Evaluating a Blended Course of Methodology of Social Research II¹

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Abstract

Blended learning is an opportunity to improve high education training courses. University’s training takes advantage of an effective use of innovative Information and Communication Technologies (ICT). This contribution shows a case study of blended learning in an evaluative perspective. The focus is on the following issues: the definition of training objectives, their implementation using both traditional face-to-face and online collaborative learning activities and the perceptions of participants. The aim is to open a reflection starting from the main findings of this research such as strengths and weaknesses that are individuated by monitoring and evaluating the online processes using quantitative and qualitative data analysis.

1. Overview

This paper shows a case study concerning the project of a blended course of Methodology of Social Research and its implementation during the Academic Year 2008/2009².

The course was held within the experimental project of Web Enhanced Learning (WEL), promoted at the University of Genova (Italy) by the Institute for Educational Technology of Consiglio Nazionale delle Ricerche – CNR (National Research Council) and it aimed to make use

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¹ II= advanced course.
² I was tutor of this course.
of Information and Communication Technologies\(^3\) in academic teaching by embedding some tools of instructional design\(^4\).

My contribution to this conference is to consider, through an evaluation approach, the changes introduced into the course by the online platform, focusing evaluative attention on these specific issues: definition of training goals, implementation of collaborative and evaluative activities and role of social actors involved.

The main purpose of this presentation is to share into the LINC community the points of strength and weakness shared by the participants for reflecting on how to emphasize the strengths and to manage the weaknesses, how to enhance the use of available ICT tools and how to integrate e-support with presence learning.

Starting from the consideration that a consolidation of e-learning is possible only by sharing practice, for Italy, an international environment becomes important in order to allow the improvement of the process of adopting e-learning in high education, taking advantages and stimulations from the international cooperation.

### 2. The theoretical framework

Blended learning refers to a blend of complementary face-to-face and computer-based environments\(^5\). In other terms it is not a repetition of online versions of classroom-based courses, but it’s a combination of «multiple delivery media that are designed to complement each other and promote learning and application learned behavior. [...]» Blended learning mixes various event-based activities, including face-to-face classrooms, live e-learning, and self-paced learning. This often is a mix of traditional

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\(^3\) According to Harris «the common communications technologies include e-mail, asynchronous threaded discussion boards, live chat boards, telephone, and audio/video conferencing» (2008, 3) [7].

\(^4\) Please see http://polaris.itd.cnr.it/Gtpages/wel.htm.

\(^5\) «Innovative instructors sometimes develop blended environments where some elements of communication are in real-time and other are asynchronous. Blended environments involve use of a diverse set of tools through which enhanced learning effectiveness is possible» (Harris 2008, 3) [7].
instructor-led training, synchronous online conferencing or training, asynchronous self-paced study, and structured on-the-job training from an experienced worker or mentor» (Singh 2003) [22].

Particularly, Merrill (2001) [15] introduces the first principles of instruction and argues that learning is facilitated when the learner is engaged in solving a real-world problem (problem-based), new knowledge builds on the learner’s existing knowledge (activation) and it is demonstrated to the learner (demonstration), applied by the learner (application) and integrated into the learner’s world, increasing generalization (integration). It’s a problem-based consideration that consists in showing the learners «the task that they will be able to do or the problem that they will be able to solve as a result of completing a module or course» (Merril 2001) [15]⁶. Contemporarily, it means using telematic resources to create a virtual space «where students can work together and help each other learn to use a variety of tools and information resources in pursuit of common goals for learning and problem solving» (Wilson 1996: 122) [31].

Consequently, an active e-learning environment becomes the second consideration. According to Jonassen (2004) [12], it is a constructivist learning environment where there are conditions for the negotiated meanings and cooperative learning. A constructivist learning is not linear but it is an embedded reflexive process that facilitates the transition of students from the role of modular/molecular listeners to the role of molar learners. It encourages autonomy and self-evaluation skills⁷ so that formative evaluation activity (Scriven 1967) [21] becomes an indispensable tool for self-empowerment.

