

MOODLE: 10 YEARS @ UNIVERSIDADE PORTUCALENSE

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Abstract

Modular Object-Oriented Dynamic Learning Environment (MOODLE) was first used in Universidade Portucalense during the 2003-2004 academic year only with the presence of three courses, all responsibility of the administrators of the platform, members of the Computer science Department. Four years after, the administration of MOODLE became responsibility of Computing Services. In 2008 all the courses taught at the University Portucalense have presence in MOODLE, regardless of the willingness of responsible teachers. Between July 2006 and July 2013 the Rectory has promoted five MOODLE applied courses for teachers. At the beginning of each school year there is a reception to new teachers where they have also an introduction to this platform. Meanwhile there have been some upgrades in the platform, and in 2013/14, the university upgrade to the last version.

Rounding up 10 years of MOODLE in Universidade Portucalense an evaluation of this use must be done as well as a picture of how teachers see the 2014 platform, and how they think this resource can improve students' learning. Universidade Portucalense is a good mirror of Higher Education Institutions in Portugal as it is organized in four different departments and has several types of teachers: different scientific areas, ages, cultures and distinct technological skills.

This study aims to find if teachers use MOODLE and how they do it to supplement classroom lessons, improving or contributing to student success, from the teachers' perspective.

Keywords: MOODLE; e-learning; Higher Education Institutions; b-learning; digital educational resources

1 INTRODUCTION

Modular Object-Oriented Dynamic Learning Environment (MOODLE) is one of the most popular learning management systems in use in higher education institutions. Different studies have been developed, focusing, for instance, the identification of the factors affecting the effectiveness of MOODLE from the students' perspective (Damjanovic et al 2012, Horvat, 2013), the acceptance of MOODLE technology in different scientific areas (Escobar-Rodriguez, 2012), its adoption in higher education (Costello, 2014).

Universidade Portucalense is a private Portuguese university where MOODLE is being used for 10 years. IT was first used during the 2003-2004 academic year only with the presence of three courses, all responsibility of the administrators of the platform, members of the Computer Science Department. Four years after, the university Computing Services, assume the responsibility of MOODLE administration. In 2008 all the courses taught at the University have its own page in MOODLE, regardless of the willingness of the teachers.

There have been some upgrades in the platform, and in 2013/14, the university upgrade to the last version. Since this year all the students are automatically registered in MOODLE in all the courses they are attending.

Portucalense teaches courses in different scientific areas: economy and management, computer science, law, psychology, tourism and education, having several types of teachers belonging to these different scientific areas, with different ages, cultures and distinct technological skills. In order to develop the necessary skills so that everyone can use the platform, the Rectory promotes applied courses for teachers, and at the beginning of each school year there is a reception to new teachers where an introduction to this platform is also presented. However, there is no evidence of how teachers use MOODLE to supplement classroom lessons, and about what they think of MOODLEs' contribution to student success in each course.

Rounding up 10 years of MOODLE in Portucalense an evaluation of this use must be done as well as a picture of how teachers see the 2014 platform. To achieve these goals, a survey was carried out in July 2014. This article presents the result of this survey.

This article is divided in four sections: the introduction, in the 2nd section the research methodology used, in the third section the research results and finally the conclusions and future work.

2. RESEARCH METHODOLOGY

The main objective of the research described in this paper is to understand how Portucalense teachers use MOODLE and how they think this resource can improve students learning.

A quantitative study was made through a questionnaire sent to all teachers of the first cycle courses being taught at Portucalense in academic year 2013/14.

The teachers belong to four different departments, namely 1) Law, 2) Economy, Management and Computer Science, 3) Psychology and Education and 4) Tourism, Heritage and Culture. It should be noticed that this departments result from a restructure made in the university organic units in the middle of the 2013/2014 academic year. Before that time, there were also four departments, but with a different configuration of scientific areas: 1) Innovation, Science and Technology, 2) Economics and Management Sciences 3), Education Sciences and Heritage and 4) Law. The Economy, Management and Computer Science department result from the merge of the Innovation, Science and Technology and Economics and Management Sciences departments; the Psychology and Education department and the Tourism, Heritage and Culture department result from the split of the Education Sciences and Heritage department.

