Web-based blended e-learning for adults; a case study

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Abstract

In this study, internal and external evaluation methods will be defined in the light of objectives and web based work strategies of Open Blended Learning for Adults, project that completed successfully within the context of European Cooperation Projects. The project, composed of eight different institutions from different European countries, agrees on a common platform to reach common goals and to come by with sustainable project outcomes. With this study that will emphasize applications and the effect of internal and external evaluations over success and sustainability of the project that differs from its alike for being multinational and multi partner.

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1. Introduction

The project was envisaged to change the situation by creating new offers for learners. In the project, blended learning courses were created. Each course was related to specific topics for defined target groups of learners. There was a mixture of face to face learning and online lessons. Depending on the technical skills and knowledge of the users, different e-learning approaches were developed and included mobile technology such as mobile phones, PDA’s and PC’s. All ensure easy access to learning materials.

The social, economical and political changes, along with the development of the information society indicate clearly that knowledge will be more and more the basis of our society. Therefore, the lifelong learning process takes place not only in schools and in vocational contexts but also more and more in the private sector. As a consequence, the methods of learning and teaching have changed rapidly along with the development of e-learning [1].

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The integration of e-learning often is the best option for arranging effective relationships between teachers and learners. Classical learning in classrooms change into e-learning about ten years ago but its success was limited, because learners never came to the same environment with the instructors. Nowadays any approach became more wide spread which is called blended learning. In this approach students follow the courses through Open Distance Learning (ODL) but from time to time they come to classrooms and discuss the subject with the tutors all together.

2. Project Description

Project intended;
- To increase the effectiveness and motivation in further education by using e-learning methods (using blended learning methodology) for those who have not been interested so far in further trainings for social or other reasons,
- To equip people with the means of how to use new learning and teaching methods and didactics,
- To provide blended learning courses adapted to target groups specific needs, such as adults, youth, drop outs, immigrants,
- To distribute created learning resources on an open source platform for open accessibility,
- To develop a methodology for blended learning and to prepare a booklet for those methods regarding the target groups.

It targets primarily socially disadvantaged people, unemployed people and immigrants.

However, teachers in training institutions benefits by the Development of a new learning methodology from this project. By integrating these methods in each partner institution, it could spread into the education of all autonomous learners.

Outputs of the project are: course materials for different target groups in different languages, a best practice “blended learning concept book”, a chance for participant instructors to enhance their pedagogical practices, and creation of a new market for e-learning.

2.1.1. Current Situation in the Partner Countries

The situation in further education for the target groups is really different in each partner country. In Germany there exists a very good developed system for further education organized by private education companies, supported by the government. It is just initiating in Turkey and Romania. All together, there are big difficulties to motivate and integrate people who are far from any education opportunities for different reasons. Partly, such groups were not in the main focus of further education institutions. The results are a grown number of break offs and unmotivated, lackadaisical people who are not interested in further education. The project aims to change the situation by creating new offers for learners. At the background that traditional views on learning and working are not valid anymore [3,4].

3. Evaluation

3.1.1. Essential Questions

The main goal of the evaluation conducted by the external body was to assess the effectiveness, impact and sustainability of the project. In accordance with this goal, two essential questions were determined to be answered during the evaluation process. These are:
- How well the project was carried out (managed)?
- What was the impact of the project on participant institutions/faculty/students?

The first question addresses the project management aspect of project. The second one, on the other hand, can be inferred as an impact analysis.
3.1.2. Methodology

This study used a mixed design to gather both qualitative and quantitative data to be able to answer the essential questions. A series of survey instruments helped evaluator to collect quantitative data while semi-structured informal interviews, site observations, text/content analyses of case studies and other documentations created during the project provided in dept qualitative data [5].

3.1.3. Linkert Type Items

The Likert-type scale has been used by persuasion researchers for over three decades. The original scale of this type was developed by Rensis Likert. He reported very satisfactory reliability data for the scales developed with his procedure. In addition, Likert reported that results obtained from his scales compared favorably with those obtained by the “Thurstone scale. Subsequent research has generally confirmed the fact that the Likert-type attitude scales are quite reliable and valid instruments for the measurement of attitude [6].

