THE DEGREE COURSE IN PSYCHOLOGICAL SCIENCES AND TECHNIQUES OF SAPIENZA AND UNITELMA SAPIENZA UNIVERSITY OF ROME: TECHNOLOGY ENHANCED ACTIVE AND COLLABORATIVE LEARNING

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Abstract

This paper describes the degree course in Psychological Sciences and Techniques delivered from 2017 by Sapienza and Unitelma Sapienza University of Rome. This is an entirely online course in which the designers decided to integrate classic e-Learning with a participatory and collaborative approach, safeguarding the strengths of both models. To this end, the degree course is based on three fundamental pillars: a theoretically anchored design, an experienced team of teachers and tutors, a flexible and rich Learning Management System such as Moodle. Each of these aspects will be described, with reference to the way in which the technological environment has made it possible to harmonize provisional and participatory teaching. In the end, the authors will highlight the strengths and directions of development envisaged for the current year, starting from further use of the resources and activities that Moodle makes available to flexibly manage a model of pure e-learning inspired by the principles of socio-constructivism.

Keywords: Higher Education, e-Learning, Active Learning, Participation, Moodle.

1 INTRODUCTION

The long path that led from the first Distance Education era to the different models of nowadays e-learning universities has seen, over the years, a change of perspective and theoretical paradigm. The first online universities, in fact, were based on a behaviourist paradigm, centred on a model of teacher who defines, elaborates and prepares the contents, and of a student as the one who merely acquires and memorises them. The socio-constructivist paradigm overturns this vision and instead proposes a model of teacher who guides the course with appropriate stimuli, and of a student as one who builds his/her own knowledge by interacting with objects, meanings and people. In today's online universities these two ways of understanding knowledge and learning can be reproduced. Inspired by a behaviourist paradigm, attention will be placed on a good organization and presentation of knowledge, taking care of the quality of the lessons and of the organization of the contents, so that they are extremely comprehensible and easily assimilable by the students.

These are certainly important aspects, but if we believe as Vygotsky [3] that knowledge is created in interaction, we need to go further and, inspired by the socio-constructivist model, propose activities that lead to building complex knowledge, through interaction with teachers, tutors and peers. And through the mediation of tools that, in distance teaching, obviously have a central role. Already in 2003, Trentin [2] defined e-learning as “a way of using information and communication technology to support teaching / learning processes based on electronic content delivery, on learning active and / or collaborative” [2].

The three-year degree course in Psychological Sciences and Techniques (STP), about which we want to illustrate the architecture in this communication, is inspired precisely by this vision of e-learning, called to favour active and collaborative learning in the students.

STP is an inter-university course that takes advantage of both the experience and quality of the Sapienza teachers and the quality of the technological services of Unitelma Sapienza, as partners of this joint enterprise. The course began in the academic year 2017-2018. From the technological point of view, the STP course uses the MOODLE platform, chosen precisely because of its ability to go beyond the provisional teaching, thanks to functions and tools allowing a high level of interaction and, ultimately, collaborative learning methods.
2 METHODOLOGY

To cleverly integrate classic e-Learning with a participatory and collaborative approach, safeguarding the strengths of both models, the STP course is based on three fundamental pillars:

1. a didactic planning which is theoretically anchored to the principles of socio-constructivism,
2. an expert staff supporting professors and students, with attention to the learning and relational processes supporting the sense of identity and community,
3. a flexible and rich Learning Management System such as Moodle.

Let us now briefly look at each of these aspects.

2.1 The didactic planning

The original e-Learning design started from the lessons already present in the traditional in-presence STP course delivered at Sapienza, which have been re-designed and implemented in the e-Learning version, through a Learning Design template specifically built for the STP course here presented and defined PTIT (Provisional Teaching - Interactive Teaching). The template support teachers in effectively integrate and balance the learning contents provided according to the classic model of self-training, or through video-lessons, and the part of interactive activities designed to promote students’ active participation. Please note that participation in the activities is always optional: each student, in fact, can decide whether to participate or not. Interactive activities, in particular, can be configured as individual or collaborative; the former are generally self-paced, or carried out according to a schedule decided by the student within the course, while the latter are scheduled, as they require the simultaneous participation of students who will work in groups to respond to the teacher’s delivery.

Collaborative activities are supported by specific teaching strategies and techniques, such as Role Taking, collaborative writing and others. At the base, a clear definition of the shared objective and a full request of a widespread responsibility mean that each collaborative activity promotes the experimentation of transversal competences, as well as a new model of university distance education for the Italian panorama. To further support the active role of the student, the design is also based on maximum transparency, that is specifying within each syllabus the weight recognized for the individual activities and the criterion for assigning the points, in full practice as a training “contract”. And, in line with this, students who decide to participate in an activity, commit themselves to it through an application proposed through the Moodle Questionnaire tool.