The questionnaire was structured in three sections. The first section, corresponding to teachers profile characterization, included questions about the identification of the present and previous department, scientific area of teaching, age and year of admission as a teacher in Portucalense. The second section, about the relationship of teachers with technology and MOODLE, included the questions about the attendance of MOODLE courses at UPT, the level teachers think they are relating to MOODLE use and technology use (in a scale 1-Poor to 5-Excellent), why did they start using this platform and why they use it. The last section, about how teachers use MOODLE, included questions about the way teachers customize their MOODLE area, the format they use in the courses, which elements are available in the course page, the frequency of MOODLE use, the activities and resources used, and their opinion of MOODLE usefulness in the support of the learning process. The questionnaire only has an "open question", regarding the opinion about MOODLE as a teaching/learning tool.

The questionnaires were delivered in July 2014 and got a total of 48 responses within a universe of 112 teachers (42.86%). ~~xxx~~40 from those teachers belong to the Law department, 40 ~~xxx~~ to the Economy, Management and Computer Science department, 20 ~~to~~ the Psychology and Education department and ~~xxx~~ 12 to the Tourism, Heritage and Culture department.

3. RESEARCH RESULTS

The profile of the teachers who responded to the survey is characterized by: the current and past department names, the main scientific area of teaching, the age and year of admission as a teacher in UPT.

42% of inquiries were received from teachers of the Economics, Management and Computer Science department; 23% of those belong to the older Innovation, Science and Technology department and 19% to the Economics and Management Sciences department, as depicted in figures 1 and 2.; 23% of inquiries were received from teachers of the Psychology and Education department and 12% from the Tourism, Heritage and Culture department; these two departments result from the split of the Education and Heritage Department. I.e.: 50% (20 out of 40 possible) of the teachers of the Department of Economy, Management and Computer Science; 27.5% (11 of 40) of the Law Department, 55% (11 out of a possible 20) in the Department of Psychology and Education and 50% (6 of 12), Department of Tourism, Heritage and Culture.

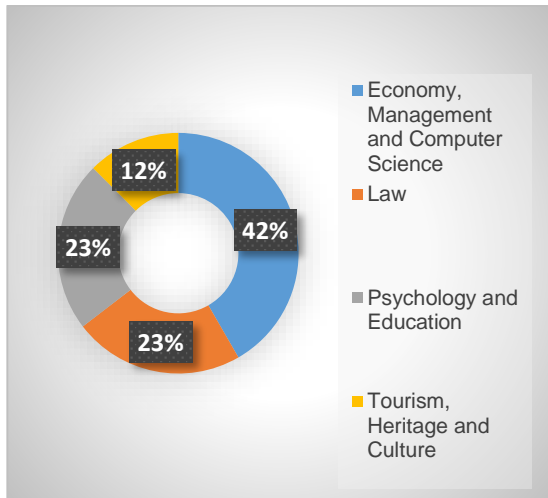


Fig. 1 - Current department.

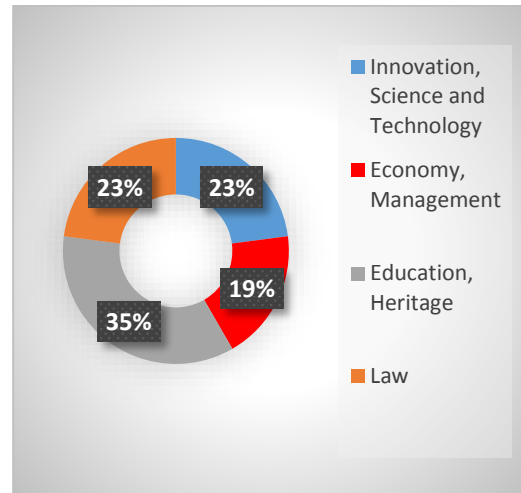


Fig. 2 - Previous department.

