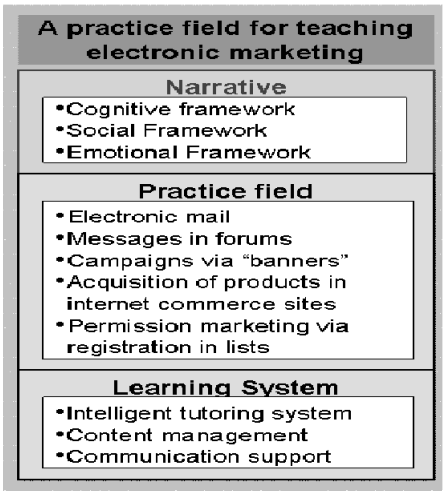

Figure 1: The architecture for the case of EM.

3 THE INTELIGENT TUTORING SYSTEM

An intelligent tutoring system (ITS) is a computer-based system supported by a model specifying what to teach and how it should be taught (Wenger, 1987).

The ITS developed for this PF may be classified as one of having a special purpose, developed for an instructional model based on authentic activities, in which students are called to participate on an organized and sequential way by the information system itself (Murray, 1999).

In the tutoring system model the following are embedded: i) the rules to make content available; ii) the sequence of the authentic activities; iii) a model of participation of each student, identified through the role he plays in each of the activities.

Instructions to students specified by the ITS are embedded in the learning support system, and duly integrated hereinto, thus enlarging the learning process. It also automatically promotes the specific configuration of the hypermedia environment, thus showing students the connections they have to follow, offering easy access to the systems that support authentic activities.

The tutoring system controls the timing of each practice, shows the student what to study before developing it and places him/her in the role s/he plays in it.

4 AUTHENTIC ACTIVITIES

A PF must have several media available so that students can practice. The PF developed for the EM field uses the following:

- Electronic mail
- Messages in forums
- Publicity on the internet via 'banners'
- Purchasing of products at an internet commerce site
- Permission marketing

4.1 A Students Market

The activities of EM developed at the PF are intended to promote the selling of products in a particular market.

The set of students defines this market; their role is that of a typical consumer. Once they receive structured messages from colleagues promoting products, they will understand the effect that these messages will have on consumers. They also learn how to structure messages to be sent in an EM campaign.

In the role of consumers, students answer messages, causing in the students that sent those messages a learning effect on how a campaign really works.

4.2 Campaigns of Electronic Mail

The development of a campaign of electronic mail must follow specific rules and good practices so that clients do not see electronic mail as 'spam' but are persuaded to read received messages.

For those who are learning, if the sending of electronic mail is appropriately developed, the PF should help students understand the characteristics that the messages should have. This is possible provided the sender has previously had the chance to read contents explaining how the message should be constructed so as to obtain certain objectives. While developing and sending electronic emails according to certain rules, students come to understand the basis of performing a campaign.

4.3 Campaigns with Forums

The creation of lists in which students playing the role of a marketer leave messages for promoting the traffic of an electronic commerce site, introduces a collective learning process leveraged by the access of other students. Access is encouraged insofar as one of the exercises to be carried out by students is answering such messages in the list.

A learning sequence is developed that will transform the PF in a learning community, insofar as it creates a two-way communication dynamic, between students in the role of consumer and students in the role of marketers.

In the platform, a system is available to place messages in forums, and students create messages according to rules previously learned. The intelligent tutoring system asks students to place messages and notifies other students to respond.

4.4 Purchasing of Products at an Electronic Shop

The emergence of electronic commerce introduced into the commercial world a completely new way of selling products, which is often not understood or even known by managers and students. Even when managers play the role of consumers themselves, this kind of market is not part of their previous commercial activities, making it more difficult to use past experiences.

Therefore, it is reasonable that future managers have informational literacy on electronic commerce, especially those working in the EM field. The PF provides the possibility of buying at electronic shops.

4.5 Development of Online Publicity

Internet media, whichever they are, are crucial vehicles to promote the image of enterprises. In EM a main activity is promoting and managing the brand of an enterprise via electronic channels; thus, knowing what a "banner" is and how it is developed becomes important.

One should know the best way to create a "banner", not only regarding costs but also

considering the communication efficiency for achieving better sales. There are several and diverse ways of creating a "banner". Specific tools available at sites on the internet make it possible to construct several kinds of "banners".

A PF that puts in contact students who may be working with EM, or with deep connections to advertising on the internet, should allow the construction of a "banner" and its placement at an electronic shop.

Students are called to build a "banner" in groups, in line with a story describing the PF.

4.6 Permission Marketing

Permission marketing can be understood as the explicit desire by a consumer for receiving relevant messages. The consumer subscribes to sites and fills out information that enables the sender to target messages. Understanding how permission marketing works is nowadays an important issue for the EM professional.

In the PF, students will play the role of consumer and will be called to subscribe in sites where they can register and give information to receive target messages.

The dynamics that emerge in such sites will help students acquire the skills necessary for an EM manager and, in particular, skills associated with permission marketing.

5 THE NARRATIVE

EM is based on the exploration of a hypermedia environment used to promote enterprises and products in the eyes of consumers.

A PF in this area should aggregate several components for exploring the hypermedia environment, making them available to students so that they can practice EM activities. In such practices students create a consumer market and play different roles introduced by a narrative.

5.1 The Development of the Narrative

The narrative enables us to contextualize, introduce simplifications, adjust and explain certain dynamics of the PF, which necessarily represent a simplified view of some world (Barab and Landa, 1997).