3. The study

The course of Methodology of Social Research II takes place in the Faculty of Education Science of the University of Genova. It’s a 40-hours

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⁶ For further information please see http://id2.usu.edu/5Star/Index.htm.
⁷ For further information, please see Trinchero 2006) [29]; Mayer and Wittrock 1996 [14].
course on the evaluation of public policies and analyses the process of policy making and its assessment. Part of the course is dedicated to the presentation of some case studies of participatory evaluation in order to deepen the theory of evaluation. It provides, as final test, a case study presented by students and focused on a theme of their choice, including its discussion. Starting from the last academic year it has been turned into a blended learning form using the virtual space of the University of Genova, so called AulaWeb.8

The European Community’s program cycle management has been adopted to define goals and Kirkpatrick’s learning evaluation model (1959 [9], 1967 [10], 1994 [11]) has been used to evaluate four levels: reaction of students, learning, behavior and organizational change.

A formative evaluation (Scriven 1967) [21] is the approach adopted; some tools of social research have been used, as qualitative observation,
interviews and online focus group\textsuperscript{9} and as quantitative, using data extracted from the online platform.

The team interaction has been studied by Hesseling’ evaluation model (1966) \cite{Hesseling1966}. The communicative processes have been observed systematically and classified into 4 categories: information, evaluation, decision and execution. The interaction can be given or received for each category.

All the results are presented by descriptive analysis.

\section*{4. Findings}

The online training had 77 logged students; 46 of them attended at least one online activity, as the next figure shows.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{access_frequencies.png}
\caption{Access frequencies}
\end{figure}

Students shared the training goals by the first online activity, so called “The goals that I would”. A forum has been used to mediate this

individual activity, that recorded 407 visits and 22 messages. The aim was to create a generative learning and a student agreement with the professor and tutor.

The goals explained by students were:
- To do an evaluation research design;
- Adopting a practical approach;
- Studying and applying the issues of Methodology of Social Research I.

Then a detailed elaboration of the course goals was completed by using Bloom’ Taxonomy (1956) [3], as the next figure shows.

<table>
<thead>
<tr>
<th>General training goals</th>
<th>Specific goals</th>
<th>Operative Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1:</td>
<td>To have a basic knowledge of evaluation.</td>
<td>To know theories approaches, evaluation models, criteria and how to do a draft of an evaluation research.</td>
</tr>
<tr>
<td></td>
<td>To know public policy evaluation.</td>
<td>To know public policy and decision making are and how to evaluate a public policy.</td>
</tr>
<tr>
<td></td>
<td>To apply evaluation research.</td>
<td>To be able to do an evaluation research.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In presence</td>
<td>E-contents such as presentations, documents, bibliography.</td>
<td></td>
</tr>
</tbody>
</table>

**Picture 3. Training goals**

In particular, 18 students spontaneously created self named working groups, such as ALFA (4 participants), METODOLOGICAMENTE (4 participants), Savoir Faire (3 participants), VERITA’ SUPPOSTE (4 participants) and VEKIETTIMABELLI DENTRO (3 participants). Only the last one had been created online; the other teams attended both virtual
and face-to-face activities. As the next figure shows, there was a different participation in the groups and more online access was done by the student per group who showed an organizational leadership, confirmed by students’ interviews and observation of interaction in the online and face-to-face settings.

Files about interesting topics were published online and standard forums for general use were adopted. A separate group forum was created for writing a reflective journal of the group. Visible group forums were used for the benchmarking, for the institutional context analysis and for evaluation reports writing. A chat group was used for synchronous interaction, although the students chose other informal tools, such as Facebook, telephone or face-to-face meetings.

We studied the reactions of the students on what they thought and felt about the training. The organization of activities (modularization, schedules, tasks and comparison in the presence) was perceived and rated as good by the students.

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10 The horizontal axis shows the groups and the vertical axis shows the individual frequencies.
The virtual setting was considered a strength for exchanging new bibliography. Active participation to online and face-to-face activities was considered a strength too. Particularly, a face to face interaction was preferred to virtual meetings, especially for working on difficult tasks, such as benchmarking and evaluation reporting activities, while e-learning was considered as a chance to work on distance but too cold (un-personal and anonymous) to allow effective learning.

The teams had different ways of working. All the teams accessed more to bibliography than to interactive tools. One group (Savoir Faire) used forum more frequently than the others. The chat was not used by two teams, but it was adopted very frequently by the group that had been created online (Vekkiettimabelli). The next picture shows the distribution of team works, distinguishing the access to bibliography tools, forums and chat.

![Picture 5. Team work distribution](image)

The result was an increase of knowledge and capability due to the use of e-learning. The evaluation results showed that the use of technologies is a strength for learning although some weaknesses emerged.

