

# **SLOOP: a European project focused on the realization of a shared file of *Free Learning Objects*.**

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## **Abstract**

Aim of the project Sloop is to realize a file of free Learning Objects accessible from everyone and open to external contributions produced according to the model FLOSS, Free/OpenSource Software. The stress is not only on the “free use” of LOs, but above all on their realization thanks to the cooperation of virtual communities. This article addresses to the communities of practice dealing with e-Learning and invites them to set up a cooperation with our group.

## **1. SLOOP project: a commitment and a proposal.**

Sloops are small and fast sailing boats, with only one mast. They played an important role in the American Revolution: fast and easy to handle, they were used by buccaneers to damage English trade and commerce and they carried out surprise attacks sailing against the harbours in England. It was also thanks to the Sloops that the “colonies” gained their freedom.



Figure 1: Sloop Providence, symbol of the American Revolution

We have chosen SLOOP as acronym to represent a pilot project in the Leonardo da Vinci Programme to indicate: ***Sharing Learning Objects in an Open Perspective***. The project will officially start on October 1<sup>st</sup> 2005, having passed both pre-selection and selection phases.

The decision to publicise the project as soon as we have received notice of its approval, rather than waiting for the first outcomes is connected to the peculiarities of the project that, as we outlined in the application form<sup>1</sup> “*is – following its own nature – strictly connected with a strategy of optimization. One could perhaps state that the strategy coincides with the project. Our purpose is, in fact, to start up a process to produce/share **free LOs** to train learners on-line.*”

*One of the leading products of the project is the LO production-filing-use environment which is not bound to contain only the Los produced by the partners. In fact the file with the Los is meant to appear dynamic, constantly extended in the utilization, adaptation, improvement, increase of LO collections– from the very beginning - thanks to the intervention of the **comunities of practice.**”*

The announcement of the beginning of the project to the communities of practice interested in the potential of the on-line training has, therefore, a twofold significance: the public assumption of a commitment and the invitation to cooperate, from the very beginning, debating the objectives of SLOOP, evaluating the on-going outcomes, contributing, looking for synergies among the various projects in progress.

## **2. Reasons and fundamental ideas of SLOOP**

As one can notice, the stress is on the cooperation and this is clearly underlined also in the first word of the title: *Sharing*. Also the word Open, inserted on purpose in the title, recalls OpenSource.

Sloop project aims at ***transferring the model*** of Free/OpenSource Software – “people use it, people adapt it, people fix bugs” – to the context of the production of contents for e-Learning: from the cooperation of communities of *hackers*<sup>2</sup> in order to produce and continuously improve software to the cooperation of communities of teachers<sup>3</sup> in order to produce and constantly improve e-Learning materials.

Let now analyse, one by one, the different reasons that have led us to define the project.

Most of the Partners, as you can see from the box with the list of the institutions, have a consolidated experience in face to face teaching and work experiences. They have also been involved in increasing their on-line training courses for several years. Their

<sup>1</sup> The application – following a call for proposal of Leonardo da Vinci Programme – to obtain EC fund.

<sup>2</sup> Original use of the term hacker: people who engage intellectual challenges in the hardware or software field, with a cooperative mind, and tries to bypass/ overcome the restrictions imposed.

<sup>3</sup> I take the liberty to introduce this term, which combines *teacher with hacker*, to indicate those teachers who, with similar cultural attitude, face the e-Learning challenges.

**experience** has enabled us to outline two **critical themes relevant for institutions** interested in increasing the use of on-line training.

The first theme is linked to **the training of teachers/trainers**, according to the concept: *"Giving attention to the learning needs of teachers and trainers within all forms of vocational education and training"*. (The Copenhagen Declaration, 2002)

While training teachers to use e-Learning, one must take into consideration the pedagogic competencies they have acquired during their face to face teaching in order to optimise them and, consequently, to transfer the good praxis to the on-line training: significance of relational system and of peer groups, relevance of pedagogical methodologies such as learning by doing, learning by playing as well as cooperative learning (BiTE<sup>4</sup> Project, 2003)

The second theme is connected with the on-line **didactic materials**. The scenario where we place them is not meant for self-training because in that case they should require the highest level of completeness /exhaustiveness, but it is thought for supported learning in a virtual class where the role of the materials is less relevant as many functions are performed by the teacher/tutor and by the peer group (Guide 4 – SOLE Project<sup>5</sup>, 2003)

In both situations the materials represent a fundamental role and must be designed for the Net. Considered the high cost, in terms of money and time, unlikely affordable by most schools and even universities, it becomes necessary to create products that are reusable and improvable.

## 2.2 Utility of Learning Objects

The limits of the reusability of the materials was evident in the SiR2 project, promoted by ITSOS and funded by the European Community. 120 teachers joined the project and attended an on-line course to produce 120 didactic materials to use with their students<sup>6</sup>.

As I wrote in a previous article: *" Even if the starting idea was a modular product and focused on the production of elements, in reality the products are not easily modifiable, matchable or reusable as we wished.*

*Each element produced in SiR2 is complex and highly structured.* The objects forming it – lesson/explanation, stimuli to reflect (also in group), exercises, mock-tests, tests corrected automatically - are logically linked on the basis of a story-board. It is its distinctive completeness and organic unity that limit the possibility to transfer and reuse them. (Ravotto, 2004).

