Chapter 11
Strategic Trials of Educ@Tlon, the Telecom Italia Solution for Cooperative Digital Learning

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ABSTRACT

Educ@tion is an application framework available to teachers, students, and headmasters, based on the integration of open source modules and specific developments of Telecom Italia, which do not require licensing costs. It is made up of a range of innovative didactic applications, which are integrated with an advanced solution for dashboard data management and school administration. The prototype is being tested in several Italian primary and secondary schools. During the academic year 2010/2011, Telecom Italia has run two trials in particular in two Italian high schools (one in Naples and the other in Trent). During these experiences teachers and students have tested the innovative module of editorial mash up, for the collaborative aggregation of multimedia didactic materials. Both schools have highlighted a major student feeling of involvement, their increased enthusiasm for the school and a higher rate of grades in the classes that had been involved in the digital activities.

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INTRODUCTION

This chapter provides an overview of Telecom Italia solution for digital learning, describing the main technological characteristics of the educ@Tlon framework and its functionalities, both the already available ones and those ones that are being developed.

The chapter also highlights the advantages of the framework adoption in schools and evaluates the impacts of its usage on the teaching and learning process in primary and secondary schools.

Driven by the feedback and the analysis of its usage in classrooms, educ@Tlon is developing and evolving to meet the school real didactic needs. So far, the two completed trial experienced have demonstrated how teachers, students and their families have led both schools to the project extension, to further promote the introduction of digital learning. The trial experience will therefore continue in the current academic year.

The final objective of this chapter is to describe Telecom Italia experience and effort in building a digital learning environment at school, to capitalize its experience to create the conditions for a virtuous cycle of growth and trade between the world of business and schools.

Some framework applications have been tested in the field in two different parts of Italy (one in the North, one in the South), in two different types of schools - arts and technology. The schools involved include one state school and one private school. These differences have permitted to evaluate with only two trials the impact under several contexts, e.g. social and cultural aspects, also due to different geographical areas, different type of courses, different levels of familiarity with technology, different approaches.

The main objective of the trials is to evaluate the impact of ICT technologies in the daily school process and their role in the adoption of cooperative learning methods.

The introduction of ICT technologies in schools impacts on two different layers:

- “Digitalization” of the school actors, in terms of technological capabilities in using ICT devices;
- “Digitalization” of the teaching process, in terms of definition of new learning strategies due to the need of moving from the traditional vertical learning approach to the horizontal collaborative one.

In addition to evaluating the impact of the introduction of ICT in schools, specific aims of the trials run have been the collection of feedback and suggestions from real-use experiences to trigger the possible future evolutions of an effective ICT platform for digital learning in schools.

Telecom Italia has made the prototype software solutions available for testing and specifically customized for the local trial. For the trial in Naples, personal computers have been provided to all the involved students and teachers, in addition to a White Interactive Board for the classroom and the needed connectivity. For the trial in Trent, a Class 2.0 was identified (with internet connection, students/teachers PC and White Interactive Board), so no further hardware/connection was needed.

Focus Groups with students and teachers have been used, particularly in Naples, as a means to run a first evaluation of the trials.

One classroom in each school has been involved (about 25 students each), with about five teachers per school. Furthermore, two technical resources of Telecom Italia have been involved to cover technical aspects and training needed to run the trials. Other resources – such as: schoolmasters, speakers and presenters for the technical workshop, usability experts – have been involved, as needed.
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