Considering the main scientific areas of teaching, 23% were from the law area, 19% from economy and management, 19% from computer science and 13% from psychology, as showed in figure 3.

Most of the teachers are older than 30, being 33% between 30 and 40 years, as displayed in figure 4.

Considering the admission year as a teacher in UPT (fig. 5), 54% teach for less than 10 years in UPT.

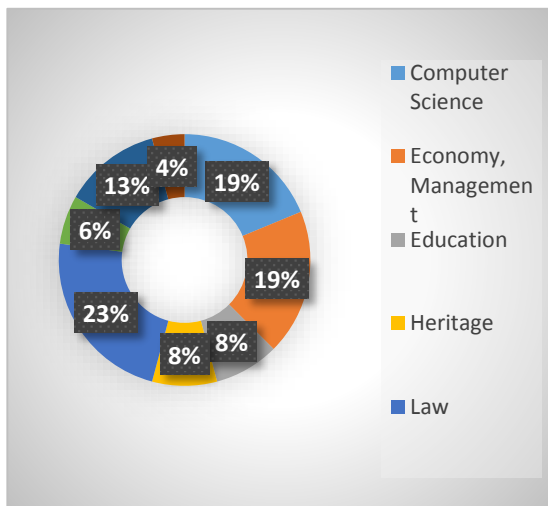


Fig. 3 - Field of study.

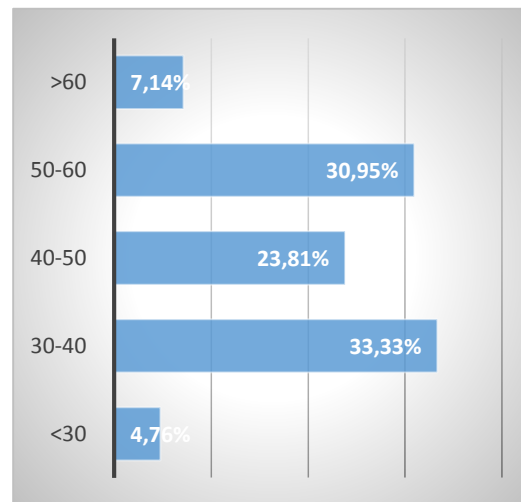


Fig. 4 - Age.

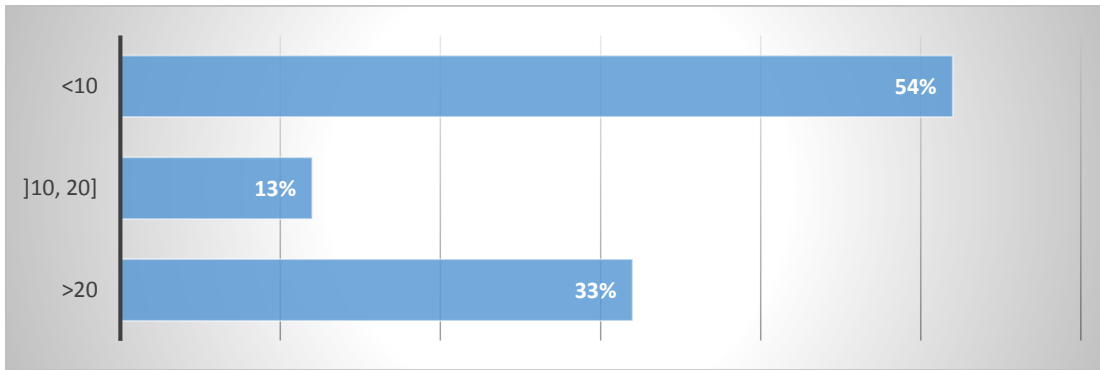


Fig. 5 - Number of years teaching at UPT.

