A PROJECT-BASED LEARNING PATHWAY IN A BLENDED LEARNING COURSE IN MOODLE

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Abstract

This paper reports the results of a teaching experiment on a Moodle based course conceived as a Blended Learning support for students studying English on a postgraduate degree course in Document Management. The project was entitled “Task: Your Company Profile Project” and the main aim was to engage students with project-based learning materials that offered precise objectives across a series of study activities and tasks. The reasoning behind this stems from positive outcomes in previous initiatives undertaken using Moodle with other course groups in Educational Sciences. Here, the project-based format serves as a vehicle for teaching the linguistic knowledge and digital skills that the students need to acquire in the accomplishment of a specific personal task. In this sense, the project is student centred, with a strong emphasis on peer collaboration and with the additional participatory incentive of peer evaluation.

The activity stages were styled according to a format typical of MOOCs in common use in order to guarantee clarity of presentation and procedure. Support was available to students in the form of dedicated tutor assistance, the tutor’s role being to respond directly to questions posed or to direct the query to the teacher responsible or to a technician according to the nature of the problem. In linguistic terms, the aim was to acquaint students with the language associated with company profiles in order to facilitate personal production of a company profile brochure, thus uniting digital and linguistic skills. Language input consisted of a series of readings and video viewings on company profile and company brochures, with comprehension checking exercises. Resources and templates for making a brochure were provided. An important feature of the project was the evaluation stage, in which students who had completed the digital hand-in for their brochure participated in peer evaluation. The system proposed three brochures for evaluation using a Likert-style questionnaire on First Impact, Design and Graphics, Layout, Lexis and Logos, and Content. Students also responded to a Satisfaction Survey, the results of which indicate a high degree of involvement with and enthusiasm for this type of project-based learning in digital form, provided the necessary forms of support are available.

Keywords: project-based learning, blended learning, Moodle, tutor support, peer evaluation, satisfaction survey.

1 INTRODUCTION

In 2012, the PerLE platform was created at the Department of Culture, Education and Society at the University of Calabria with a view to offering a Blended Learning solution for the student community across a range of subjects and disciplines. The platform was designed in a spirit of “community of practice” [1] in order to stimulate approaches to learning which encouraged collaboration and sharing among students, with the concomitant aim of developing digital skills and digital literacy. It therefore made available to users a range of tools and software to enable exploration, collaboration and communicative sharing with the added incentive of being able to use the platform to display produced artefacts.

For institutional course materials, the platform hosts a Moodle in which teachers can offer courses comprised of materials, learning objects and support services in a Blended Learning scenario. The Moodle is used primarily to make course materials available to students in a variety of digital formats as well as offering activities and exercises that can be evaluated and graded according to the settings available in the Moodle.

Through the PerLE platform, and in particular with the Moodle, initiatives were promoted which aimed to involve students in learning related to course content, the acquisition of useful digital skills and collaboration among peers in the learning process. These initiatives included project based approaches such as digital artefact creation in a storytelling project [2], the creation of an Albanian language grammar e-Book [3], and a short summary writing course for examination preparation in Modern Languages [4].
Project-based learning is an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop. It also encourages a group dynamic, sense of purpose, and it creates a positive environment in which forms of peer-to-peer and self-evaluation can be adopted [5]. In proposing our specific project, we were concerned to evaluate student response in terms of their perceived learning efficacy, engagement with the digital environment and perception of use of the platform and the hosted Moodle. Another important issue was that of the opportunity to encourage collaborative learning experiences and peer evaluation. In the present paper, we report the results of a project based initiative within the sphere of an English Language Workshop on a postgraduate degree course in Document Management.

The English language workshop for Document Management has a Blended Learning digital component in the form of a course in the Moodle LMS and this offers a series of elements in support of learning and examination preparation. Using the Tabs function for easy access and clarity of presentation, these include Language Banks for general study of the English (grammar, tenses etc.), sections which are specific to components of the written examination (Reading Comprehension, Graphs, Email and Letter Writing) and materials used in class lessons during the course. While these materials are undoubtedly useful to students, our perception was that the experience of using them did not promote the sense of being involved in a learning pathway, that it isolated students and that the static nature of course materials presentation did not promote the collaborative learning and acquisition of digital skills that we were interested in. We therefore decided to experiment with the integration of a project constituted of a task which integrated language skills through a number of activities and which would offer students a learning pathway with a defined object, and which would also permit students to take responsibility for their own decisions in research for and completion of the project [6]. The project work encourages creativity, critical thinking, collaboration, self-study, and other study skills [7]. The aim was to bring together the acquisition of specific language content, digital skills and collaborative learning, followed up with peer and self-evaluation. Support was provided in the form of dedicated tutor availability, consultation with the teacher in class and through the platform, and technical support where required. A satisfaction survey was conducted to gather information on student perceptions of the experience.

