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# Accommodating students with disabilities in academic and institutional contexts

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***Abstract:** The development of educational technologies has been increasing the opportunities for students with disabilities to integrate Higher Education Institutions. However, in order to provide an adequate accommodation of these students special needs we believe that it is necessary to provide and articulate a sufficient academic and institutional support. Although educational technologies have been showing potential to increase disabled students access to course contents and to equal learning opportunities there are other needs that demand the institutions attention and that need to be integrated into the its mission. In this paper we present how the articulation and intervention of several support services is promoting the inclusion of students with disabilities at School of Accounting and Administration of Oporto.*

***Keywords:** students with disabilities, PAOL, MOODLE, support services*

## 1 Introduction

The development of internet technologies and particularly technology-mediated education has been opening up opportunities for students with disabilities to enter higher education. Educational technologies offer disabled students an amplified access to course contents and to communication tools allowing for a better inclusion in academic contexts. In fact, internet communication tools can be a valuable instrument for disabled students to interact with others without having colleagues' preconceived notions of disability affecting that relationship [1, 2]. Therefore, the development and access to technology has potential to improve the quality of life of students with disabilities [3, 4, 5, 6] offering them academic and professional equal or similar opportunities that otherwise would be unviable. This is a key aspect on the role that technology represents in schools and in society nowadays, once most part of schools, institutions and enterprises' services have been digitized, allowing for an inclusion of broader range of students and professionals, including the disabled ones. Furthermore, as the primary training entity, schools have also a determinant role on the development of disabled students' technical skills because these skills can determine their professional life and impact their social integration. Therefore, schools should not only foment the access to equal opportunities in education, but also develop and stimulate the disabled students' technical training that would allow them to actively engage in that same education and in later work situations.

We believe that the best way to promote this type of student involvement and training in Higher Education Institutions is to bring together a set of necessary services and conditions that can impact the whole schools academic and social environment.

In Higher Education students present physical disabilities such as visual, hearing, speech and/or orthopaedic impairment, once students with severe learning or cognitive disabilities tend to be retained in lower levels of education. Therefore, the support given to these students most focus on granting learning and ergonomic accessibility, equal opportunities and psychological support.

At ISCAP we are using two complementary types of intervention to support students with disabilities at two levels: academic and institutional. In order to provide students these services there are two main school units working with both students and teachers, in order to promote and improve the communication and interaction amongst each other. It is determinant that the teachers and the school understand the needs of students with disabilities so that they can be fully integrated into classes, activities and in the school's culture.

## **2 Academic Support**

At the academic level, the PAOL – Innovation in Education Unit is the responsible for managing and disseminating the use of technology mediated education. The unit aims at providing support to the implementation of computer-assisted teaching and learning, being constituted by human resources and material resources whose aim is to stimulate the use of information and communication technologies both by teachers and students in an harmonious and integrated form. The pedagogical innovation and the temporal flexibility of the support of individual and collaborative study of our students are the central vectors of this project that converge to improve the quality of the existing educational offers.

Along with these vectors PAOL explores technologies as a pedagogical resource to contribute to the innovation of the teaching/learning process and to help students prepare their professional life, seeking at the same time to promote their engagement in the study of the subjects. For this, it was important to motivate students by simplifying their access to knowledge, creating Internet using habits in study and working activities, making diversified material to back up study available and by providing different forms of learning, according to the various individual learning styles.

PAOL has adopted MOODLE as the institutional LMS since in Portugal its usage has been increasing rapidly, thus justifying the opening of an open space to share experiences. MOODLE has interesting characteristics as it is an LMS that offers a set of activities that are adaptable to the contents of the most diversified subjects. In order to create a dynamic use of MOODLE, PAOL promotes several trainings sessions on a continuous base, as well as in other educative technological areas to motivate teachers in the usage of such instruments, helping them in managing MOODLE and generating creative offers to their students.

Although PAOL's initiatives are to serve every student needs, this unit is also responsible for helping teachers supporting and integrating students with disabilities in their class and in the teaching-learning process. This is to say that PAOL has developed bidirectional intervention lines both bottom-up and top-down that comprehend the students and the teachers need. In fact, as managers of the teaching learning process, teachers should receive adequate technical and pedagogical support in order to facilitate and instigate the inclusion of students' special needs. This concerns a top-down

intervention line where initiatives like teacher's technical and pedagogical training are included. We believe that it is important to act close to teachers, once they usually feel very lonely and sometimes frustrated in developing and adjusting their practices to students with special needs. The success of student involvement and needs satisfaction relies heavily in teachers' pedagogical and personal performance. Therefore, this top-down intervention aims to provide teachers with the correct tools and skills, but also to offer a continuous daily support in order to respond to their difficulties, to keep them motivated and to help them implementing and managing creative educational solutions.