69% of the teachers have attend a MOODLE course at UPT.

Most of the teachers think they are comfortable using MOODLE (40% rated themselves in the level 4 (in a scale 1-Poor to 5-Excellent) and 38% in level 3. However there are still 12% rating themselves in levels 1 and 2, as showed in figure 7.

As technology users, almost all the teachers rated themselves as 3, 4 and 5 level (in a scale 1-Poor to 5-Excellent), as displayed in figure 8.

42% uses MOODLE since three to five years ago. Only one person answered "no use" and said that "I know how to work with MOODLE but I do not like it".

57% of the teachers answered that they start using MOODLE by superior indication and 43% by their own initiative. However, in the present, 79% are using it as their own initiative and only 21% use it as an obligation. Most of the computer science teachers, 67%, begin using MOODLE by their own initiative. The same for half of the teachers from tourism and half from psychology. The majority of the other teachers had begun using it by superior imposition.

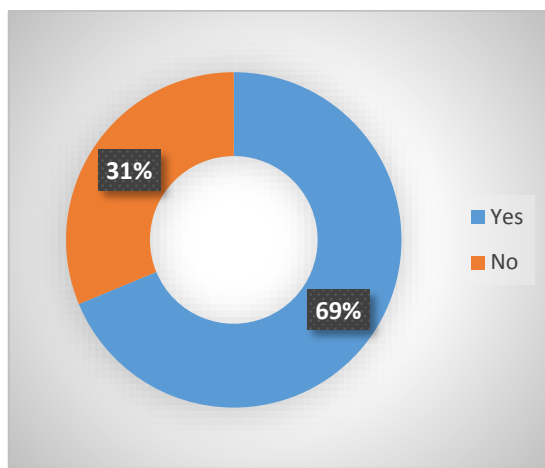


Fig. 6 - Attended any MOODLE course @ UPT.

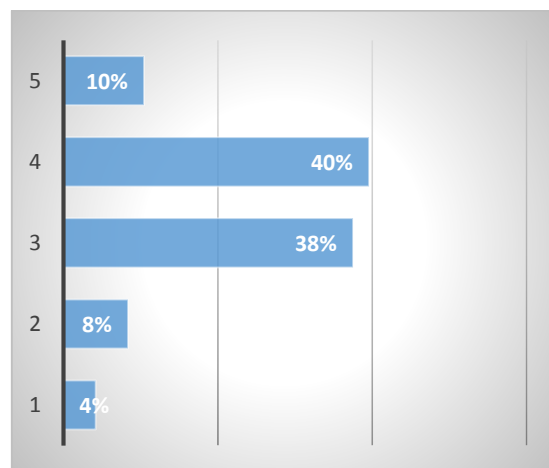


Fig. 7 - Level of MOODLE use (1-Poor to 5-Excellent).

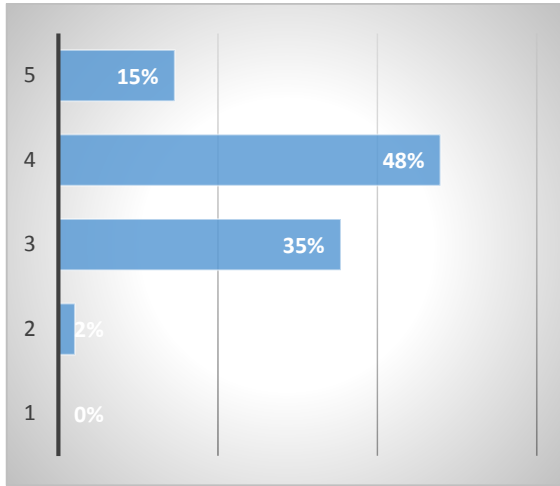


Fig. 8 - Level of technology user, (1-Poor to 5-Excellent).