“Moving to the core of the matter”; improving personal skills; developing organizational capacities; applying personal skills; enhancing
enthusiasm, motivations and good will were considered points of strength by the students.

On the contrary, the points of weakness explained by the students were the following: computer expertise/skills requirements; difficulty in improving virtual work-team; initial delivery misunderstandings; difficulties during the organization of tasks; scarce participation of introvert or unmotivated students and imbalance of groups related to their spontaneous creation.

Tutorship was a key aspect to blend coherently face-to-face and online activities. The e-contents were developed by the tutor and the professor during the online course design. During the course implementation, the tutorship supported collaborative learning activities, monitored the work-teams and facilitated interactions with students responding to learners’ needs. The evaluation results show that the students perceived the role of the tutor closer than that of the teacher. There are more interactions between students and tutor than between students and teacher.

The last studied aspect was the behavior of the students that changed during the course implementation. Active participation forms, such as cooperation, knowledge of different points of view, feedbacks among participants, have been promoted by the experimental collaborative online activities. A more difficult co-decision was the result of an increase of proposals among the participants.

Collaborative outputs require a continuous mediation (Trentin 2008a) [27] and the time of decision can affect the collaborative process especially where there is an asynchronous communication among participants.

A communicative process analysis was done for one of the work team interactions, as the next figure shows.

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Given</th>
<th>Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>A informs B and C that he’s going to prepare a draft essay.</td>
<td>B and C receive information from A</td>
</tr>
<tr>
<td>Evaluation</td>
<td>A asks B and C if they have already done something. B answers the question of A and asks C and A how to go on</td>
<td>B and C read the question of A and</td>
</tr>
</tbody>
</table>
C informs B about the tasks and asks B and A to participate and collaborate or to change the research issue.

A and B read C’s proposal.

A decides to keep the same issue and asks B e C to meet on the chatline at 9 p.m.

B and C don’t read A’s decision on time.

Only A is on line on time.

### Picture 6. An application of the Hesseling’ evaluation model

Particularly, a reflective group evaluation was created by using the reflective journal. The aim was to increase students’ self-assessment and capability to justify personal choices among the group.

At the end of the course the students did an evaluation activity; the focus was on their course and teamwork satisfaction.

The students had to point out three points of strength and three of weakness for each aspect and to give a score from 1 to 5 to each participant of the personal team. This last activity was considered negative (concept to evaluate group mate) and led to the decision of having focus groups.

The data have been elaborated in aggregated form. The main results were that students had been satisfied about the training course and their experimental team experiences.

However they would have preferred simpler, more structured and directive tasks rather than doing a complex artifact as an online evaluation reporting activity.

Besides, the participants would have preferred random virtual teams that would not reproduce face-to-face cooperation and competition.

One point of strength was that the students have been constantly monitored by both e-tutor and teacher during the online activity, making it possible to advise them in itinere.
5. Conclusions

On the basis of this case study, the course structuring, the interactive process activation and evaluation are the significant dimensions that have been taken into account for the following year (A.A. 2009/2010).

«In analyzing current distance education, it is useful to think of two primary components: technology supporting self-study and technology supporting interaction between students and between student and instructor» (Harris, 2008:3) [7]. The course design (as goals, action, strategies and evaluation) was crucial. Maintaining flexibility was useful in order to consider the specific needs of the participants (e.g. different level of initial skills, and available time and technologies). This year, the same structured modules have been maintained but a participated evaluation activity was done to share the examination criteria and indicators.

Different aspects of communication were taken in consideration:

1. Among the students within the group, the ancillary unstructured communication development, that is parallel to the structured communication utilized for tasks;
2. Among students, teacher and tutor usually based on formal messaging (synchronous and/or asynchronous) and exchange of materials/information;
3. Among all stakeholders involved in the process (students, teacher/tutor, experts and external specialists), where structured communication is for developing the assigned tasks.

The chat was promoted by introducing focus group for intermediate course evaluation and the use of wisky was suggested for the team evaluation reporting activities. The data are currently in elaboration and analysis.

In conclusion, this contribution suggests that a participated course evaluation allows the improved redesign and implementation of a new edition course, monitoring micro social processes, emphasizing the strengths and managing the weaknesses.
6. References

[17] M. Palumbo, “Monitoraggio e valutazione”, in R. Franchini, and R. Cerri,
Per una istruzione e formazione di eccellenza, Franco Angeli, Milano, 2005.


