Foreword

HOW DO WAVES SHAPE THE LITTORAL?

Every few years, a technology wave reaches the beaches of higher education. Mobile technologies, social software, Web 2.0, and e-portfolios are recent waves addressed in this book. Every wave brings novelty: it affords new learning activities and hence generates expectations, often over-expectations. When the wave returns to the ocean, it leaves behind it some tears of disappointment. If one considers a single wave, the educational landscape remains somehow similar to what it was before it. There has been (fortunately) no educational tsunami. Nonetheless, over a longer term, waves do somehow shape the littoral. Higher education is not the same as 30 years ago, partly due to technologies, partly to other factors. This book contributes to our understanding of our technologies have influenced the complex ecosystems of higher education institutions.

The contributions reflect the emergent maturity in the field of technology-enhanced learning. The book escapes from a discourse that would consider learning technologies as intrinsically innovative and adopts a more rigorous approach that editors labeled “informed design.” The word “design” partly refers to the old tradition of instructional design: some contributions stress the importance of analyzing learning goals when preparing an educational intervention. However, the word “design” has evolved. Since some chapters address informal learning, the word “design” cannot refer to the sequencing of interventions (questions, exercises, feedback, …), but to more subtle ways of shaping social interactions through technology. Most of Web 2.0 technologies addressed in this book are not suitable tools to implement lessons plans, but introduce changes in the institutional ecosystems that might indirectly change instruction. The status of university lectures illustrates this point. Lecturing is not a sandy beach that waves easily reshaped; it is much closer to rather rocky cliffs that learning technologies have never destabilized. Recording lectures does not intrinsically change the pedagogy – a recorded lecture is a lecture – but simply provides a few extra features (navigation, search, subtitles, …) that may have indirect effects. It is per not a pedagogical innovation but yet, some features many change the processes. The term “informed design” hence takes two meanings. Not only must design be enriched by the understanding of the cognitive outcomes of learning activities, but it must also be influenced by the understanding of how a technology answers to the needs of the teachers, the students, and the institutions. Technologies are more innovative when they address real problems than when they simply aim to be innovative. The maturity of our field requires understanding the constraints that shape teachers’ daily work: the curriculum constraints, the time segmentation, the workload for students, et cetera...
Actually, other waves reach university beaches every year: new students enter the system, as well as new teachers. While many teachers pessimistically argue that students are “less” than before (lower in maths, working less, …), many technologists expect that the last generation – the digital natives – have a new relationship to learning, to knowledge, to social interaction. Myth or reality? This book includes different voices, some supporting, some questioning the existence of generational effects. What is important is that one cannot anymore claim that the situation will simply change the day all teachers will be familiar with technologies (new teachers are digital natives), or the day when Internet will be accessible anytime, anywhere, or the day when students will be able to access knowledge across the world, or the day where teachers will have access to on-line repositories of educational resources. These days are today, at least in the industrial countries. If, on the one hand, these days have come while, on the other hand, technologies are still under-exploited in higher education, our mature community has to learn from this disappointment. The lessons learned, collected in this book, will inform the design of technologies that penetrate educational ecosystems.

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