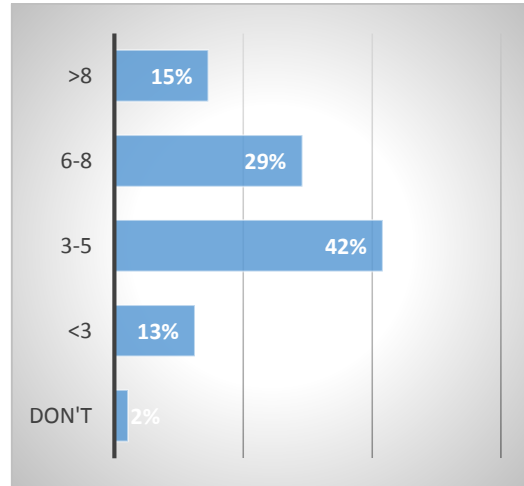


Fig. 10 - Years of MOODLE.

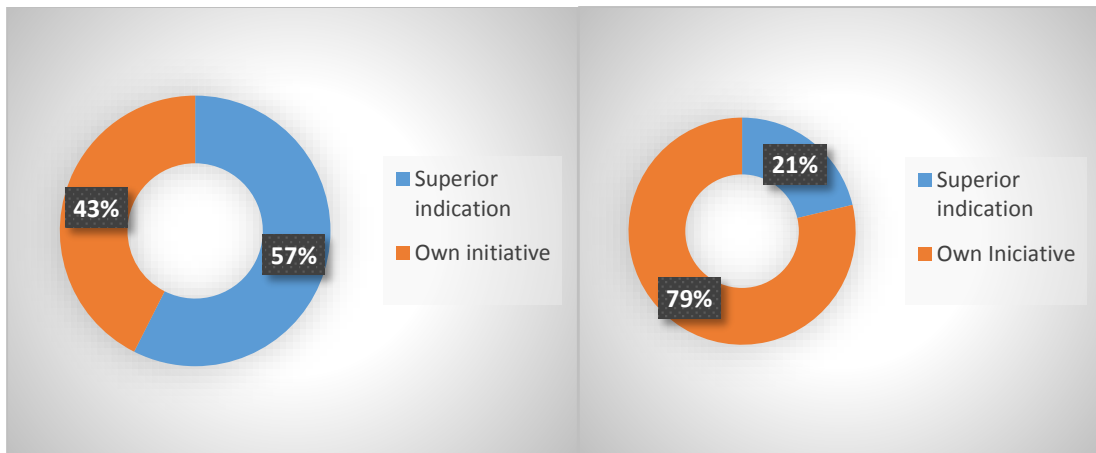


Fig. 9 - Why did you start using MOODLE.

Fig. 11 - Why do you use ~~MOODLE-MOODLE?~~

75% of teachers of Education and Heritage started using MOODLE by superior indication, but currently they use it for their own initiative (fig. 12); 36 % of Law, 33% of economics and management, 25% of education and 22% of computer science still uses MOODLE for obligation.

There are 10 persons who begin and still use MOODLE by superior imposition; 4 of those never attend any kind of MOODLE course. Considering the 17 teachers that began using MOODLE by imposition, but that now use it by their own initiative, 12 have attend a MOODLE course. Some of the teachers that classify themselves as bad MOODLE users, never attend any MOODLE course.