In other words, thanks to our experience, we have come to the same conclusions that have led other institutions – far more important than ours – that is the necessity to the theorization of the Learning Objects. We also have become aware *"that there are three essentials for successful teaching in the network: pre-prepared content, personal online supervision and support and a learning management system.....The*

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<sup>4</sup> BiTE, <http://www-deis.cit.ie/bite>, Socrates-Minerva Programme, developed by SLOOP Members

<sup>5</sup> Also Sole Project, <http://www.tes.mi.it/sole>, was developed by some members of SLOOP.

<sup>6</sup> Presentation and materials available: <http://www.tes.mi.it/sir2portale>.

*main idea is to have very fine **granular learning object** modules, which are well documented by **metadata**, easy to find and reuse”(Kaderali, 2004).*

*We also agree on the concept “there is a trend towards **standardization** of online education. The benefits are obvious. With standards we will experience a **more open** online education world. It will be easier to identify courses and course content in public database and portals” (Paulsen, 2003)*

The Learning Objects – in accordance with a defined standard and classified through a metadata system – are reusable, modifiable, interactive. This can, in the short/ middle run, reduce planning and production costs.

We have to underline anyway that, teachers need a meaningful collection of Learning Objects available in order to supplement face to face teaching and online training and this goes beyond most schools and universities economical means.

Sloop aims at meeting this necessity.

### 2.3 Copyleft and Cooperative Strategy

It is obvious that, when a strategy proves successful in a certain application field, one tries to extend it to other fields. Since when the idea of *free software* changed from utopian into concrete reality, competitive on the market, many of us have thought to extend it to didactic contents.

The first meaningful centre where the original hacker philosophy originated, was the well-known MIT – Massachusetts Institute of Technology and it was also there that the idea to create free training online courses was performed.

Our hypothesis of **Free Learning Object** goes beyond the idea of free usability. It is centred on another strongpoint of FOSS: the **cooperation**, which can make online training compatible with economical balance of schools and universities: “ the benefits that could reasonably be sought from a shared approach are reduced procurement costs, shared assets, economics of scale and shared development costs”. (Annan, 2004)

Moreover, the cooperation can create better materials! The history of FOSS, and generally speaking of the Internet, coincides with the history of the free and spontaneous establishment of communities of practice that agree on rules and objectives and that succeed in obtaining interesting results. Let us think of GNU/Linux and Wikipedia systems.

*“The net is, today, one of the fundamental means of support to the **communities of practice**, to the **collaborative learning and social methodologies** , The bulk of Knowledge on which a community finds its basis is not static, but it evolves following the process of co-building and selection of meanings activated by the same community; that implies the fact that LOs are modifiable from the **learners**, who **can and must contribute to reissue LOs to define new ones while cooperating in building new knowledge.....”**  
(Alvino e Sarti, 2004)*

### 3. Expected Outcomes from the Project

This is what we intend by the cooperative project. We intend to start a process able to involve not only teachers – teachers – but also students as Alvino and Sarti have clearly stated.

It is a process we hope to intertwine with those who are going the same direction.

First of all, we are responsible to meet the commitments we have undertaken with EC:

- to define a **methodology** in order to produce *free* Learning Objects after the up-and-coming **standards** at an international level (with reference both to pedagogical and technical aspects).
- to realize an **environment** on the Internet for **the production-filing-use** of *free* LOs resulting easily and freely accessible both by training institutions and by teachers/trainers individually involved in the educational training process, that is to say a **shared environment** where one can exchange e-Learning contents and methodologies
- to produce a collection of **Learning Objects** to train/update teachers/trainers professionally in:
  - **LO production** and on-line utilization of them (meta-LO)
  - **Combined use of different media** in the pedagogical field and for the production of multimedia LOs
  - **Work experience (stage)**
  - **Acknowledgement of previous competencies**
- **to create LO collections** to train students and workers
  
- **to organize the optimization** of the model, the environment and the collection to cover all existing practices
  - **inside partners' institutions**
  - **outside partners' institutions**through the activation of new LO collections considering subjects and differentiated learning contexts.
  
- to promote **the optimization** of the model, the environment and the collection as well as its assessment and validation through the starting up of on-line training activities, focused on students/learners prepared to use LO collections created by teachers/trainers both inside and outside the partnership.

The sailing boat called sloop is fast and agile, but – alas – it is small: will it be able to manage and master winds and currents? Time has come to hoist the sails and harness the power of a fair wind.

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Alvino e Sarti, Istituto per le Tecnologie didattiche del CNR di Genova, *Learning Objects e Costruttivismo*, in Didamatica 2004 ATTI, Omnicom editore, 2004, p. 741

### As to **Free/OpenSource Software**

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OSI (Open Source Initiative), <http://www.opensource.org/>

Free Software Foundation, <http://www.gnu.org/>

Linux, <http://www.linux.org>

### As to **copyleft**

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GNU General Public Licence <http://www.gnu.org/copyleft/gpl.html>

CreativeCommons <http://creativecommons.org/>

### As to **copyleft eLearning contents**

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MIT-OpenCourseWare - <http://ocw.mit.edu/index.html>

OpenDida Project – <http://www.tes.mi.it/pendidaweb>

### **As to cooperative production on the Internet**

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Wikipedia - <http://www.wikipedia.org/>

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Open Directory Project - <http://dmoz.org/>

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