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THE DIFFICULTIES OF ADAPTING UNIVERSITY TEACHING FOR STUDENTS WITH DISABILITIES: AN ANALYSIS FOCUSSED ON INCLUSIVE GUIDANCE

[Las dificultades de adaptación a la enseñanza universitaria de los estudiantes con discapacidad: un análisis desde un enfoque de orientación inclusiva]

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Abstract

The need for specific attention for the personal, social, academic and professional development of students with disabilities is a challenge that the university is committed to. Although significant progress has been made, promoted by an inclusive educational approach, there are still many difficulties faced by students to intergrate into university education. To advance a deeper understanding of the issues affecting these students, research has been conducted with a sample of 113 students with disabilities from different centers in the University of La Laguna (Spain). The results have highlighted, the lack of guidance and information regarding access to university courses, the need to implement support measures to assist the learning process and also the urgency for improving institutional policies favouring the disabled.

Keywords

University; disability; inclusive coaching and mentoring, college students with disabilities, support for integration, accessibility, equal opportunities.

The process of attention as well as starting off measures of different kinds for both curricular measures (programmes, adapted material, bibliography resources, technological re-

Resumen

La necesidad de una atención específica para el desarrollo personal, social, académico y profesional del alumnado con discapacidad es un reto que tiene contraída la institución universitaria. Aunque ha habido avances importantes promovidos desde un enfoque de educación inclusiva, son todavía muchas las dificultades a las que se enfrentan los estudiantes para integrarse en los estudios universitarios. Para avanzar en un conocimiento más profundo de los problemas que afectan a estos estudiantes, se ha llevado a cabo una investigación con una muestra de 113 estudiantes con discapacidad de distintos centros de la Universidad de La Laguna, que ha puesto de manifiesto la falta de orientación e información con la que afrontan el acceso a los estudios universitarios, la necesidad de implantar medidas de apoyo para facilitar el proceso de aprendizaje y la urgencia de mejorar las políticas institucionales en favor de la discapacidad.

Descriptores

Universidad; discapacidad; orientación y tutoría inclusiva; alumnado universitario con discapacidad; apoyo a la integración; accesibilidad; igualdad de oportunidades.

sources, etc.) and extracurricular measures (welcoming programmes, orientation programmes, tutorial programmes, informative guides,...) addressed to university students

with disabilities, have to start from the diagnosis in their needs and the context in which the learning process takes place.

On the one hand, the importance of this type of analysis is due to a lack of studies which deeply look into the problems and demands that the students with disabilities have and, on the other hand, it is needed to make significant improvements in the support and assessment of the students with disabilities who have access to university studies. The data obtained through these diagnosis analyses of the reality that this group of students has to face must be the basic reference and starting point so that professors and tutors can plan and design the different actions aimed to achieve a better adaptation and promotion throughout their university studies.

Despite the fact that there has been a significant improvement in both the legal level and actions and policies for the equality and disability, which has turned into a notorious (considerable) increase of students with disabilities who have access to university studies, the percentage of those who succeed in their studies is still very low. This fact only comes to show that there are a lot of difficulties that students with disabilities still have to overcome when deciding to start higher education. It also shows that only 1% of the university students are recorded as being disabled and a 3% of them possess a university degree.

At the same time, it makes clear the need to offer a global answer from all educative levels so that the right every university student has is accomplished. The needs for specific assessment must to be taken into consideration as well as the implementation of orientation programmes, which have to be adapted to the needs of each moment and each formative and vital stage for these students.

The movement of inclusive education at university

Inclusive movement arises in a determined way to stand for the fact that all education cen-

ters have to satisfy the students' needs, without taking their personal, psychological and social characteristics into account. Inclusion is connected to access, participation and achievements of all students (Opertti, 2008). It implies transforming culture, organization, and center routines to face diversity in education needs for all students. It is an adapted teaching to the student and its actions are targeted to eradicate or minimize the physical, personal or institutional barriers which limit the learning opportunities, the access and the participation in the training activities.