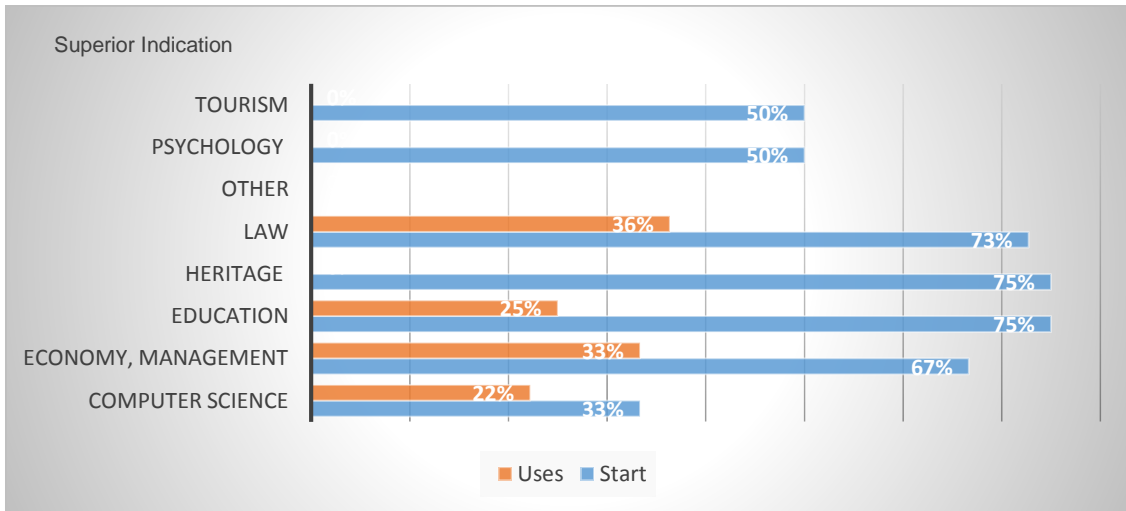


Fig. 12 - Field/Superior Indications.

The third part of the questionnaire intends to understand how teachers use MOODLE. As displayed in figure 13, 19% of the teachers don't know what "is to customize their area and 43% don't customize it at all. 85% use the Topics layout format.

Considering the elements that teachers put available in their courses (fig. 15): course schedule (30%), hours to receive students (55%), general information about the course (74%), syllabus of each lesson (21%), assignments (74%), exams (51%), exams correction grids (57%), slides (79%), documents and other information sources (89%), links (62%) and notices (72%).

Most of the teachers do not use MOODLE every lessons, during the school year; 64% use it in some classes and 2% rarely use it, as depicted in figure 16.

File Assignments (31%), Private folders (24%) and Discussion Forums (22%) are the activities teachers refer they use most (fig. 18); some also use it to Create Groups (9%), Create tests (9%) and Wikis (6%),.

GoogleDocs (38%) and DropBox (25%) are the kind of files teachers most import in MOODLE, (fig. 19): 12,5% YouTube, 2% BoxNex and Wikimedia were also referred; nobody uses Alfresco, Amazon, Fickr, Merlot, Picasa or WebDAV in their classes.

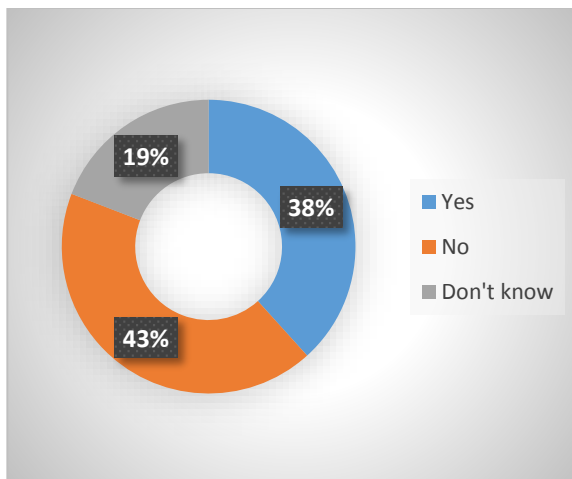


Fig. 13 - Customized your MOODLE area customization.