In this context, the PSO - Projects and Support Office from PAOL assumes the most preeminent role, once specialized staff ensures teachers daily support by helping them to prepare their contents in digital formats and to make them available online. This office also offers pedagogical consultancy to teachers and helps them to construct online teaching-learning activities.

In what the bottom-up intervention line is concerned, the Projects and Support Office is also the major support mechanism, once it responds to students difficulties in managing the available educational technologies and serves as a mediator between their needs and teachers activities. Although this line of intervention concerns all the schools' students and not students with disabilities in particular, their needs are framed into the office's scope, requiring special attention and care. For instance, when for several reasons a disabled student cannot access, manage or find the online contents and/or participate in some online activities they can contact and/or visit the PSO and ask for help. When this happens, in some cases and when necessary, the PSO staff seats with the student for as long as it is required in order to help him/her gathering the necessary online contents and/or to complete their online tasks. It is of this office competency to find response to each particular situation and to develop and apply the necessary solutions by it self or in direct collaboration with teachers.

Apart from the PSO areas of intervention, students with disabilities can also count on teachers supplementary efforts, although in this case this type of support depends only on the teacher's willingness to help more. From our experience we are able to report that usually teachers tend to make an effort to respond to students' needs be offering additional private lecturing sessions and/or to use MOODLE to give students additional notes, bibliography and exercises or even class written summaries.

### **3 Institutional Support**

As we have seen, the academic support aims to offer both students and teachers optimized resources and skills in order to improve educational processes, student accessibility and equal learning opportunities.

In Higher Education the institutional support given to students with disabilities also represents a determinant role on how the student is included in the system, what type of adjustments should be made in order to accommodate that student in particular and what type of privileges should be given to him/her.

In order to establish a common procedure on the best way to accommodate students with disabilities the Polytechnic Institute of Oporto, which houses ISCAP, has developed the Statute Applicable to Students with Disabilities, published in 2004, where the concession of that statute and the students' special privileges are regulated. This

document also aims to ensure people with disabilities about their place as future students in the school.

One of the first guidelines of the Statute Applicable to Students with Disabilities is the constitution of an Analysis Committee, composed by a member of the School Board, a member of the Scientific Board, one member of the Pedagogical Board and the Psychology Office.

The Psychology Office's role in the Analysis Committee is mainly to interview students that wish to apply to the statute of student with disabilities. From this interview the psychologist produces a report about the student limitations and needs that is sent to approval by the other members of the commission. This limitations and needs analysis is determinant for the student accurate accommodation in the school once it communicates to the Analysis Committee what the student privileges should be.

According to the Statute Applicable to Students with Disabilities, these privileges may include, amongst other:

- Priority in the schools' administrative services;
- Adjustments that improve ergonomic conditions in classrooms;
- Possibility to audio record classes;
- Adjustments in evaluation instruments, such as:
  - o Replacing oral exams by written exams, or the other way around;
  - o Having additional time to complete the exam;
  - o Having a break during the exam;
  - o Extending deadlines for practical and/or written essays;
  - o Arranging alternative examination dates that best suit the student.
- Adjustments in the course curriculum;

This document also contains a series of guidelines for teachers concerning the improvement of student access to course contents and the necessary technical support, thus, bridging with the intervention that is carried out by PAOL.

The Psychology Office's role does not end, however, in the moment the student needs have been determined. This office is also responsible for student counselling and physiological support along their academic journey as well as guarantying that the students' needs are being satisfied. In order to accomplish this, the Psychology Office has developed a portal where students can access the Statute Applicable to Students with Disabilities and can also contact the psychologist to ask for counselling.

#### **4 Conclusion**

We believe that the existence of PSO is of most importance in our school and it has deeply contributed to the introduction and development of online support mechanisms to students in general and to students with disabilities in particular. We believe, however, that there is still much to be done particularly where active equal learning opportunities for students with disabilities are concerned. It is still necessary to promote the development of blended learning pedagogical strategies that foment higher levels of student involvement and increase the accommodation of disabled students in, for instance, collaborative tasks.

The harmonious accommodation of students with disabilities is also deeply dependent on the existence of institutional and psychological support that overcomes the

dimension of the academic support. It is this combination of technology-enhanced education with ergonomic facilities, administrative services and inter/intra-personal support that give a qualitative response to the special needs of students with disabilities.

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