EVALUATION OF THE CURRENT LEARNING SITUATION OF
UNIVERSITY STUDENTS WITH VISUAL AND HEARING SPECIAL
NEEDS

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Abstract

The integrating and standardizing main aim of the education system for the population in general and in relation to students with special needs in particular, is evident. The University, as the nucleus of the Teaching and training period developed in the adulthood, also embraces this double purpose. The university has a crucial role in the transmission of culture, values and scientific knowledge to which a group of professors add a rehabilitative / integrating role, within a normalized context. The fear of being discriminated against, the lack of real considerations and the lack of support services, sometimes justify the absence of declaration the disabilities in some students. The outcrop of this population makes necessary actions aimed at alleviating the constraints and barriers imposed by the university institution, in order to guarantee the principle of equal opportunities, inherent to our social order. The knowledge of the policy, in matter of educational integration in the University, through the compilation of the existing legislation; the delimitation of the concept of equal opportunities; and the study of the risk factors in the university environment as potential agents of discrimination for those who have some deficiency are previous concepts has to be identified in these students. Therefore, it is necessary to develop practical derivation in the actions and services in higher education institutions to avoid these deficiencies. In the current experience, students of physiology of the Degree in sciences of physical activity and sport and Food Science and Technology of the University of Granada took part in this experience. They were surveyed to evaluate the current state of the help systems of students with visual and audio special needs as well as the difficulties that these students present. Subsequently, the material and resources to improve the learning process of students with visual and audio special needs were analysed. The evaluation of these questions and material allowed us to confirm that the acquisition of knowledge in this population with special needs is a complex process and although University provides enough resources to facilitate learning, these materials should be promoted and updated.

Keywords: Students with special needs, learning, teaching, information and communication technologies (ICT).

1 INTRODUCTION

Students taking part in the educational centers are characterized mainly because they are diverse. In Spain, legislative measures have been promoted in the educational field that allow the students to achieve the principle of equal opportunities and taking into account the consideration of disability (Abad, Álvarez and Castro, 2008). This educational framework extends to the university stage in which the maturity and development of the students allow them to voluntarily choose what and how to study. Therefore no student who wants to increase their training should find barriers that prevent it from getting a solid training and formation. In this sense, the measures carried out have allowed the University enrollment of students with disabilities to increase (Suárez, 2011). Even though, 18.7% of people with 25 or more years have university studies in Spain, but on the contrary just 5.4% of people with disabilities at the same age have the same qualifications, as stated in the report on the situation of persons with disabilities made by the State Disability Observatory (2010). Therefore, the representation of students with special educational needs in the University is lower to what is desirable. In the university context, the application of the inclusion principle requires actions aimed at attention to diversity, measures based on respect for equality and universal accessibility, and appropriate services and structures for their attention (Jerónimo, 2009). The University must act to meet the development of the abilities and interests of these students, and must provide the elements of access and training in equal conditions (Luque and Rodriguez, 2008). That is why universities and specifically the University of Granada, taking into account right to education and the defense of an inclusive university, has launched a series of resources and indications that facilitate the inclusion and
enrollment of students with special educational needs. Thus, for years, all Faculties have invested efforts and resources to eliminate any architectural barrier that prevents access to the University to students with some type of physical disability, but we must be aware that students may present different types of disability, such as visual, auditory, physical, psychic... and the University must provide the necessary tools to these students so that their access to higher education is entirely possible.

Based on these premises, and taking into account that students with disabilities are very diverse, this study focuses on the identification, analysis, study of the proposed resources and evaluation of the current situation of education in students with visual or hearing disabilities.

2 OBJECTIVES

The general objective of this study is to analyze the current situation of students with special educational needs (visual and hearing deficiencies) at the University of Granada, to propose lines of improvement.

This general objective has been complemented by the following specific objectives:

1. Identify the difficulties that students with visual or auditory disability face in the university.
2. Analyze the proposals for improvement in the classroom.
3. Study the resources offered to students with these special educational needs.
4. Evaluate the implementation of these resources and the opinion of the students themselves in this regard.

3 MATERIAL AND METHODS

In this study, 55 students from the second year of the Degree in Science, Physical Activity and Sports Sciences and 65 first-year students from the Degree in Human Nutrition attending to the Human Physiology subject of the University of Granada voluntarily participated.

Initially the team in charge of the project studied the possible difficulties and actions to be carried out with the students who presented visual or auditory educational needs. Subsequently, this material was shared with the students who participated in this study and finally, once the students learned about the difficulties and resources available to their colleagues with visual or hearing disabilities, the current situation was evaluated from the students’ point of view.