Setting up of an innovative training system for the social inclusion is possible, but to do that, it is essential that the different parts have a systemic attitude and vision when tackling the problems that need to be solved (Alzugaray et al., 2011). That is why the educative option based on an inclusive model implies a global development that demands changes which affect all of the educative system such as creating inclusive training, inclusive policies and inclusive culture (Villar & Alegre, 2008) as quality is not exclusive of a specific level, it has to get all the system. That is why it is thought that one of the quality indicators of a specific university is the way this entity responds to diversity and shows the teaching excellence of the professional staff connected to it (Alegre, 2009 a and b).

Garcia & Cotrina (2011) propose the development of a universal design in learning as a pedagogical practice in the context of higher education, so that the socio-educative culture, the access structure, computer technology and communication, inclusion, curricular sustainability in processes of teaching innovation which sustain the social model at university can be improved.

As Sosa (2009) points out, the inclusion at university can be tackled from the ethical (as inclusion is a basic human right), sociological (disability seen as a social aspect and inclusion seen as a means to provide a place for the disabled), organizative (which brings up the

changes that must be done in the university organization to move forwards to a more inclusive institution) and teaching-pedagogical (necessary to promote teaching-pedagogical systems to ease the stay and promotion of students with disabilities) points of view.

The reality we are facing is that there are more and more groups of students with some kind of disability entering the classrooms. But this fact remains in the dark due to the fact that, unlike the primary and secondary education levels, a straight forward process of adaptation for special inclusive measures has not been followed. We believe that the big effort towards integration made, the resources provided, the curricular adaptations made in primary and secondary levels don't make any sense if people with some kind of disability cannot access the university studies like any other citizen if they wish.

One of the key points for inclusion to be possible is that university professors develop the ability to deal with diversity and achieve intercultural and inclusive competence (Alegre & Villar, 2006). From the intercultural and inclusive point of view, the education staff must consider that diversity and equality must stop being a stressing factor as well as the fact that one of the most important changes that needs to be made is the fact that diversity must be created, made and promoted (Shi-Xu, 2001; Voss & Bufkin, 2011).

Leyser, Zeiger & Romi (2001) put into practice a self-efficient teaching measurement, which allowed seeing learning intensity on students' disabilities in three groups of university students, according to whether they belonged to a generic or a special group. The training in the area of students with special educative needs, compared to that of students with little or no training at all, resulted in an efficiency in the promotion of marks which were significantly higher in the four self efficiency factors (which were the depending variables: teaching efficiency, personal efficiency, social efficiency and low performance efficiency). Quite a high number of the initial and permanent training courses, aimed to special education teachers who work with students with different levels of disabilities, came from an institutional action which aimed to represent the metaphor of reflexive teacher, as Furloger, Sharma, Moore & King (2010) stated at the Australian University of Monash. This program tried to ensure that the training students will use the reflexive teaching model throughout their teaching practical activities.

Inclusive orientation as quality criterion

Even if the inclusive competence and the intercultural actions among the teaching staff are considered, it is not enough when dealing with the students' diversity. In the systems of quality guarantee at universities, gathered in the assessment protocols of degrees, several measures have to be taken into account to ease the access to students with disabilities into the university life by developing an orientation and tutorial system adapted to their specific educative needs, which solve the problems for their integration (Abad, Álvarez & Castro, 2008).

Introducing a new orientation and tutorial system in the frame of the university teaching world for all students in general and for those who have some specific type of disability is a quality factor addressed to improve the integration of students, the optimization of the training process, the promotion of higher opportunity equality, the boost of the orientation principle throughout life, the reinforcement of inclusive education and the prevention of giving up studies among other benefits (Rodríguez, 2004; Álvarez, Forner & Sobrado,2006).

