

An Academic Guidance Model to Orient Distance Students

Luca Vanin*

University of Milan – Bicocca, Italy

Stefano Castelli

University of Milan – Bicocca, Italy

Alessandro Pepe

University of Milan – Bicocca, Italy

Loredana Addimando

University of Milan – Bicocca, Italy

INTRODUCTION

In the last 20 years, the increasing importance of information and communication technology (ICT) induced many educational and training institutions to apply new technologies to education, in order to reach new and more ambitious goals (Hodgson, 2002; McNaught, 2003).

Academic institutions are following this same direction too. In Italy, as well as in the rest of Europe, we are witnessing the development of many experiences in *Web-enhanced learning* (traditional classes are taught, but there are online resources to complete the personal study), *blended learning* (teachers integrate traditional lessons with *e-activities*, such as online discussion groups, video conferencing and online resources) and, even if it is not so widely spread yet, *pure e-learning*, in which all the teaching process is Web based.

This chapter begins with an analysis of a distance degree in psychological sciences. The structure of the course includes a national centre, faculties of different universities, and technological centres. The technological centres, located both in Italy and abroad, are facilities available to students, and are equipped with all the technology necessary to follow the distance courses (personal computers, satellite connections, internet connections, etc.). These locations constitute actual meeting points for students, teachers and tutors, thus allowing for face-to-face exams and seminars, as well for videoconferencing. The student is guided by a new figure, the *e-tutor*, who facilitates online learning and communication processes.

The approaches to teaching and learning are both synchronic (by chat and videoconferencing) and diachronic (video lessons, practical exercises on the Internet, discussion forums, blogs, newsletters, etc.).

In order to understand the role played by technologies in a distance degree, starting from the very first steps taken by a student in the academic system, we will begin with the description of a guidance model conceived to inform, prepare and support the student during her or his academic career (Gresh & Mrozowski, 2000; Luck, 2000; McNaught, 2003; O'Donoghue, Singh, & Green, 2004). Then we present some theoretical, empirical and methodological issues about the use of new technologies in distance education. We conclude that a specific preliminary informative orientation system can prove to be a good tool to prevent e-dropouts, but on the condition that it starts from the very beginning of their academic career (Bozarth, Chapman, & LaMonica, 2004; DeRouin, Fritzsche, & Salas, 2004; Jones & Laffey, 2002; Lynch, 2001).

A three-step model is presented. The first step is “orienting”, where a general exploratory guidance is given, describing the set of educational and technological instruments. In the second step, “preparing”, the main goal is to reduce the technical gap between the student and the educational setting. Finally, the third step is aimed at giving technical, educational, and relational support to the student all along his/her academic career.

THE ORGANIZATIONAL PERSPECTIVE: THE STUDENT AND THE EDUCATIVE INSTITUTION

Everyday, researchers in the field of education witness the increasing use of technology in learning, and the spread of computer mediated communication in knowledge management (Jones & Laffey, 2002; Pan & Scarbrough, 1999). Very often a “naïve” use of technology is not appropriate, since it does not integrate three important elements: the student’s profile, the educational system, and the organization.

The first element is a very important one for our purposes. We need to know many important data about the student (or about the individual within the organization); in a previous paper we called this concept the *extended training profile* (Vanin, 2006).

The extended training profile includes the following information:

- General personal data (age, gender, place of birth, etc.)
- Educational and training profile (school, professional and academic degrees, master courses and specializations, etc.)
- Technical profile (ability of using technical instruments and informatics skills)
- Interactive profile (habits in accessing technical equipments, in using the Internet, e-mails, discussion forum, chat, etc.).

With the concept of extended training profile, we suggested (Vanin, Castelli, Brambilla, in press) to increase the amount of information collected about students. Usually, this kind of information is collected only to answer bureaucratic and administrative requests; we suggest using it for didactical and training purposes too.

On the other side, the educational system depends from the educational institution and its organization (O’Donoghue, Singh, & Dorward, 2001). Pan and Scarbrough (1999), using a sociotechnical approach, give specific theoretical and methodological attention to the matching between social and technical subsystems. The authors outline three layers of interaction between individuals and organizations, taking into account the form of knowledge, the organizational context and structure, and the role of technology involved in the educational or organizational process (Pan & Scar-

brough, 1999, p. 362). According to these authors, the three main components of a knowledge system are:

1. **Infrastructure:** It is the “strong” element of the organization, composed by the hardware and software of the communication, the net of physical and communicational contacts between members. Pan and Scarbrough (1999, p. 366) define this structure the knowledge architecture, made up by human resources, organizational entities, documents, books, as well as the physical structure of offices and databases.
2. **Infostructure:** This level includes all the formal rules which govern the exchange of information between the actors of the organization and produce a specific code, used by the actors to understand, exchange ideas and give sense to cultural metaphors and common language. Pan and Scarbrough (1999, p. 367) stress the point that these rules can be both formal and informal and govern both the use and the access to information sharing (“who” can use “what” information). An example of an infostructural element is the (material, symbolic or virtual) path that information has to travel through in order to reach its destination.
3. **Infoculture:** This third level refers to the culturally based code that organizations have developed to fit in their specific social and cultural environment. These practices, rules, values and habits define the information sharing process and represent the meaning and the role played by information in the educational and organizational structure.

Jones and Laffey (2002) elaborate over this model and apply the same framework to educational organizations with massive use of e-learning systems, evaluating the opportunity of using e-collaboration or e-learning systems in order to share knowledge. In their study, these authors give specific attention to each single part of the model: for what regards infrastructure, they point out the importance of clearly perceived values and benefits of e-collaboration, especially to substitute old tools, the role of training, of expectations and attitudes, the need to experiment new tools and to create user-oriented and user-friendly systems (Jones & Laffey, 2002, p. 254). Regarding infostructure, attention must be directed to knowledge repositories and databases to simplify the information sharing process. For what concerns infoculture, designers have to work on leadership, on

7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/academic-guidance-model-orient-distance/13333

Related Content

Neo-Symbiosis

Douglas Griffith and Frank L. Greitzer (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 2773-2777).

www.irma-international.org/chapter/neo-symbiosis/13980

The Effects of Social Commerce Utilization on Business Performance: A Study of Hotels in Lebanon

Firas Mohamad Halawani, Patrick C.H. Sohand and Yahya Mohamad Halawani (2020). *Information Resources Management Journal* (pp. 1-23).

www.irma-international.org/article/the-effects-of-social-commerce-utilization-on-business-performance/258928

Integration of Multi-Omics Data to Identify Cancer Biomarkers

Peng Li and Bo Sun (2022). *Journal of Information Technology Research* (pp. 1-15).

www.irma-international.org/article/integration-of-multi-omics-data-to-identify-cancer-biomarkers/282710

The Need to Measure the Value of Information Technology

Han van der Zee (2002). *Measuring the Value of Information Technology* (pp. 1-9).

www.irma-international.org/chapter/need-measure-value-information-technology/26173

E-Government Growth Barriers in Sub-Saharan Africa

Princely Ifinedo (2009). *Encyclopedia of Information Communication Technology* (pp. 209-214).

www.irma-international.org/chapter/government-growth-barriers-sub-saharan/13360