



Socrates Programme Comenius 2.1 Action
Contract Number: 128967-CP-1-2006-1-IT-Comenius-C 2.1



The Learning Game Project

Approved by the European Commission in the framework of the Socrates programme Comenius 2.1 Action.

Promoter

Pixel (Italy)

Partners

Connectis (Italy)
Accademia di Belle Arti di Brera (Italy)
In.for.Ef (Belgium)
Graphics, Multimedia And Gis Laboratory, University Of Patras (Greece)
Aberdeen City Council (United Kingdom)
Vilnius Pedagogical University (Lithuania)

Context

In recent years we have witnessed a considerable development in pedagogical activities which are based on e-learning technology.

The initial effort was focused mainly on the development of technologies (e.g. e-learning platforms, distance communication tools etc.) and on the development of the contents, not on appropriate solutions for suitable interaction between the learner and the teaching tools. E-learning courses have remained mostly in text format (Word or pdf documents) or sometimes organised under the form of a presentation (ppt). New communication technologies have far greater potential than a simple electronic conversion of a document or the possibility of accompanying it with images or film. In fact, multimedia offers the possibility to integrate all available languages in a unique new language which unifies them but at the same time adds value to them.

Up until now, this new language has been explored mainly by videogames. This is the only IT product that was not transferred from an analogical environment to a digital one, but was born and has evolved contextually with the computer.

The main objective of the *LEARNING GAME* project is therefore the merging of the best e-learning experiences with the effectiveness of videogames, using low cost tools and at the same time indicating possible "best practice" in electronic editing aimed at teaching and training.

Objectives

The main objective of the *LEARNING GAME* is the implementation of e-learning solutions and methods in a teaching and learning context that make full use of the most advanced interactive and multimedia solutions, therefore including videogames.

Project Activities

The main project activities are:

Activity 1: Research on Technical Solutions

- Research, selection and evaluation of commercial videogames identifying their educational potential. Attention will be focused on the potential use of editors.
- Research and selection of the most advanced technological solutions and software (that are open source, freeware or shareware) that implement interactivity and multimedia in the best way.
- Start of bilateral cooperation between the project partners and the videogame industry to give educational institutions the means to access and use the selected videogame editors.
- Development of online tutorials for the effective use of the selected tools, addressed to teachers so as to train them on the use of new multimedia interactive technologies, focusing in particular on their potential to create a learning environment characterised by interaction, immersion and simulation.

Results:

- Database of commercial videogames identifying their educational potential. Each product will be presented according to a common format.
- Database of the selected technical solutions and software that can be used to produce innovative e-learning based educational material. Each product will be presented according to a common format.
- Tutorials, addressed to teachers, on the use of the selected tools. Each tutorial will explain how to make the most effective use of the selected tools included in the database (e.g. videogames editors) for teaching and learning purposes. Each tutorial will have the form of a step by step training course that will train the teacher on the use of a specific tool.

Activity 2: Research on Contents

- Research, selection and review of the most relevant electronic contents (i.e. e-learning based courses) already produced in the framework of previous projects financed by the European Commission or developed by teachers both at secondary school and university level. The focus of this research is on the value of contents rather than the tools used to transfer them.
- Agreements with each author of the contents identified in order to respect the Intellectual Property Rights (I.P.R). The already successfully experienced solution is

that each author makes available their contents free of charge and in exchange has free access to the contents developed by others.

Results:

- Database of the selected e-learning based teaching material which are relevant in terms of contents. The content will have to focus on the main subject areas taught at secondary school level (e.g. literature, languages, mathematics, history, geography, arts etc) . Each product will be presented according to a common format.
- Identification of relevant electronic contents available to be re-elaborated and delivered using innovative technical solutions. These contents will serve as examples for the creation of the Manual.

Activity 3: Creation of the Teacher Training Manual

- Analysis of the communication language, cognitive dynamics and technical solutions adopted by videogames so as to understand why they have such an important impact on young generations and so as to reproduce the same solutions for educational purposes.
- Analysis of how selected contents can be more effectively communicated using the new technical solutions identified appropriately.
- Creation of the Manual concerning the use of technical solutions provided by Videogames and by advanced interactive software for training and educational purposes.

Result:

- Manual on the practical application of the most advanced interactive and multimedia solutions and of videogame strategies and tools for educational purposes. The Manual will also indicate “best practice” in electronic editing aimed at teaching and training.

Activity 4: Teacher Training

- Identification of the secondary schools participating in the project from each partner country (at least 5 per country).
- Organisation, management and monitoring of the teacher training at national level in each partner country. The training will take place:
 - through the online tutorials (developed in the framework of Activity 1) available on the portal
 - through the organisation of monthly on-site workshops for teachers, organised by the partners at national level.
- Organisation and management of a virtual Forum that will be used as an asynchronous tool to foster discussions during the training phase.
- Organisation of a service of on-line tutoring to support teachers in their training process.
- Organisation of one transnational course for all teachers to be funded under the Grundtvig 3 / Comenius 2.2 programme.

Result:

- The teachers involved in the training will gain the necessary skills to use innovative multimedia solutions and videogames in a teaching and learning context.
- The teachers involved in the training will also produce the pilot courses as described in Activity 5

Activity 5: Development of Pilot Courses

- Creation, by the teachers involved in Activity 4, of some pilot educational courses, using existing electronic teaching material that will be re-elaborated to be accessible in a more friendly, multimedia, interactive way, also assuming the form of an educational videogame.
- Creation, by the teachers involved in Activity 4, of tutorials explaining in detail how the pilot courses were developed so that the teachers using them can decide whether to use them as they are or to customise them for their own teaching purposes.

Results:

- Pilot educational courses that will fully exploit the potential of multimedia, which may assume the form of an educational videogame.
- Tutorial explaining in detail how each of the courses has been developed.