



The Special Needs in Polytechnical Institutions Students - Case Study in ESTGL

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Abstract

Special needs in higher education are currently a concern about the teaching methodologies, the assessment system and the information and communication technologies used.

In the case of amblyopia, associated with a wider and lack of lateral vision, students are limited by tubular vision. The need to increase words and decrease sentence length requires new teaching-learning methodologies (Awan et al., 2010) [1];. The use of information technologies, e.g. computers and interactive whiteboards, allows for greater reading flexibility and knowledge acquisition. Audiovisual media, with image projection and sound reproduction, allow students to more easily view contents and understand the material. Computer-based assessment with increased spelling and answers using the same technological means allows students to feel motivated and satisfied, with equal opportunity and equal evaluation regarding dates, text and material used. Using B-On, students can access books that have grown and use updated bibliography. We used feedback from students to develop an educational / motivational intervention pack to improve amblyopia treatment (Pradeep et al., 2014) [2]. This research addresses a case study with special educational needs for visual impairment - amblyopia. The results of two years were analyzed, and a synthesis of the methodologies made in the various curricular units, with spatial emphasis of the evaluation and the results.

We have investigated the effect of amblyopia on reading using eye movement recordings and find that there are often subclinical deficits present for example when reading with both eyes open or the non-amblyopic eye open (Kanonidou et al., 2010, 2014). [3]. The social work course was the degree analyzed. It takes at least three years to obtain a degree and to enter the job market. This student has already been assessed in at least 60% of the curricular units and in at least 50% has obtained approval. Nowadays is currently attending the 2nd year. Teamwork develop skills and participation knowledge. In extracurricular activities its performance is always accompanied by the mentor who is only a process advisor. Burchinal et al. (2008) [4], alerts to School Programs and make an analysis to Working Meeting. This study aims to create an information for the learning system in higher education institutions.

Keywords: *Inclusion, Special needs, Higher Education Institutions, Assessment*

1. Introduction

Nowadays, it is normal to find students in higher education who have special educational needs. The total number of students with disabilities placed in higher education in the academic year 2018/2019 was 231. There are several public services to help students with disabilities: GTAEDS [5] in the inclusion of Students with Specific Needs in Higher Education – Working group to support students with disabilities in higher education; the Balcony includes; the Directory of Support Offices for Persons with Disabilities in Higher Education; BAES - Open Library of Higher Education | Accessible content library(it has a collection of more than 3000 titles in braille, audio and text); PLACES - Accessibility Platform for Higher Education | Tutorials for anyone who wants to learn how to build accessible content in Word, PowerPoint, HTML and PDF.

Based on the assumptions of inclusive education and the growing democratization of higher education, we have been verifying the progressive opening of the university and polytechnics to several minorities, namely students with Special Educational Needs (SEN).

The inclusion of students with SEN in Higher Education (ES) has not been consensual. Their participation and academic success encounter several constraints that need to be analyzed and it is important to respond in order to guide institutional change and lead to the assumption of the responsibilities that HEIs have for social development (Abreu, 2011 [6]; Antunes & Faria, 2013 [7] [8]; Berggren, Rowan, Bergbäck, & Blomberg, 2016 [9]; Bisol & Valentin, 2012 [10]).



Many of the studies that state that goodwill is not enough for the inclusion of ENEE to be a reality and that it is necessary to overcome barriers with regard to accessibility, but also the barriers that affect the inclusion of these students (Cabral et al., 2015 [11]; Fossey et al., 2017 [12]).

