Chapter 12
Educators' Expectations on Technology Enhanced Education (TEE): Should and Could they be Modified?

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ABSTRACT

This paper reports and discusses the result of a survey focused on the perceptions and expectations on TEE applications, conducted among 500 Italian educators (university, high/middle/elementary schools and professionals) involved in on-line or blended learning practices. The expectations are quite basic ones, although may depend on the educational level: support to content sharing and production, communication, assessment and team working are at the top of rank; much less relevant appear to be items like: support to socialization, process design and personalization. Very similar results have been obtained also from a survey among schools' teachers, novices for TEE, attending a Master in "e-learning: methods, techniques and applications". The survey was conducted after the conclusion of the first part of the master carried on according to a very traditional distance learning process: content download, self-evaluation tests, tutor assistance upon request. However, after the participation to the second part of the Master, organized as a collaborative, design inspired P^{3}BL (problem, project and process based learning) experience, their opinions on TEE changed in a considerable manner. This indicates how necessary a dissemination action on a large scale among educators with regard to both TEE potentialities and design literacy would be.

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INTRODUCTION

There is a general agreement that innovation is fostered only upon social acceptance and there are also few doubts that investments on methodological and technological researches carried out in recent years in the domain of the Technology Enhanced Education (TEE) have not been able to transform themselves into veritable innovation or, in other words, into a socially accepted phenomenon able to produce a significant and tangible impact on educational processes. On the other hand the rapid development of Web 2.0, of mobile networks and appliances (phone, pad, etc.) and, as well, of other relevant technological related domains, like games, in which technologies are diffused and used at mass level, demonstrate that the problem does not lies in the penetration of technologies but, rather, in the matching among expectations/motivations and the ability of technologies to meet them, and sometime, as well, on "time to market" and business strategies.

In education the achievement of such matching is certainly complicated by the fact that technologies are part of processes that are informed by pedagogical strategies or, in other words, by "points of views" on strategies that are expected to shape the society through education: for example, during a discussion on TEE it would be not very difficult to be traced back to ancestral and inevitable conflicts such as that between "nature" and "culture" (Cambi, 2003). In such context it is not surprising that technologies, in the absence of any certainty about their neutrality, may generate distrust and misunderstanding, or incomplete understanding of their potentialities. This is especially true when we consider people more aged than the digital natives (Prensky, 2001), for example teachers who were trained by mean of traditional educational processes.

With the aim to get a detailed description of the current situation, we decided, at the beginning of 2010, to conduct among educators (elementary, middle, high school, university teachers and professionals, including free lances) a survey on the penetration and motivation to adopt open source software and/or web services - with particular regard to the TEE domain. About 500 educators accepted our invitation and participated in the survey.

At the same time we asked ourselves the following question: could and should an educational process modify perceptions and expectations of educators with regards to technology, and its potentialities to support and enhance educational processes?

In the attempt to give a preliminary answer to this question, we studied the effect of attending a honored Master in E-learning on a group of high school teachers, novices for TEE [it is worth to stress that the Master adopted a designed inspired P^3BL (Giovannella, 2009; Giovannella & Graf, 2010) process]. Their beliefs and expectations about educational technologies were investigated before and after the process through appropriate questionnaires. The results will be presented in the third paragraph, just before to come to the conclusions and to a brief discussion on future perspectives.

A PANORAMIC VIEW ON PERCEPTION AND EXPECTATIONS OF ITALIAN EDUCATORS WITH REGARD TO TEE

The survey were conducted among educators who have been already involved at least few times in on-line or blended learning practices or, at least, very well informed about them. Almost all educators were sufficiently confident in using the computer, as shown in Figure 1. In fact, on average the penetration of open source software was found to be 88%, the use of web services 92%, while the use of applications specialized for TEE (including open service) stood at 79%.

As regards more specifically the use of TEE applications: 79% experienced on-line learning