One way to structure and develop a narrative is based on the dynamics of development of a case study.

The narrative used in this PF was developed from the structure of a problem, by suggesting how the firm sees the problem and what alternative solutions are available (Linder, 1990). The narrative shows the student the context of the problem and indicates the importance of the practices students will carry on (Barab et al., 1998).

The narrative also introduces students to the various roles they will have in the PF.

Apart the aspects of contextualization, a good narrative reinforces motivational aspects and develops a framework that helps with the solution of practical problems (Dickey, 2006).

5.2 Narrative Description

The narrative is based on a situation where an enterprise has just bought an electronic commerce business and has to maximize its publicity campaigns.

5.2.1 The Events

"It was late in the afternoon of a very busy day. Expectations were high as meetings with top management and marketing professionals were not frequent. We all knew that our president was a keen adept of the use of the internet to commercialize products, mainly books. The room was silent.

Without any kind of introduction or perspective comment Luis [the president] said 'We did it, we just bought a firm that sells books via internet!'".

5.2.2 Characteristics of the Buying Company

"The firm 'All books' has around 25 employees distributed across four locations. A big space at a pedestrian street in the busy centre of Lisbon and three other spaces in different locations. Each one of these shops with five employees.

'All books' has been a quite profitable business but the selling of books via the internet raised some concern about its future. This new reality led the owner to buy a business in order to sell books via the internet".

5.2.3 Characteristics of the Acquired Company

"The firm 'e-Books' was created two years ago. An analyst programmer with skills in the internet area decided to create a site to sell books via this new channel.

However, lack of knowledge about this business took the company to a difficult financial situation

and the owner started looking for an expert partner in this kind of business.

He started by contacting 'All Books' but they were not interested in this kind of partnership. After long negotiations 'e-Books' decided to sell all its stock to 'All Books'".

5.2.4 Business Model of the Newly Acquired Company

"'e-Books' is a bookshop that sells exclusively via the internet. With a market share of 5%, it does not yet have profits, which is possible only with a 50% share. Having this in mind the former management bought a campaign of electronic marketing. The campaign is supposed to occur consecutively, divided into five campaigns.

5.2.5 The First Meeting

"Luis, the owner of 'All Books', arrived at the meeting room and gave us a paper showing what he thought would be necessary to reach profitability and clearly explaining the role of each management team for this purpose. The main role of the marketing management team will be to maximize the EM campaign already in place."

5.2.6 The Campaign of Electronic Marketing

"The campaign of EM will be based on four different techniques.

- *Banners*
- *Messages in forums*
- *Campaigns of electronic mail*
- *Sponsorships*

'e-Books' had already decided to put banners: i) in our site; ii) in other sites of the internet market by exchanging banners with other enterprises; iii) in a high traffic site.

The electronic mail campaign will be created for clients who voluntarily registered at our site and for lists of clients whose email addresses were bought.

Messages will also be placed at a forum where internet users express their opinions on books.

We will also look for sites on the internet that will sponsor this new enterprise on the internet".

5.2.7 The Activities

"The EM team is supposed to develop practical activities on EM according to the promotional campaigns of the enterprise".

5.3 Student Roles

In the PF, students participate by playing different roles. A role is associated with a specific narrative in order to provide the adequate mental and operational framework. In this PF the students play the roles of student, marketer, and consumer.

6 RESULTS

The architecture of the PF here described is part of an instructional model based on an enlarged e-learning system, where students develop learning activities in a PF, as well as other features as simulation and games.

This education model was applied to 293 post-graduate students, involving one quarter, with good results in terms of the above mentioned characteristics.

We used a set of inquiries (Cashin and Downey, 1992) that led us to understand results along five dimensions: i) evaluation of the teacher; ii) evaluation of progress, iii) quality of given contents; iv) interest levels during course and v) a global evaluation of the course.

Space limitations prevent us from offering a full report and analysis of results in this paper. Concerning the instructional model, student reactions were positive, but further work is necessary (mean of 3.0 from a maximum score of 5.0). Students ranked as the most valued characteristic the ability to progress in "*Acquiring skills in working with others as a member of a team*" (3.9 points) and as the least valuated the progress in "*the development of skills related in expressing myself orally or in writing*" (2.3 points).

Considering that the main purpose of the PF was to gain literacies and learn real activities connected with the development of EM campaigns, we measured two specific characteristics: a) the capacity of the teacher to promote practical activities (3.5 points); b) the capability the instructional model shows in developing specific abilities and skills related with EM (3.1 points).

7 CONCLUSIONS AND FUTURE DEVELOPMENTS

The inclusion of a practice field in a management learning environment supported in ICT is a demanding exercise implying the use of an

intelligent tutoring system and, for the case of EM, a set of five other systems: i) electronic mail; ii) forums; iii) publicity in "banners"; iv) Web shops; and v) hypermedia links allowing students to enter sites where they can register themselves in an "opt-in" model in order to receive information.

Results obtained by applying the practice field to the teaching of EM are significant, which possibly may be generalised to other fields of high technological intensity. The motivational and socializing aspects are still to be explored by improving the intelligent tutoring system and the interaction it promotes among elements of the narrative.

This narrative may be further improved by developing multimedia elements, like enhanced video, integrated in the e-learning environment, or by including virtual characters to embody narrative in a simulated environment.

The study of this impact may conduct us to important conclusions on the way these technological devices may increase the efficiency of the e-learning environment.

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