As Alonso & Díez (2007) highlight, the creation of the European Area of Higher Education obliges universities to meet a number of quality standards and the attention to the students with disabilities is one of them. This has to be understood as attention measures to university students with disabilities to ensure and guarantee equal access, equal action and suita-

ble training that provide consistency to a truly valuable higher education. According to this, the Real Decree 1393/2007, which rules the official university teaching system, compiles clear references to the access and education for all, as basic principles to take into account when designing the new university degrees so that the access and transit of students with disabilities are carried out in a satisfactory and suitable way.

Yet, how can the suitable assessment be carried out to university students from intercultural and inclusive processes? The proposal of an inclusive orientation model in the university teaching is connected to contextual planning in university centres, where barriers for the learning process are minimized and participation from all students and resources to support both processes are maximized (Ainscow, 2001). Deciding in favour of inclusion implies the elimination of traditional labels connected to this world as well as the reinforcement of specific backup for inclusive university.

The difficulties of students with specific needs derived from their disability when it comes to facing the transition to university studies worsen as the problems they face when integrating and developing their educational project are in most cases more serious than those of the rest of their classmates. This is due to the fact that it is probably the most troublesome one because it implies a lot of changes as well as the most difficult transition they must face as this is a completely different stage compared to the previous ones (cultural differences, different demands, different methodology,...) (Fernández & García, 2002; Eckes & Ochoa, 2005).

Although the Spanish universities have been making a big effort from the 90's to create programs and services aimed at attention and support for disability (increasing in number from the 2000 onwards), its implementation has been heterogenous and unequal as it can only be found in about 60% of public universities (Campo, Verdugo, Díez & Sancho, 2006), which means that many universities are not still ready to welcome these students, not only when talking about physical and architectural barriers but also in regulation, curricular aspects and staff organization (Susinos & Rojas, 2003). As Tolrà says (2002), it is obvious that several efforts are being made to continue providing support and assessment measures which students with disabilities require. The consolidation of principles in opportunity equality and non-discrimination of these people in the university context is far from being achieved yet.

To solve these situations, it is necessary to make progress in design, in approval as well as in broadcasting the regulations to ensure the right support and attention to the students with disabilities, in which the quality standards and indicators of good use in the support service functioning to the disability in different contexts are specified. These have to allow to establish connecting links between stages so that there is continuity in their training (Alcantud, Ávila & Asensi, 2000; Fortaleza & Ortego, 2003; CERMI, 2005; Luque & Rodríguez, 2008).

The processes of European Convergence allow the university to teach in a more flexible way, rationalize the study program and make all the members more aware of the changes that will benefit the people with disabilities, as an example we understand an organization of teaching activities focused on students' activities, more emphasis on the tutorial concept and coexistence between on-line sessions and oncampus lessons (Álvarez, 2002; Alegre, 2004; Castro & Alegre, 2009). Orientation programs and university tutorials are basic elements to ease quality and students with disabilities inclusion of as they let us develop the inclusive factor in higher education (Bayot, Rincón & Hernández, 2002; Luque & Rodríguez, 2005). Orientation can be an important way to introduce compensatory measures that will solve all students'specific needs and specially disabled ones. It also implements a customized atten-

tion which helps these students integrate and promote (Álvarez, 2012).

Objectives

The two main objectives in the research were on the one hand, to know the difficulties and the assistance requirements for the students with disabilities who have access to university studies and, on the other hand, to gage to what extent the processes that are being carried out are effective enough to help the students with disabilities to integrate into university education. The obtained results connected to these two objectives should help to suggest different intervention proposals from the guidance point of view as well as university tutorials closer to the real situation to contribute to better inclusion and educational development for this group. Therefore, the main concern of the research was: How do students with disabilities face their transition and integration process in university studies at present?.

The specific objectives presented in the study were:

- 1. To know the level of attention and assistance the students received before coming to university.
- 2. To know the students' assessment of the guidance and attention they get at university.
- 3. To know the demands for guidance the students with disabilities have when they start their university studies.
- 4. To know students' opinions on the education process, resources and level of attention to diversity which are implemented at universities.
- 5. To know the function served by university tutorials for the students with disabilities.
- 6. To know how integrated the students with disabilities are as well as what their relationship is with their peers.