2. The case of António in ESTGL

Polytechnic institutes and Universities, confronted, on the one hand, with the increase in the number of ENEE, and, on the other hand, with the international and national policies in favor of inclusive education, have sought to implement appropriate support measures internally for needs of this audience (Working Group to Support Students with Disabilities in Higher Education [GTAEDES], 2014) [8]). In 2017/18, 1644 students with special educational needs enrolled in higher education institutions are referred, 91.5% in public education (1504) and 8.5% in private education (140). Of the 231 students with special educational needs who are not enrolled in 2017/18, 57.1% (132) were enrolled in undergraduate study cycles and 23.4% (54) in integrated master study cycles in 2016 / 17. Some of higher education institutions were subdivided by their organic units. ESTGL is an organic unit of Polytechnic Institute of Viseu. In 54 organic units (20.4%) there is a training offer in the domain of the inclusion of diversity and universal design, either in curricular units or in structured programs for undergraduate, master's and doctoral programs and in higher professional technical courses. In 79 organic units (29.8%) research is carried out in the area of disability or in the field of inclusion of diversity through units or lines of research.

António is a student in the Social Work Course with special educational needs for amblyopic.

Amblyopia (or black eye) is shown by the reduction or loss of vision in one or both eyes, without having a structural abnormality, that is, it is purely functional. It corresponds to a deficiency in the development of the visual system during the maturation period of the central nervous system (which cannot be corrected by glasses), which usually occurs until 6 or 7 years of age. Amblyopia that lasts longer is irreversible. This low visual acuity must be an incomplete development of foveal vision. A fovea is a central region of the retina, where an image is formed of what is focused on by vision and sent to the brain. So, amblyopia is not just an alteration of the eye, but also of the brain region of vision, which was not properly stimulated at the right time.

2.1 Training offer

The director of the Social Work Course, in the Course Council, raised the question of "adapting the course to the profile of students with SEN" due to the implications it has for their success, both academic and professional. The problem arises when the choice of the course proves to be inadequate due to the characteristics and limitations arising from the problem presented by the student, proving to be incompatible with the future professional practice.

In **António** situation, it was found that this was not the case, because this type of disability is not limiting in the exercise of professional functions. It is also important to note that this concern does not seem to stem from an exclusionary stance, but an inclusive one. Some faults and problems in the infrastructure and accessibility are pointed out by all the players in this educational scenario. For example, "access to classrooms" in the way they are identified and "inappropriate classrooms". The course director used computer equipment to improve the assistance to classes and developed the concept of support sessions to fill some gaps in the teaching-learning process. In this sense, both the teachers and the course director reveal that, when dealing with students with SEN, they seek to respond to their needs by making different pedagogical adjustments, namely the "adaptation of the evaluation process", using Information and Communication Technologies.

In classroom there is a large screen, where **António** write some notes from the class and can compare with the documents provided by the teacher and placed on the platform. The assessment is done using the laptop and questions and answers are sent to the Moodle platform.

António participates in all social activities and performs his duties without any need for support. In most cases, it is prepared in advance in order to identify the spaces and the sequence of intervention. However, it is recognized that these students need to be supported more than the rest and that they can fail or give up more easily, especially "when there is no" support.

In terms of socialization, academic and social inclusion, António has a good interaction with other students.

3. Results

The Social Work course has a minimum duration of 3 years, it's an 1st Cycle – Bachelor consisting of 6 semesters. This course has 30 Curriculum Unit (UCs), an observation internship and an internship in the 6th semester.



António enrolled in 2018-2019. He is in his second year and has been successful in at least 100% of UC's in the first year, and almost 80% of UC's in the first semester of the second year. In the summative assessment based on tests and research work, in a score from 0 to 20, he scored two 10, two eleven, two dozen, two thirteen, one sixteen and one seventeen. It is necessary to train teachers and staff in order to understand this type of students and promote their performance to achieve greater success in the training course.

In the case of this student, he managed to interact with colleagues and even though he was a large class, he managed to develop technical and emotional skills that led him to succeed.

4. Conclusions

It is necessary to carry out further studies in order to have a perception of what the process of inclusion in Higher Education is, of the difficulties that remain and of what must be done to move towards Higher Education for All.

The assumption of this policy would allow more targeted and concerted work, namely combating attitudinal barriers, which continue to be one of the main obstacles to inclusion.

We must give a voice to students with SEN so that we can have the information necessary to promote a more inclusive and more supportive academic community.

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