

## **SPOC and flexible language learning with Moodle: the experience at the University for Foreigners of Perugia**

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### ***Abstract***

*Engaging learners with targeted pathways in a language course can present many challenges in both selecting learning contents and assessing student skills. In this context, Learning Management Systems (LMSs) represents a big opportunity, by offering solutions capable of reaching a wide range of needs and characteristics. This paper describes some examples in creating a Small Private Online Course (SPOC) of Italian language for academic purposes at the University for Foreigners of Perugia, focusing on the tools available on the Moodle platform to help students to achieve their goals and to support teachers in gathering information on the learning dynamics and interventions to be implemented. The aim is to disclose perspectives on the developments of language education and on the potential of the Moodle LMS as a flexible learning environment, outlining some future lines of research.*

**Keywords:** *SPOC; language learning; flexible learning; Moodle; Italian for academic purposes.*

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## **1. Introduction**

In the last decade, with the growing diffusion of the Internet and application programs, we have witnessed a significant increase in the use of Information and Communication Technology in training. In particular, a phenomenon that has attracted the attention of researchers is represented by MOOCs (Massive Open Online Courses), that have made a valuable contribution to the dissemination and democratization of knowledge thanks to the offer of free training potentially reachable by an unlimited number of users (UNESCO, 2002). These courses had an exponential success and it is precisely in 2012 that the three most influential were born: Coursera, edX and Udacity. Many universities worldwide have collaborated and continue to collaborate with the three and with other platforms in order to make culture accessible to a great audience. Indeed, scalability allows universities on one hand to make investments to spread education, on the other hand to acquire a considerable visibility, allowing even geographically distant students to approach and potentially enroll more consciously in the on-site courses. However, research has shown that just a small proportion of participants go on to complete the courses and that there are many issues to face to foster the cross-cutting competencies of the students. As stated by Lane and Kinser (2012), most of the massive courses are based on a transmissive model, and the risk of “McDonaldization” of education is high; furthermore, in the teaching practice in academic contexts does not seem to have big results: compared to the traditional teaching model, the number of students in a MOOC is infinitely broader and managing the questions and answers and the forum space becomes a very difficult challenge to face (Guo, 2017).

In 2013, Armando Fox, a professor of Computer Science and Electrical Engineering at the University of California at Berkeley, coined the acronym SPOC referring to the online courses used with on-campus students as a supplement to face-to-face learning, arguing that such training improve teachers skills and students productivity, self-confidence, engagement and outcomes (Fox, 2013). In the context of language learning, the potential of SPOCs is supported by several studies (Chen, 2019; Li et al., 2019), as they can offer students’ access to authentic, interactive and motivational educational material through which they can explore new forms of language, learn about the culture of the target language and in general practice and acquire language skills, respecting individual learning styles and supporting face-to face and online learning and interaction.

SPOCs use online features as course materials in college classrooms: by assigning lessons as homework, teachers are free to spend traditional lesson time answering students' questions, monitoring their learning and the key factors that could hamper the training process (Dringus & Ellis, 2005; Ferguson, 2013), customizing the pace and grading system according to the needs of the students. Moreover, this kind of courses support blended learning and flipped classroom learning, which variously combine online resources and technology with personal

engagement between faculty and students, and can prevent hidden guests because students are called to log in the platform with the real identity.

The main objective of this study is therefore to outline the tools of Moodle LMS useful for students and teachers to enhance learning opportunity in a language course, describing our experience in the design and implementation of an online Italian course for academic purposes designed as a localized instance of a traditional MOOC (Kaplan & Haenlein, 2016).

## **2. Methodology**

Undoubtedly, there may be greater difficulties in carrying out the activities required by the academic context in a language very different from individual mother tongue. Furthermore, it is important to underline that the language for academic purposes has specific peculiarities linked to textual, morphosyntactic, pragmatic and cultural norms. Hence, we have devised an online Italian language course for academic purposes, open to the whole University for Foreigners of Perugia community, in order to support the skills of our students, organizing our work in 3 different phases that will be described in the following.