Method

In this research a non-experimental descriptive methodology was carried out based on the

survey in order to compile information. The aim was to describe the characteristics and the situation that affect transition and integration processes of students with disabilities in the university education in an objective and systematic way. Although numerous references tackle the issue of attention to diversity amongst university students (Ainscow, 2001; Bayot, Rincón & Hernández, 2002; Trujillo & González, 2006; Alonso & Díez, 2008; Luque & Rodríguez, 2008), many of these contributions are mainly focused on the intervention, describing the process and results of different programs, guides for professors, etc. The lack of in depth research that focuses on the reality, the difficulties and the conditions in which students with disabilities face the change to a higher education, looking into it from their own perspective, justifies the development of this study, whose results will contribute without a doubt to a better understanding of this reality, and to make these students better prepared to integrate into university teaching.

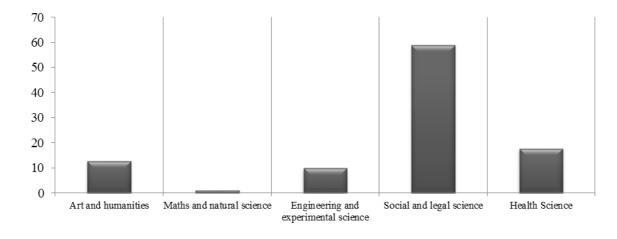
Population

From the data provided by the Analysis and Planification Department (APD), the research started off with the total number of students with disabilities enrolled in the academic year 2009-10 at the University of La Laguna. Out of the 150 identified students, contact was made with 119 of them who were asked to answer an on-line questionnaire. In the end, 103 students took part in the study.

The average age of the students studied was around 30.1 years old. 54% of the sample ranged between 17 and 25 years old, 36.9 % ranged between 26 and 45 years old and a 10.7% ranged between 50 and 65 years old. As for sex, 51.5 % were women and 48.5% were men.

Out of all students surveyed only 16.5% were in their first year of their university studies, the 83.5% left were at different places and qualifications in the degree they were studying and in many cases they were studying subjects from different courses. As for the distribution

according to choices of study, 58% were studying social and legal science; 17.6% were studying health science, 12.7% art and humanities, 9.8% were studying engineering and experimental science and 1.1% were studying maths and natural science.



Graph 1: Distribution of population according to scientific fields.

As far as the disability degree goes, 77.6% of students showed a degree of disability between 33% and 66%; 19.4 % showed a disability higher than 66% and only a 3% said they didn't know the degree of disability they had. The type of disability the students who were surveyed showed was physical (55.3%), sensorial (23.3%) and psychic (6.8%). 14.6% said they suffered from more than one type of disability.

Tests and variable factors

When choosing the methods of testing different possibilities were taken into account and special attention was paid to both, the characteristics of the sample and the difficulties associated with collecting data about people with disabilities. In the end, it was decided to use an on-line questionnaire so that the people involved could answer it individually and send it electronically. This strategy turned out to be successful due to the fact that many of the students with disabilities had movement problems so it was thought that this format could ease the process of providing and collecting the research data.

Prior to putting into practice the on-line questionnaire, different validation and sample reliability procedures were carried out in order to guarantee its ability to assess the variables directly related to the research objectives. As an on-line tool was going to be used, some experts in digital technology were asked (n=3) to control the different aspects related to the virtual tool with the aim of controlling the format, the structure, the answer procedure and the proper use of the W3C protocols (universal access). After considering the different on-line survey applications, the one ultimately chosen was LimeSurvey tool, which is an open code application for the administration of on-line surveys written in PHP and using a MySQL database. The criterion taken into account for its use were the fact that it allows storing of an unlimited number of users, a wide variety of question formats can be used and it eases the automatic data export in SPSS for its statistics use.