2 METHODOLOGY

2.1 The project: purpose and form.

Using as a guide the project work process outlined in six steps by Papandreou [8], “Task: Your Company Profile Project” was organized in order to guarantee a number of specific outcomes. The first was the use of authentic English language materials for the acquisition of content regarding company profile at CEFR level A2-B1, specifically with reference to company history, current status and future goals. Second, we were concerned to include elements that would guarantee the creative use of digital tools and media and the acquisition of specific skills. Third, students were to be encouraged to make use of available support while using the system in the form of tutor support, contact with the teacher both in class time and online, and technical support where perceived as necessary. Finally, students were encouraged to collaborate in the creation of a company profile brochure and were subsequently required, after hand in of their brochures, to participate in peer and self-evaluation and a satisfaction survey.

In a previous project with students studying Educational Sciences, students had been asked to create a digital artefact in order to tell a story on a theme of their choice related to their studies. The project was paced across five weeks of study and activity and we decided to adopt a form of presentation characteristic of today’s MOOC courses so that students would work their way towards completion by learning how to complete the individual steps that comprised the preparatory phases for creation of the videos and presentations that they had been tasked to complete.

In the present case, a similar presentational format was adopted so that students could clearly discern the single stages of the project and its related activities and exercises. Students were given a month to complete the project in their own time although they were also free to consult with each other online and in class discussions involving the teacher, whose interventions followed flex model principles in order to leave control in the hands of the learners. The dedicated tutor was available for advice and consultation on questions of language and aspects relevant to the creation and presentation of the individual company brochures.
2.2 Project contents and learning pathway – layout and activities

The layout and activity stages were styled according to a format typical of MOOCs in common use, in order to guarantee clarity of presentation and procedure. It is therefore, worth specifying some of the features typically required in a MOOC and which are present in this course project:

- layout in clear and specific paced stages;
- specific learning objectives to be achieved by students within a given time period (start-finish);
- inclusion of quizzes and testing during the course to allow checking for comprehension;
- “openness” – while this course is institutional and closed to the general public, it does make use of open content of various kinds across the PerLE platform and generated content can also be openly shared by course participants;
- opportunity for interaction (student<>student – student <>tutor - student<=>teacher – student<>tech administrator).

In our view, an important guiding principle of a digital project is that there should be clarity of layout and content. The user must be able to understand and navigate contents with ease. In a manner also characteristic of a MOOC format, therefore, the introductory part aims to provide the student with a clear sense of how to proceed, since we consider first impact - the students’ initial impression of the course, their visual introduction to it – to be of fundamental importance in engaging attention and acquiring trust. As Figure 1 below shows, single elements of menu, student profile functions and social media are clearly visible.

![Figure 1. Opening of “Task: Your Company Profile Project](image)

Within the project, it is immediately clear that the noticeboard, forum and support areas are available to the user. There is also a document for download which systematically explains the contents of the project pathway, which begins immediately afterwards, as can be seen (in its compressed easy view form) in Figure 2 below.
The figure below shows the “Learn” section containing individual reading and comprehension check activities related to Company profile.

![Figure 2. Compressed form of course sections](image)

**Figure 2. Compressed form of course sections**

2.3 Support

It had emerged from feedback following previous project initiatives that students felt more comfortable if they were aware of the availability of concrete forms of support, so apart from the opportunity to discuss issues with the teacher in class or lab time, it was decided to provide dedicated tutor assistance, made available through the PerLE platform’s messaging and media tools. The tutor could be contacted both for issues related to language and more general questions related to completion of the company profile brochure task. The tutor also functioned as a communication hub, directing questions either to the teacher or to technical support on the basis of the type of problem posed.

Another support feature provided was the Moodle activity Dictionary, which could be consulted directly with items in alphabetic order or using highlighting and definition of individual language items, as well
as immediate reference to further related materials for study and/or practice in the Language Banks in the main course area.

![Dictionary reference support](image)

_Figure 4. Dictionary reference support_

It emerged that the students preferred to consult the dictionary using the single highlighted items that they encounter while reading textual materials, as is confirmed by the responses to the satisfaction survey regarding “usefulness of the grammar highlighting function”.

### 2.4 Evaluation and satisfaction survey

In order to encourage a climate of participation and collaboration in the learning experience, students on this project were invited to both evaluate their own work and subsequently that of their companions. The Moodle activity “Workshop” was used for the management of this aspect of the course using the rubric shown in the figure below.