A Likert-type scale consists of a series of declarative statements. The subject is asked to indicate whether he agrees or disagrees with each statement. Commonly, five options are provided: "strongly agree," "agree," "undecided," "disagree," and "strongly disagree." Other Likert-type scales include four or six steps rather than five, excluding the undecided position[7]. In this study, Linkert Type Items was used for questionnaire analysis.

4. Results

The assessment of results is organized into two sections. The first section summarizes the findings about how successful the project was carried out and the second section covers the results for impact of the project.

4.1.1. Project Management

Under the project management aspect, first of all, the partnership meetings were assessed. Total 5 formal meetings including closing conference were held during the project. The first meeting was in Ankara Turkey. Later, meetings were held accordingly in Greece, Portuguese and Italy. The last meeting, the final conference, was organized in Turkey. Surveys used to evaluate the meetings, as summarized in Table 1, have shown that partners were quite satisfied about the meetings.

<table>
<thead>
<tr>
<th>Items</th>
<th>Scale Points*</th>
<th>N</th>
<th>Max</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Partners contributed to the meeting agendas</td>
<td>2 3 19 45</td>
<td>180</td>
<td>141</td>
<td></td>
<td>78</td>
</tr>
<tr>
<td>2 The meetings satisfied expectations</td>
<td>4 25 16 45</td>
<td>180</td>
<td>139</td>
<td></td>
<td>77</td>
</tr>
<tr>
<td>3 Partners presentations were effective</td>
<td>3 15 27 45</td>
<td>180</td>
<td>153</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>4 Adequate information was send beforehand</td>
<td>4 14 24 42</td>
<td>168</td>
<td>138</td>
<td></td>
<td>82</td>
</tr>
<tr>
<td>5 Adequate social and cultural parts of the meetings</td>
<td>1 12 32 45</td>
<td>180</td>
<td>164</td>
<td></td>
<td>91</td>
</tr>
<tr>
<td>6 The organization of the meeting by the host partner</td>
<td>1 8 32 41</td>
<td>164</td>
<td>152</td>
<td></td>
<td>93</td>
</tr>
<tr>
<td>7 My organization made adequate preparation for the meeting</td>
<td>8 37 45 180</td>
<td>152</td>
<td>172</td>
<td></td>
<td>96</td>
</tr>
<tr>
<td>8 Meeting times were adequate</td>
<td>2 15 28 45</td>
<td>180</td>
<td>157</td>
<td></td>
<td>87</td>
</tr>
</tbody>
</table>

Average: 86

1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree

This result can also be used as an indicator of partnership satisfaction, which was assessed with another survey (Q1). We observed that, generally partners are satisfied with the partnership. Final survey results also support this finding. There are couple items concerning the partnership evaluation. The participants indicated a high level of agreement with these items (average 89%). So, survey instruments pointed out a high level of satisfaction from the partnership. An important component of the project management was communication between partners. The partners stated a satisfactory level (77%) for communication between partners. In the final survey, they noted even higher satisfaction
(83%). Responses Along with Likert Type items the final survey instrument included 4 open ended questions. Due to page limitations of this study, other surveys, their evaluation questions and responses were not given.

4.1.2. Strengths of the project
- Good collaboration, management, implication of all the partners.
- Innovative, looking at new and interesting ways of engaging disadvantaged learners. Brought a lot of expertise together which is invaluable in such projects.
- The challenge consisting in the project’s aspiration to contribute in bridging the ‘digital divide’ and in ensuring access for all in lifelong learning, by targeting to socially fragile groups. The cultural exchange between partners and the social interactions within the project.
- The design and production of project Cookbook. The cooperation with new partners.
- Exploring, testing and exploiting different open source tools and platforms for a) developing SCORM-compliant multiform learning objects and b) facilitating our courses.
- The interaction with tutors/facilitators and adult learners of the targeted social groups.
- The mixture of face to face and distant learning. The dynamic adaptation onto learners’ needs. Motivating to investigate further. Progress made in developing blended courses.
- Partnership covers different geographic regions of EU from north-south, east-west – most of the time with similar target groups. Creation of courses with a lot of flexibility in content to allow easy updating in the future.