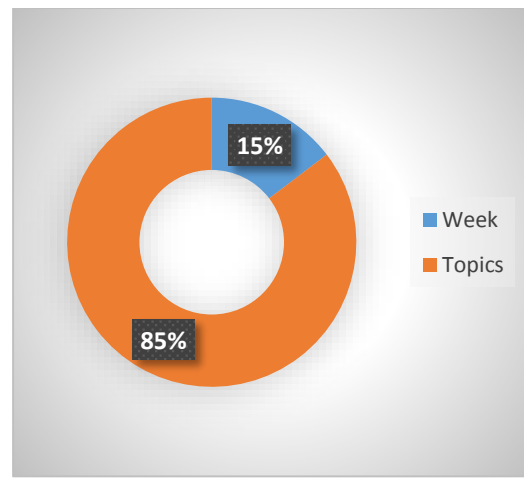


Fig. 14 - What kind of MOODLE format do you uses?.

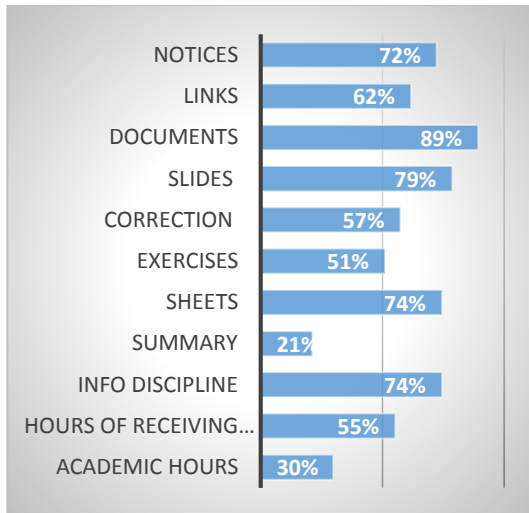


Fig. 15 - The elements that teachers use in MOODLE.

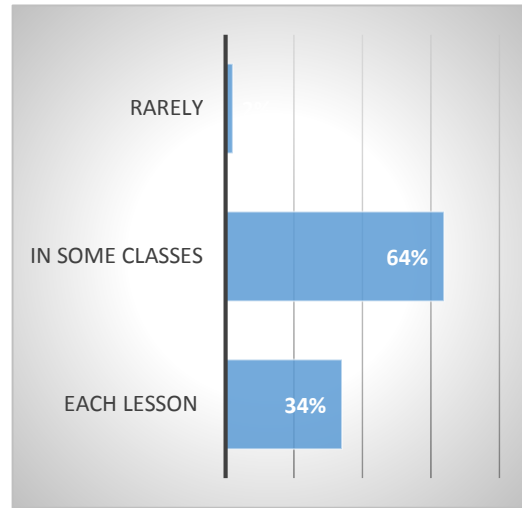


Fig. 16 - Frequency of MOODLE use in the academic year.

Most of the teachers think MOODLE is a useful tool to support teaching, mainly to make class materials available to students, to keep students informed about what is happening in the course and to help in the student learning process, as displayed in figure 17.