4 ANALYSIS OF TEACHING CURRENT SITUATION WITH STUDENTS WITH VISUAL AND/OR AUDITORY EDUCATIONAL NEEDS

4.1 Identification of the difficulties faced by students with special educational needs (visual and hearing)

Students with visual disabilities

- Class notes: due to its difficulty when viewing the projected audiovisual material, blackboard, slides, posters displayed inside and outside the classrooms etc ...
- Difficulties when understanding diagrams, structures, abstract terms, for lacking the possibility of having visual references of support.
- Non-verbal communication.
- Accessibility of computer resources for practices.
- Problems for the displacement or ambulation inside the classroom, especially at the beginning of the course.

Students with hearing disabilities

- Follow the professor's explanations, communication, learning process, interpersonal relationships or emotional state.
• Exams, class works, take notes.
• Attendance at courses, tutorials, conferences, etc.

4.2 **Actions to be carried out in the classroom to improve the learning of these students**

4.2.1 **Disposition in the classroom**

**Students with visual disabilities**

• The classroom should be very well illuminated to favor the visualization of the teaching material, ensuring that students with visual educational needs sit in the front rows and avoiding direct exposure to light or the reflection of the blackboard.

• The doors must be completely open or closed, to avoid difficulties when entering or leaving.

• The furniture must remain in the same position during the whole course, (within the possibilities of each classroom), to promote the familiarization of students with the environment. In case of changes it is necessary that they communicate.

• Avoid leaving objects blocking the path.

**Students with hearing disabilities**

• The student with special hearing educational needs should be located in the first rows to avoid distractions or difficulties so that the sound arrives clearly.

• In the case that the student is deaf, it must be placed in such a way that the Spanish sign language interpreter can be located in front of him and thus be able to carry out his function.

• It is convenient to repeat the questions the rest of the students make during the class, to favor integration and learning.

4.2.2 **Communication**

**Students with visual disabilities**

• It is necessary that when addressing the student both the professor and the rest of the classmates introduce themselves, to favor the identification of the interlocutors.

• It is recommendable to talk slowly and clearly, without shouting or raising your voice, as they do not have a hearing disability.

• If it is necessary to call attention to this type of students, it should be done by name and by turns, especially if the student is blind.

• Do not substitute verbal language for gestures.

• Do not use place adverbs when giving spatial indications, since they do not indicate a correct dimension for a person with visual disability. Replace them with specific references such as: "to your right", "behind you".

**Students with hearing disabilities**

• The communication with them never should be carried out without looking directly. If necessary, their attention should be get before speaking with them or even learning their name in sign language for students who are deaf.

• Speak slowly and vocalize correctly, without the need to scream.

• The professor should be placed in front of the student so that he can make a correct lip reading.

• Avoid walking in the classroom while explaining and not giving information if the professor is not in the student's field of vision.

• The lighting in the classroom must be correct, since darkness makes lip reading difficult. In the event that the classroom is obscured to perform any type of audiovisual projection, the teacher should be placed in a well-lit area and approach the student as much as possible.
4.2.3 Group work

**Students with visual disabilities**

- Increase the motivation of students with visual disabilities to be as participatory as possible, allowing them to be included in groups with classmates, normalizing the situation.
- Encourage collaboration between colleagues, an aspect that favors inclusion to the group (sharing notes, joint work, debates, etc.).

**Students with hearing disabilities**

- In group conversations they need to respect the shifts and not talk all at once. It is convenient that the disposition of these groups be in the form of "U".
- Promote work in small groups, so that the student can relate to other classmates.
- Some deaf people hardly follow a group conversation without a sign language interpreter, so include them in the group to favor learning.

4.2.4 Exams

In general, adaptations may be made in the evaluation of these students, without altering the competences, objectives and basic contents, to adapt it and adapt it to said disability. It is convenient, to agree beforehand with each student and according to their needs, the most suitable form of evaluation.

**Students with visual disabilities**

- If the exam is oral, it should be done, if possible, like the rest of the classmates. If the test or exam is written, you may need extra time depending on the technique used.
- If the exam has to be transcribed into Braille, advance the exams to the Coordinator of the ONCE Educational Team, with time enough for transcription.
- It will be necessary to anticipate in advance the typography extension in the tests, as well as the accessibility of the computer resources that are used for exams, practices, etc.