### **2.1. Design of the course**

The dynamics related to the context in which students interact were examined, and we opted for the creation of contents to be integrated into open and flexible paths that allow learners to start a gradual self-training path, providing online resources to support individual learning. This solution is designed to support on one hand the learning of students that for various reasons are unable to attend lessons, and on the other hand students who attend lessons regularly, adopting methods and strategies typical of self paced learning, flipped classroom, blended learning and cooperative learning. Furthermore, The University for Foreigners is by its very nature an international university and in this sense the pedagogical approach may favor a better general understanding for students who come from other countries, that may have the opportunity to personalize their learning and be more motivated, due to the flexibility of use of the contents that the type of course offers (Sbardella *et al.*, 2019).

The course is conceived as an innovative activity of orientation and preparation of students to face the challenges of communication in the university environment. Linguistic-communicative skills and general study skills related to the different subject areas are gradually developed, strengthening the specialized lexicon, textual skills and sectorial communication skills. The aim is to provide pragmatic, sociocultural and linguistic tools useful for managing the communication of disciplinary contents and for addressing and constructing various textual types by developing particular communication skills typical of the academic context, such as: summarizing, describing, augmenting, classifying, exposing, concluding, which represent the six learning units on which the course is structured.

The course has a 8 weeks duration and remains open for about three months after its conclusion; 2 to 3 hours of commitment are foreseen for each module and an access key is provided at the time of registration. It consists of the learning units mentioned above, introduced by a first section, which explains the aims of the course and presents general information on the various activities proposed. A specific section is designed to allow students to familiarize with the interactive tools of the platform and to break the ice, starting the activities launched by a Padlet, in which all the members of the community can introduce themselves and exchange mutual information.

The path suggested after the introductory phase is outlined in several steps, but students will be able at any time to personalize their learning by developing one content rather than another, choosing the path more suitable to their needs. In each thematic area, an itinerary is developed that provides the exploration of textual files, in-depth studies and exercises, while the last section is devoted to assessment activities. For each unit, a final test is proposed, presenting respectively: a self-assessment form, with questions on the perception of what has been learned, where the answer must be expressed according to a Likert scale, a final test, and a final task, that requires a peer evaluation. The peer evaluation choice is due to the fact that during this process, students take an active role: by analyzing the work produced by one or more colleagues, they inevitably reflect on their work, strengthening their disciplinary knowledge while observing different ways to accomplish the same task (Boud & Soler, 2015; Boud & Molloy, 2013).

## ***2.2. Implementation in the Moodle platform***

The educational path is provided within the Moodle platform, that allows students to carry out the activities foreseen by the course also in parallel with the classroom lessons, customizing learning spaces and times and making use of online support on demand. Moodle provides support for teaching activities through a very broad and articulated set of tools. It is an easy-to-use platform where navigation is fluid and immediate. The default appearance of Moodle is easily customizable, and its open source approach allows for continuous improvements to meet the current and evolving needs of its users, as well as greater security for their personal data. It is an organized system built on a set of tools oriented to five macro-contexts: the administration of user enrollment in the course, the management and delivery of contents, the management of evaluation activities, the management of communicative and collaborative processes the management of evaluation processes.

By implementing the course, we took into account the usability, the attractiveness of the graphic aspect, the ease of the operational tools and the articulations of the educational path, caring that each language skill could be exploited and achieved. Among the different features, the quiz-making function has been analyzed. Moodle's functions provide the possibility to create different types of quizzes. In our specific context, the relevant quiz types are: Multiple

choice, True/False, Matching, Drag and Drop, Description, and Cloze. A broad range of options allowed us to arrange the items in random order, to set up the time frame for availability, to pre-set feedback, to control the display of the correct answers, to determine how many times students may take the quiz and to establish the score.

In order to elicitate learners' previous knowledge, we decided to use the choice activity, that allows to set options through which students can select from a series of possible answers. The system remembers the choice and at the end of the path the students can go back and check if their previous knowledge was correct.

To facilitate the autonomous understanding and implementation of the proposed teaching activities, each communicative situation offers online support tools, such as in-depth sheets and glossary activity. The hypertextual architecture provides a transversal use of the educational path, allowing a personal approach to learning and a guide to the implementation of the activities and exercises. At the end of each activity, the system allows to automatically obtain the correction, the solution of the exercises and the score attained by the user.