2.2 The staff of lecturers and tutors to support the learning and relational processes

To support an effective implementation of the STP course, a fundamental requirement is given by the presence of a team of well-trained tutors coordinated by the teachers responsible for the course. The team is made up of process tutors and content tutors: the former are responsible for offering organizational and transversal support to the students, while the latter are assigned to the individual courses and work in close contact with the teaching instructors, setting up the environment Moodle, preparing and monitoring interactive activities. Overall, tutoring efforts are geared to accompanying students in their distance learning experience, through constant support, both online and in person. During each semester, moreover, moments of face-to-face meeting are foreseen in which to offer information, answers to the main doubts, and methodological mentoring.

Inside, the staff works in an organic way from the design phase to the implementation and monitoring of the activities, through regular meetings in which the group shares best practices and critical episodes, offers and receives technical support, aligns with the trend of individual courses. The objective, in fact, is to preserve the delicate balance between traditional teaching and interactive teaching, guaranteeing an excellent quality of both, respecting the workloads and the e-Learning nature of the course. In other words, students must be able to enjoy all the advantages of a pure online model, while exploiting the educational potential of active and collaborative approaches.

2.3 The Learning Management System: Moodle

The STP course of Sapienza and Unitelma Sapienza is delivered through Moodle, within which each course has its own course page, structured according to a common template. The template includes a
first introductory section of the course containing the syllabus, an announcement forum for teachers and tutors’ notices, a forum for student requests (Fig. 1).

![Image](image-url)

**Figure 1. The introductory section of the course pages on Moodle**

Based on the didactic design represented in the PTIT template, the course page is then enriched by the specific distribution and interactive resources provided for each Teaching Unit or topic in which the teacher has decided to structure his/her teaching. Provisioning resources always include video-lessons inserted through the file resource and corresponding PDF presentations, then collected in folders. To these can be added links to external resources and in-depth PDFs. Interactive resources are diversified and range between:

a) self-verification quizzes (multiple answer, composition, cloze, correspondences), always accompanied by reasoned feedbacks that guide the subsequent study;

b) discussion forums (general, question and answer) designed to encourage students’ exchanges guided by specific work deliveries, to collect individual or group products, and to allow the organization of collaborative activities;

c) questionnaires, used to collect applications and other types of organizational information;

d) glossaries, as tasks to be carried out collaboratively;

e) link to a debriefing video in which the teacher offers detailed feedback on a recently completed activity;

f) link to the Webinar platform, as a synchronous interactive activity that the teacher introduces during or at the end of the course to deepen topics, launch or discuss the outcomes of a collaborative activity.

### 3 RESULTS

Analyzing the motivations that led the students to choose the STP course, a survey proposed at the beginning of the first course (a.y. 2017-2018) shows how the students were guided by the passion for psychology in general (Being able to follow my passion: graduate in psychology), by the need to balance work and life (Being able to study and work at the same time), or by specific opportunities (I tried to access the psychology and health test at La Sapienza but I did not enter, then they accepted me at the stp course at the "X" university but unfortunately I did not feel well, so when I received the email from Unitelma Sapienza I decided to sign up).

Thinking in terms of the model adopted for the STP course, the testimonies collected at the end of the first year allow us to highlight the crucial aspects:
• the interaction between the institution and the student, appreciated as "aimed at the constant improvement of cultural qualifications, realized through its own model of training and personal learning";

• the space-time flexibility of the study: "unconstrained times allow student-workers to study and attend even when working, thanks to the team's ability to respond flexibly to individual needs, guaranteeing full independence and personalization of teaching"; "Without a physical presence constraint, but constantly tracked, the courses allow the student to periodically monitor the level of learning, also through moments and tools of self-assessment";

• the importance of the presence of reference figures, such as tutors: "the presence of tutors is fundamental, as they assist the learner during the entire course of study, following him/her for every subject and helping him/her to properly orient himself/herself in the examination of the topics, sometimes even only with practical advice".

4 CONCLUSIONS

The first year of the STP course certainly represented a challenge from many points of view: from the organizational synergy between Sapienza and Unitelma Sapienza, to the involvement of teachers in a new teaching approach; from the for trials and errors definition of operational models and practices, to the reference to consolidated organizational strategies; from preserving the balance between traditional and interactive teaching, to supporting students' sense of identity and community; from the management of the inevitable technical issues, to the familiarization with tools and resources which were new for the majority of the students. These efforts were, on the one hand, carried out by the Sapienza team and teachers and, on the other, supported by the technological environment, which made it possible to expertly mix the different souls of this course, within a flexible and rich system. As we know, however, the heart of the success of a training course insists first of all in its pedagogical planning and it is at that level that we are working, starting from what was observed in the first year and following these directions: a) a further clarity of the "contract of classroom" that favours the students' widest autonomy in the choice between the different modalities of participation, b) the transversal coordination of the parallel teachings and a wiser management of timing, c) the forecast of activities and moments in support of the study, in where students can confront teachers in view of the exam, d) a greater use of Moodle resources which, in the context of the proposed interactive and collaborative activities, could and should support key competences such as self-evaluation, critical thinking, peer-feedback. In this sense, the Wiki and Workshop resources lend themselves and can offer effective solutions, even within an exclusively online course such as the STP degree course, as they guarantee ease of use for the students and monitoring for the tutors, in respect of an increasing level of complexity compared to other already used resources.

REFERENCES