Secondly, the different aspects related to the content, the writing, the comprehension of the items, the different possible answers, etc. of the first version of the questionnaire were checked. To be more specific, the question-

naire was done in an on-campus session with a sample group (n=8) with similar characteristics to the group of people targeted by the study, who showed different types of disabilities. In the sample session, three assessment guides took note of all problems related to understanding of concepts, meaning of questions, clarity of explanations and different possible answers.

Thirdly, a group of university professors who are experts in education and psychological intervention (n=5) carried out an analysis of this questionnaire. Prior to the analysis, these experts were told that the criteria to be taken into account were the structure, the pertinence, the clarity and the suitability of the questions considering the sample characteristics. Similarly, experts in research methodology (n=3) assessed the tool aspects (types of questions, types of scale, etc.)

From all these revising processes, different types of improvements in the questionnaire were made in both the technical and content aspects. As far as the technical aspects go, two applications in the LimeSurvey platform were added for people with visual disabilities: one of them allowed enlarging the size of the text and the other one was a voice conversor.

As for the content, some aspects of the questionnaire were modified taking into account the sample results in order to improve its efficiency. So, two new items were added (20 and 28) to get a more accurate response from the participants; some answer options were added in some questions (5, 15 and 18) to show all the possible alternatives; the explanation of some questions were corrected (11 and 16) to improve the understanding and the "specify other elements" section was included in 21. The final questionnaire was made up of 30 items organized in Likert type scale, multiplechoice questions, dichotomized questions and open answer questions.

As for reliability of the test, the implementation of the Cronbach alpha coefficient resulted in a value of $\alpha = .793$, which means adequate reliability to measure the variable factors studied here, as it indicates a high interrelation among the different items which make up the questionnaire, and an acceptable level of stability. In the following chart, the reliability levels are specified according to the Cronbach alpha coefficient for each variable to evaluate.

Charl 1. Test reliability sample of the data collection		
Variables	Ítems	Cronbach alpha coefficient
Identification data	1 2 3 4 5 6	
Pre-university ori- entation and infor- mation	7 8 9 10 11	α = .889
Services, subjects and professors	12 13 14 15 16 17 18	$\alpha = .783$
Tutorials	19 20 21 22 23 24 25	α = .872
Relationship with classmates	26 27 28 29 30	α = .559
QUESTIONNAIRE	1 – 30	$\alpha = .793$

Chart 1. Test reliability sample of the data collection

The variation factors taken into account in the test to reach the objectives in the research were: pre-university guidance and information; services, subjects and professors; tutorials; relationship with classmates.

Procedure

Once the final survey was made, the data collection was carried out sending the questionnaire on-line by e-mail with a letter attached, which explained the purpose of the study, the procedure for sending the survey as well as the link where they should submit the questionnaire once it had been filled out.

Data analysis

The collected data through the questionnaire were analyzed using the statistics for the *Statistical Package for the Social Sciences* program (SPSS 17.0) for Microsoft Windows XP. The specific statistics items used were: frequency analysis and comparative analysis among variables (Pearson correlations). An analysis for the narrative content was made for the open items, identifying each informant for the Pn codification (where P makes reference

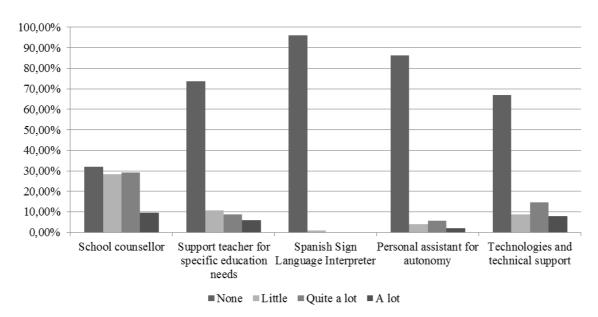
to "participant" and N represents the number surveyed).

