Introduction

The Net on Teaching Processes at the University

La Red en los procesos de enseñanza de la Universidad

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Higher education has undergone some very significant changes in recent decades: access to it has been democratised, major progress has been made both in terms of research and of relationships with business and society, new teaching methodologies have been introduced, laws have been amended, quality assurance systems have been incorporated, the European Higher Education Area process has been implemented and so on. All of these changes are a consequence of the impact that an increasingly open and dynamic society –the information and knowledge society– has had on higher education. Moreover, we have experienced –and continue to experience– the rise of technologies that were first described as «new», then referred to as the 'Internet' and are now known as the «Web». The Web has spread into all areas of society and makes it more open. The social networking phenomenon is changing how we communicate with each other and how we value the present. However, technologies are not responsible for bringing about these changes in society in general and in higher education in particular; the changes were already there, bubbling under the surface until the time was right for them to happen. What the Internet has done is speed up the pace of change and enabled these changes to happen, while at the same time promoting new ways of communicating and disseminating ideas. These dynamics generate and are generating a real change in society and all of its institutions, not only in the field of higher education.

The introduction and use of the Internet in higher education has transformed its organisational, technological, communication and educational models. While the early Internet-related changes affected organisation and communication (institutional websites, access to grades, online libraries, access to teaching plans, folders of virtual documents, etc.), nowadays it could be said that that major change affects education; it is the outcome of a model that integrates technology into teaching and learning processes. According to currently available data, teaching staff constitute one of the collectives that most uses the Internet on a personal level. However, we find that only slightly more than 50% of teachers in the Spanish education system use the Internet in teaching (although they make widespread of the Internet for research). These data also show that the uses to which the Internet is put in the classroom tend to focus on searching for and accessing information, and on communicating via e-mail. It would therefore seem that what is worthwhile in their personal lives and for research is of no use in classroom dynamics. Something similar happens when analysing the student collective, although we consider that students should not be held responsible for the low level of Internet use in higher education teaching.

Today, we also know that Internet use in the classroom does not, in its own right, help to improve
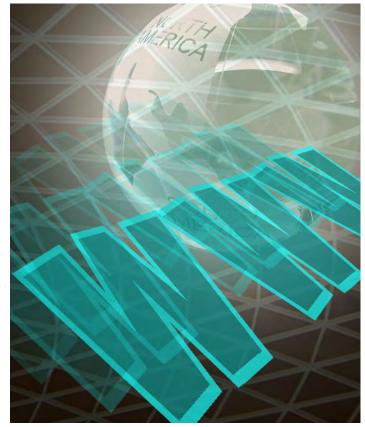
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learning results. It is essential to integrate Internet use into learning plans in order to achieve positive results. Thus, we propose that the following principles should be taken into account: a) Awareness of the profile of university students today; b) Defining a learning model that integrates the use of technologies; c) Centring the educational model on learning activities; d) Avoiding any confusion between information and learning; e) Hybridising educational action to achieve a communication continuum between students and lecturers. Each of these principles is assessed in the paragraphs that follow.

Knowing the student is crucial to any educational process. Learning is a personal process of acquisition, and we should therefore know the individuals to whom we are going to relate. Today, training cannot be understood solely from a unidirectional, lecturer-to-student knowledge transmission perspective; nowadays, students are people who are very much aware of Internet dynamics, who have their social networks, who have their identities on the Internet and who also have their own systems for searching for and accessing information. They are, therefore, people with Internet-use competencies. To overlook in the classroom the use that students make of the Internet outside the classroom is not beneficial to the teaching-learning process.

Furthermore, we find that few higher education institutions have an institutional educational model. The most common approach is that each lecturer independently defines his or her own educational model in the classroom. However, today if a higher education institution wants to have a teaching system that integrates technologies, it is crucial to have the right institutional technological support. Higher education institutions should provide lecturers and students with technological systems to enable an educational model that integrates technologies to be developed. In the early days, an institution merely had to provide a Virtual Campus or a Learning Management System (LMS), but now it needs to go much further and facilitate access to open source information, the creation of knowledge networks, online participation, etc. Generally speaking, these systems should enable an increase in standards of information competencies and online relational competencies, and foster the creation of an institutional educational model that integrates technology use.

Learning activities should be at the centre of any educational model. Neither is this new, nor is it a consequence of Internet use, though it could be said that Internet use can indeed help to situate learning

activities at the centre of the learning model. Learning activities are based on students' learning objectives and not solely on teaching objectives, and this is precisely the point where multiple aspects need to be related and integrated: learning resources (available on the Internet), accompaniment by lecturers (both in class and online) and collaborative work among students (synchronous or asynchronous, with a more or less intensive Internet use).