Forums are the main peer communication tool within the course, and were created to encourage interaction, discussion and to develop a sense of community. These spaces are used to allow participants to get in touch each other, discuss the contents or in depth study of the course, giving continuity to a problem encountered during face to face sessions, and to extend activities, e.g. proposing problems that students can evaluate in order to develop debate, critical thinking and suggest solutions. In other words, it is a space created to allow a continuous comparison within a community of learners oriented towards the development of collective intelligence, understood as the amplification of the human capacity to co-construct knowledge online (Levy 1996).

The assessment is organized with a first feedback activity used as a self-evaluation tool. For each of the six units, students are required to answer questions on the degree of confidence perceived in the different linguistic-communication skills. Subsequently, a quiz with multiple choice items is provided, which includes the topics already covered in the reference unit. Finally, a workshop activity is planned and oriented towards peer evaluation. Through five different phases, students move from one phase to another. The five phases are: setup, submission, assessment, grading evaluation, closure. Students are required to put in place a strategy to produce an original text in line with the reference unit, and their work will be evaluated by their colleagues. At the same time, they will have to evaluate the work of peers with a comment, thus showing the assessment knowledge developed.

### **2.3. Learning Analytics**

Moodle allows the use of Learning Analytics (LA), i.e. the measurement, collection, analysis, and interpretation of data about students and their contexts. The exploitation of the software

algorithms is fundamental as it provides valuable information on what really happens in the learning processes, and offers teachers detailed indications on possible ways of intervening to make improvements, in order to understand and optimize both learning and the environments in which it takes place (Gašević et al., 2015).

Within LMS, such as Moodle, students have access to teaching materials, interact in a forum, submit assignments, perform activities such as viewing schedules, assessments and information, creating video or audio content, taking advantage of course content and generating at the same time a large amount of valuable data for evaluating their commitment and progress. The analysis of such data is a relevant process, allowing to provide learners with a personalized experience meeting their needs: it is in fact possible to obtain information on their learning habits, adapt content based on progress and provide real-time feedback that allow them to monitor their progress, thus promoting adaptive learning (Long & Siemens, 2011). LA also provides indications on which students need additional support to achieve their goals during the training process: the analysis of activities related to participation may help to identify the least motivated students in a given area (Siemens, 2013).

Teachers may have access to important information on the types of resources with which students interact more frequently, managing to evaluate which types of interventions are most functional to the various educational goals. In addition to providing data on progression and predictive indicators of students' problems, LA may also be useful to identify indicators of more complex phenomena such as the construction of knowledge, the sense of belonging to a learning community, creativity, and self-learning (Macfadyen & Dawson, 2010). All this information will be exploited, at the end of the course, for measuring the impact of the learning activities and of the entire learning pathway.

### **3. Preliminary results and discussion**

The course is still ongoing, and preliminary data show that all the academic community, i.e. both the students who learn in pace and the students who are attending in presence are engaged, appreciating the digital resources and actively participating in the online virtual environment. The main result of our work is the development of a set of digital tools taking into account the benefits of flexible and personalized learning. As stated in the previous sections, each learning unit contains tools provided by the Moodle LMS geared to enhance interactivity and autonomous exploration. In the quiz activity, automatic feedback has been set based on the answers given by the students, with the aim to provide a guided analysis that will help them to deepen their favorite content and to autonomously analyze language functions. Forums have been exploited for guided written productions and to address sociopragmatic aspects in the academic context, and the participation and the quality of the various interventions contribute to determining the final score. Other tools, such as choice

and feedback activities, have been used respectively to elicit previous knowledge and to self-assess outgoing competences to foster students awareness about their skills. The final peer evaluation will provide students with the opportunity to test themselves in the role of evaluators, enhancing one of the most important cross-cutting skill, i.e. the ability to create, use and apply evaluation criteria to make decisions.

#### 4. Conclusions

As part of the development of open educational content delivered online, the creation of innovative and integrated models adapted to the different needs and characteristics of students is key to fostering learners' skills. Based to this strong conviction, we deem it appropriate to deepen the knowledge of SPOCs and its impact on training, investigating the effects on the channels of students participation, their motivation and satisfaction in terms of didactic and academic outcomes. In this paper we described the first stages of our course, presenting some initiatives aimed at enhancing the linguistic and communicative skills of our students in the academic context exploiting the functionalities of the Moodle LMS. In a future perspective, LA will allow us to have detailed data, which will be used to evaluate and eventually improve the quality of the learning experience.

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