**Students with hearing disabilities**

- Adaptations may be made in the evaluation, without altering the competencies, objectives and basic contents, to adapt it and adapt it to said disability.
- It is desirable that the partial or final exams are carried out by the student as well as the rest of their classmates (written, oral, test type, etc.) contemplating the supports and resources for the correct performance of the same.
- The presence of the Spanish sign language interpreter during examinations in the classroom must be assessed by the professor. Exceptionally, the oral examination (with the participation of the interpreter) will be carried out when the interested party requests it and if the professor considers it convenient to know the degree of knowledge of the subject matter of evaluation.
- The information related to the exam must be given in advance and in writing, communicating the subject matter of the exam, the examination modality, its approximate duration, the basic structure of the exam, the documentation required of the student, the didactic or bibliographic material that, in your case, you can or should use it, as well as any other indication of interest to the student.
- It is advisable that the exam is given to know as clearly as possible regarding its presentation and statements.
- Students with hearing disabilities who so require and request, may have 25% more time for the completion of tests or written exams.

4.3 Resources to improve the learning of students with visual or auditory educational needs

The resources adapted for these students are based on improving the learning process, making it more accessible and comprehensible. For this, the figure of a collaborating student or tutor can be essential, allowing the student with educational needs a support in the classroom.
Collaborating student: they will be enrolled in the same course and subjects and will carry out the following activities:

- Attend class, providing notes and notes that students with special needs can’t take.
- Analyze the contents explained by the teaching staff in common.
- Serve as a link between the student and the teachers to improve the use of the classes.
- Accompany, especially at the beginning of the course, to show the facilities and services of the University.

Tutor Professor:

- Support the student in their curricular development.
- Serve as a link between the student, the faculty and the administration and services staff.
- Advise the student in the preparation, organization and preparation of works and teaching materials.
- Coordinate with the collaborating student and monitor the development.

In the specific case of students with hearing impairment, the resources will depend on the auditory difficulties they present, the percentage of disability, language they freely wish to use (sign language or oral language), as well as the supports and/or resources that can be obtained. Together with the figure of the collaborating student and the tutor, the figure of the sign language interpreter has a key role. Therefore students who use sign language, need the support of an interpreter to acquire an understanding of the contents that make up the different subjects. The professor must take into account that the sign language interpreter is a mere bridge of communication between the University community and the student with hearing disability, therefore, this professional is a neutral resource whose function is to transmit all the sounds and messages that they occur during the class.

5 EVALUATION BY THE STUDENT OF THE DIFFICULTIES AND RESOURCES FOR LEARNING WITH THESE STUDENTS

Once analyzed the difficulties and resources available to students with special educational hearing or visual needs, students were surveyed in this regard, with the intention of evaluating the knowledge that the university community has about this field.

Of the 120 students surveyed, 55% were women and 45% were men, between 18 and 25 years old, the majority (92%). Only 2 students had a hearing disability and none visual. Practically all of the students indicated that they know the difficulties faced by students with visual and hearing disabilities (98%), but once analyzed, all of them recognized that they did not know some of them.

Regarding the actions to be carried out in the classroom to improve the learning of these students, 82% of the students without visual or hearing disabilities did not know the improvements to carry out in the field of communication, group work and/or exams to favor the learning of students with visual and/or hearing disabilities. On the other hand, 100% of the students surveyed with this disability do know these improvements in the classroom.

In relation to the results obtained on the resources available for students with special educational needs, the results obtained were similar. 90% of the students without disabilities were unaware of the existence of the collaborating student and/or the tutor for the improvement of learning. The students with disabilities surveyed have a hearing disability and 100% of them have a sign language interpreter in the classroom, to allow the learning process to be carried out correctly.

Finally, the students were surveyed in relation to know their opinion about if the current university education was adapted to the needs that these students required. 78% of those who did not have disabilities felt that education was not fully adapted and 50% of those with disabilities believe that it is. In addition, as an improvement line, 59% of students reported that the preparation of specific material for students with disabilities would improve the learning process, as well as 41% stated that personalized tutoring is the best option for improving this process.
6 CONCLUSION

Students who have a visual and/or hearing disability feature specific difficulties when it comes to addressing the learning process. Although they are known and Universities work to reduce them and promote the equality and inclusion among all students, the measures and resources to solve these difficulties are not well known within the university community. Of all the measures and resources that the University offers, only students with disabilities know them mostly. Therefore, the rest of the university community can’t be involved in the process of helping these students, as they do not know how to deal with the different aspects that may arise. In this sense, it is necessary to invest more time and resources in promoting the key lines of action for the inclusion and improvement of students with visual and/or auditory disability, encouraging the entire university community to be involved in this process. Finally, despite the efforts of the University, the students surveyed believe that teaching in the classroom is not yet fully adapted to the needs that students with disabilities can present and therefore should improve their improvement.

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REFERENCES