Knowing is not the same as learning. Being connected to or taking part in social networks does not necessarily mean that learning is taking place. Connectivism is not, in our view, a theory of learning. We need to do a lot of research and have sufficient data available in order to observe and analyse the impact of connectivity on learning processes. Without these data, we consider that the most significant aspect is the acquisition of competencies to enable an appropriate use of social networking. Indeed, it is in the competent use of social networking – and not so much in access to technology – where the digital divide now manifests itself.

Currently, the big challenge for higher education institutions resides in the hybridisation of their organisation and their teaching-learning methodologies. To hybridise is to integrate, that is to say, to combine traditional teaching with Internet-based teaching. It is not simply a matter of complementing traditional teaching with access to information on the Internet. Rather, it is a question of planning the educational process in an integrated way right from the start, and teaching staff play a key role in this challenge. Hybridisation also entails the configuration of a continuum in the learning process that goes beyond the amount of time spent in face-to-face classes. Students and lecturers remain connected and continue learning outside class time.

Finally, it should be pointed out that the big challenge today is the teaching staff's capacity to acquire the necessary competencies to adapt teaching methodologies to the reality of the present, a time when students are actively involved in social networks and in the network society.

The monograph presented here includes important contributions to each of the issues and assessments that have been mentioned. Some of the most important contributions contained in the selected articles are detailed in the paragraphs that follow.

The article by Martínez, Cabecinhas and Loscertales, which draws on an empirical survey-based study, shows that older people are very familiar with the Internet, highlights the importance of the motivational use of the Internet by older people and corroborates basic uses such as information searches and e-mail. It is an important contribution to the study of this collective's social inclusion in the network society.

The article by Collis and Moonen presents a very interesting review of the processes of higher education flexibilisation through Internet use. The authors assess flexibility from institutional, technological and educational viewpoints; they place particular emphasis on the latter and highlight the role of students and lecturers. They also portray several future scenarios for higher education.

Along similar lines, the article by Steinbeck points to creativity as an important component in Internet-based learning processes. The author introduces this component by analysing global programmes and by drawing on the results of a research project conducted at several universities such as Stanford (California) and Pontifical Xavierian (Colombia). It is a very interesting contribution, with a new methodological and design proposal for learning activities.

Open content repositories are also an object of analysis in this monograph. Marcelo, Yot and Mayor present the Alacena repository and perform a detailed analysis of its use for higher education teaching.

The article by Burkle analyses the specific nature of e-learning in technical higher education institutions. The author presents a study that particularly focuses on the use of Web 2.0 tools by lecturers at technical institutes. One of the important conclusions drawn from the study suggests that there is a need to deal with the diversity of competencies required for students to use Web 2.0 tools by creating environments that enable competency imbalances to be redressed.

Sloep and Berlanga's contribution to the monograph is an interesting article on learning networks and networked learning. This is an important, well-documented reflection on the role of the Internet in the field of education. Indeed, it is one of the hot topics of debate in the sphere of higher education whenever there is talk of the role of social networks in learning processes. The article by Sloep and Berlanga brings crucial criteria and assessments to the debate.

The contribution made by Osorio and Duart is an analysis of interaction in hybrid learning environments. On the basis of a study conducted with the collaboration of students and lecturers taking part in a master's degree programme, the importance of the learning environment was observed and, furthermore, the hybridisation of models was found to contribute to the training-communication continuum between students and lecturers.

Along similar lines, the contribution made by Gómez-Escalonilla, Santín and Mathieu is a case study on journalism e-learning from the students' perspective. The authors highlight the importance of the profile of students on the e-learning programmes and underscore the differences between them and other students taking a face-to-face journalism course.

The final article in the monograph is by Torres and Infante, which analyses Internet use by university students in Ecuador. It is a study within a geographical area that confirms some of the key evidence of similar studies conducted in other countries. In particular, the study highlights the existence of a relationship between social status and Internet use. This confirms the existence of digital inequality, which is dependent on the socioeconomic status of the family to which an Ecuadorian university student belongs.

The monograph draws attention to some of today's most important elements of analysis on Internet use in higher education. As already mentioned, this is just the start of a process of change in teaching and learning methodologies that is and will be highly beneficial. However, it is and will be a complex process because it affects people in particular and higher education institutions in general. Like any other process of change, it requires reflection, investigation and analysis. The monograph presented here seeks to contribute research, studies and assessments to aid such a necessary reflection.