4.1.3. Weaknesses of the project
- The collaborative tools of the website were not used at the highest possible rate by all the partners. Building relationships and recognizing the different ways of working between the different partners took a long time.
- Expect for the use of Moodle, the detailed technical specifications for the development and facilitation of the learning material (e.g. SCORM objects, course structure and features) were not thoroughly and/or very clearly defined in the initialization phase of the project. This resulted in different levels and types of development work among the project parties and therefore, in different standards and features for the courses to be pilot-tested as part of a commonly proposed methodology.
- Sometimes there was lack of common perception of terms (e.g. methodology) across project participants.
- Over-detailed documentation and reporting as well as some inflexibility of the centralized financial management model. High and wide objectives compare to foreseen/available project resources.
- Having 2 central servers, as well as the parallel functioning of independent serves at the project partner sites.
- Problematic timeline.

4.1.4. The innovative aspects of project and improvement of products
The innovative aspect of this project is to develop a blended learning methodology for their target groups. This means, this project will be a mixture of both, ODL plus classical classroom training. Through the art of cooperation the intercultural and media competence of all participants will be developed. All participating partners will provide the creation of courses on an open source training platform in their mother tongue and in English. This will be the basic for an open international network for sharing content and experiences in teaching of people who are far from the education. Items on the improvement of products follow as:
- It would have been nice to have two phases, a pilot phase and a main rollout phase for the course. There needed to be discussions after the pilot phase which would inform the final product.
- Less emphasis to quantity, more emphasis to quality: a smaller number of courses (instead of 50) which could serve as “model” blended courses, be tested (across all countries) and proposed as such within the project methodological framework.
- More integration between partner’s work, for example: if all partners had developed SCORM learning objects, these could have been exchanged and incorporated in each others courses for validation purposes.
- There were some technical issues with the central Moodle platform which led some partners to setup connecting local Moodles, in order to ensure successful facilitation, monitoring and fine tuning during the pilot phase. This could have been decided in advance, along with a plan for integrating the local LCMSs in a central site for common facilitation of all blended courses. Or alternatively, the central facilitation could have been more efficiently planned, managed and supported.

5. Results, Discussion And Conclusion

Project was effective because the project met all the outputs: A large number of course materials were produced for different target groups such as socially disadvantaged, unemployed and immigrants; a best practice “blended learning concepts book” was written; teachers who took parts in the project as facilitators expressed their improvement on blended open adult education. Although it may be seen fuzzy now, but the majority of learners mentioned their willingness to take similar courses in the future. This may be inferred as the project’s success to create a new market for learning with ICT.

The project was also very efficient when considering time and funds allocated for the project and the outcomes. In other words, the partnership designed and developed a large number of materials in a very short time period and with limited funds.

The results of the surveys, such as Beneficiary and Facilitators as well as final one, have revealed that the project was quite appealing for all the external and internal partakers. Beneficiaries especially stated that blended open learning is a good alternative for them to acquire some skills that they need to be productive citizens. An important number of them pointed out that they could not attend if it was not blended.

The project is also a sustainable one. The project outputs, first of all, can be used in various occasions including offering same courses for the same or similar target groups as it is done during the project. Also, the partners have already developed future project ideas that based on project outputs, and expressed their willingness to work together. Some of these ideas must certainly be realized for the goods of the targeted groups and improvement of the open blended learning strategy, such as European standards and methods for blended course facilitators’ training and certification, and models and tools for smart, flexible and time/cost efficient adjustment of existing blended content for personal learning styles and needs.

Furthermore, it seems project was completed successfully in terms of project management and impact. Although partners had some communication and collaboration problems regarding use of different Web sites, unfamiliarity to the Moodle environment, multi-language, and so forth, partner performance and communication was successfully resolved by the project management.

As a result of globalization, multinational, multilateral and project based studies becomes increasingly important. In this kind of studies, external evaluation methodology became a critical success factor. In this study, evaluation strategies are examined with the view of internal and external evaluator in accordance with goals and objectives that is proposed by project which is a web based project. It is emphasized, positive contribution of interim result upon project process. The methods, practices and analysis that is given by this exemplary study will be a road map for similar project based studies.

References


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