![Evaluation rubric](image)

_Figure 5. Evaluation rubric_

It should be noted that this postgraduate course attracts students already in fulltime employment and therefore class attendance is not obligatory. It is therefore important, across the range of subjects on the syllabus, that there be strong digital support available to those students who will carry out their studies almost exclusively using content made available online. Therefore, the creators of the digital component for the English language Workshop were concerned to ascertain the extent to which forms of collaborative cohesion developed among the participating students, both attending class and not attending, as well as establishing whether students had acquired a knowledge of the proposed language content, the digital skills needed for project completion and an adequate comprehension of the just criteria for the production of a well realised company profile brochure.

The envisaged language competency level is A2-B1 (CEFR) and this comparatively modest language level did influence the choice to propose the creation of a company profile brochure in this experimental initiative, rather than a more demanding or complicated project which students might not have found workable. Our concern was to establish the feasibility of working on a modest project with specific language content at the prescribed level to produce a specific practical result in the form of a brochure using the platform and available digital instruments. In this context, the self-evaluation and peer evaluation requirements were included in order to establish whether, in the first case, students
had acquired an adequate sense of the issues involved in the project, and in the second, whether a mature and collaborative group dynamic had been established.

The Satisfaction Survey was composed of 20 questions, the first 15 of which were questions using a Lykert scale style range of response from 1 to 5 (strongly disagree – strongly agree). The remaining 5 questions (16-20) were open. The survey was conducted in the native language of the students concerned (Italian).

Question criteria regarded the following:
- appropriacy of project layout and structure to efficacy of study
- clarity of objectives
- satisfaction with topics/arguments treated
- achievement of objectives
- satisfaction with teaching methodology
- usefulness of grammar highlighting function
- pertinence of project realisation for learning requirements on course
- usefulness of this project for your learning
- usefulness of creation of a brochure for your learning
- usefulness of tutor assistance
- pertinence of instructional elements provided for project realisation
- pertinence of reading materials/exercises to the project
- pertinence of vocabulary materials/exercises to the project
- pertinence of explanations provided on Company profile for realisation of the brochure
- usefulness of resources available for project completion (templates/resources)

The open questions, on the other hand, invited students to comment on the following:
- which topics/arguments stimulated your interest most?
- What other types of project would you propose?
- Would you advise the realisation of other projects on other courses?
- What struck you most during the realisation of this project?
- What are the strong and weak points of this project?

3 RESULTS

Self and peer evaluation results indicated that this relatively small group of students developed a team spirit in the completion of a project that required the production of a company profile brochure for individual hand in. From a didactic point of view, it emerged that the students, in expressing themselves in regard both to their own work and that of their peers, had acquired a strong understanding of the criteria for evaluation of a company profile brochure, in terms of graphics, layout, content and language.

For the first 15 questions in the satisfaction survey, responses indicated a high degree of approval and satisfaction with the project. Strong appreciation was evident in particular for clarity of structure and layout, clarity of objectives, instructional input, language assistance support, appropriateness of language input, and relevance of materials. There was some indication that the topic, company profile, was not sufficiently central to the concerns of future document managers and open individual feedback from the students confirmed that they would have more interest in projects more closely related to the practical aspects of their search for employment in this field or in the field itself.

Responses to the open questions provided a range of useful information for the designers of the course. Strong preference was indicated, in the global context of the workshop, for practical project-based learning. Proposals emerged for the furthering of this type of analysis, extending it to the study of companies and the simulation of working scenarios and job interviews. The idea of proposing such projects for other courses in other disciplines garnered 100% approval. Reactions to the experience of
completing the project showed that students strongly appreciated and understood the need to acquire specific competencies in order to complete the project and that its was satisfying and stimulating to do so. Appreciation was also expressed for the imposition of a specific timeline for the completion of the project and for the fact that all materials necessary for its completion were made available with the necessary ancillary support.

4 CONCLUSIONS

Based on the above reported project, we conclude that this project-based learning activity created and managed in a digital medium can produce significantly positive outcomes. In the course of project activity completion, exposure to and assimilation of the proposed language content is assured, and the same goes for the acquisition and/or maturation of digital skills. Engagement with the platform and Moodle, with the concomitant support, both linguistic and technical, leads also to a higher level of technology acceptance and trust. Interaction, which takes place through the services provided by the course managers, teachers and tutors, fosters a climate in which collaboration and sharing of knowledge and ideas can flourish. This ensures also that the proposed forms of evaluation are satisfying both at group and individual levels. Feedback from the satisfaction survey, particularly in the responses to the open questions, indicated that students are interested in participating in this type of project, once the guarantees for assistance and helpful supervision are in place. Future initiatives will be directed towards maturing this approach and tuning the topic areas treated to real world practical scenarios in order to further engage the interest of participants.

REFERENCES