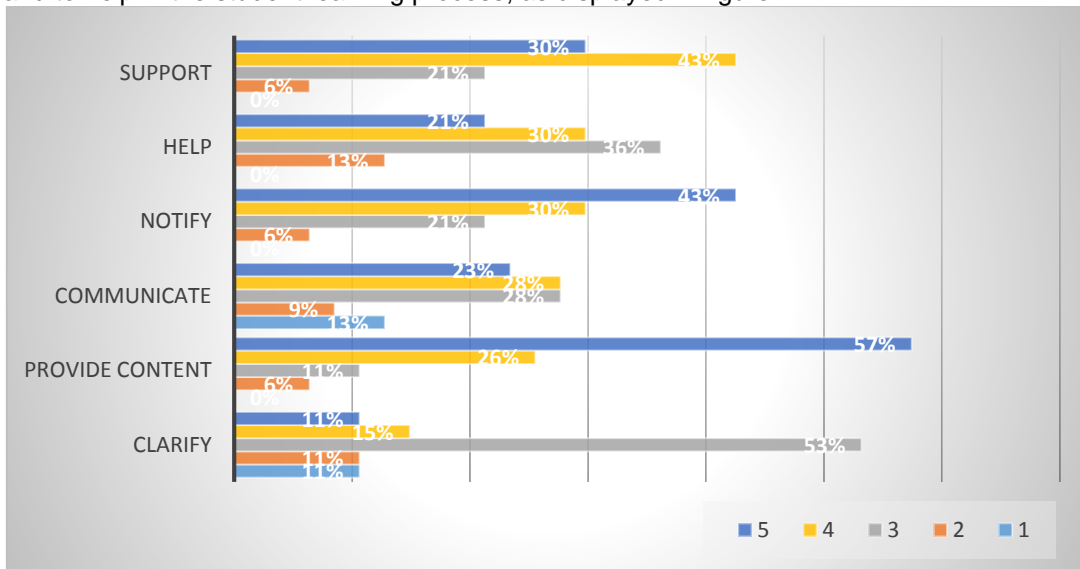


Fig. 17 - Usefulness of MOODLE in the teaching process (1 (poor) - 5 (excellent)).

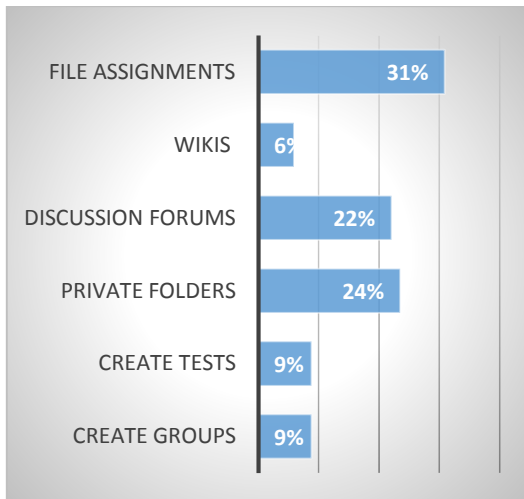


Fig. 18 - The kind of activities teachers use

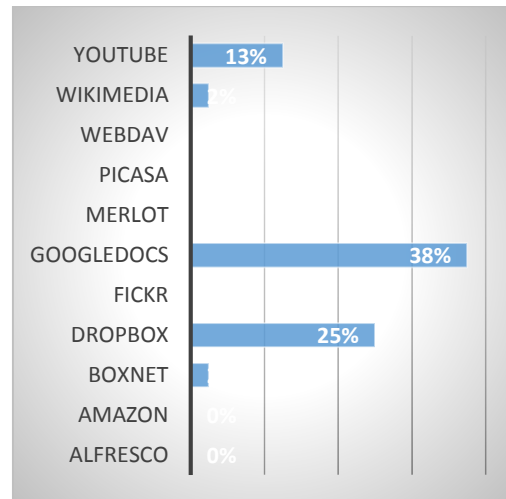


Fig. 19 - The kind of files teachers have imported into MOODLE.

Regarding teacher's opinion about MOODLE as a teaching/ learning tool most think MOODLE is an excellent tool for teaching and learning, but use it primarily to deliver the material to students.

4. CONCLUSIONS

The questionnaire was answered by 48 teachers and only one does not use MOODLE. There are still 21% of teachers that use MOODLE by superior imposition. However, the kind of activities and resources they use it is not very different from the ones used by the other teachers.

Considering the scientific areas of teaching, there are no significant differences in the way MOODLE is used.

Despite several MOODLE courses that were taught in UPT, there are still 30% of people who did not attend any training. Only 48% needs more training on MOODLE.

Slides and documents are the most usual elements in MOODLE. Teachers use the resource File Assignments but they don't use imported files (only 38% GoogleDocs, 25% DropBox).

Having verified that teachers use MOODLE and that the majority think MOODLE is an excellent content management system, but, that there are still some teachers that only use it by superior imposition, it is necessary to understand which characteristics influence the use of MOODLE.

5. REFERENCES

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