Results

The results obtained in this research are grouped in various fields connected to the analyzed objectives and variation factors.

Pre-university information and Guidance

Shown in this first section are the results of the information related to attention measures and guidance obtained by the students with disabilities before starting their university studies. The surveyed students said they seldom used the school counselor's help (60.2%), the support teacher for specific education needs (84.5%), the sign language interpreter (96.1%) or the personal assistant (90.3%). Likewise, they used the technical support very little (75.7%). However, the students who needed the support teacher for specific educational needs also needed the personal assistant's help (r=.564; p<0.000) and they made use of the technologies as well as the technical help (r=.476; p<0.000).



Graph 2. Resources used before entering university

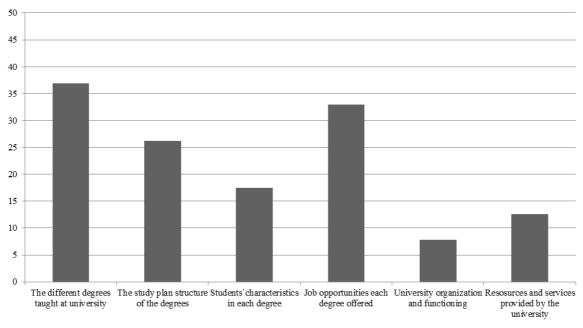
The participants indicated that before entering university, they had also needed "psychological help" (P98), support to "learn how to study and organize themselves" (P44) and assistance "to get ready for university access exams" (P55). Because of this, the fact that half of the students surveyed (50.5%) stated that they didn't receive any information or assistance related to their university studies caught our attention. Those who received some information, stated that they got it through their family and friends. The information provided by the University of La Laguna through information seminars, web sites... had only been useful for half of the students.

Referring to this, the lack of participation that students surveyed received from the educational agents in the pre-university stage must be highlighted. It stands out that the worst considered resource for guidance and information for students was the school counselor. Some of the participants stated that the resources through which they had gotten some information about the university had been "the media "(P31) and "the web sites connected to teaching and the Ministry of Education" (P62).

The content of the information received at the pre-university stage was related to the different existing degrees at the University of La Laguna (36.9%), the different job opportuni-

ties they offered (33%) and the curricular structure they had (26.2%). It also stands out that, according to 12.6% of the surveyed stu-

dents, the information about resources and services the university offered was scarce.



Graph 3. Information received prior to entering university

The reasons they took account into account for choosing their current studies were the "preference or liking for the degree" (83.5%), the "job opportunities it provided" (38.8%) and the "advice given by relatives" (20.4%).

Services, resources, subjects and professors

Related to this section, 78.6% of surveyed students stated that they attended regularly all subjects in which they had enrolled. The ones who didn't (21.4%) said that in most cases it was due to health problems. Specifically, they said that they had to "run several medical tests" (P7), "go for regular check-ups" and could not "spend too much time sitting" (P59) due to their disability. Therefore, this overlap in academic activities and rehabilitation sessions did not help students with disabilities to attend their classes regularly.

According to the data collected, few students made their disability visible. Only 18.4% of the surveyed students said they had reported it to the staff previously. The rest said that they had only reported it to some of the professors

(34%) or to none of them (47.6%). According to the participants, justifications for this behavior include: the disability "does not affect the intellectual ability" (P8), "I try not to be noticed in these aspects" (P33), "the disability I have is not a problem when the knowledge has to be assessed" (P95) or the "insensitivity shown towards the students" (P77).

Matching the data results, not many students asked the staff for specific adjustments in their university studies. These adjustments were connected to documents and material (11.7%), assessment procedures (5.8%), resources used in the classroom (4.9%) and the means of technological support of the class explanations (3.9%). As for the adaptations made in the classroom, 33% of the students said that the professors hadn't made any relevant change to provide the needs to students with disabilities in the teaching-learning process.

The students with disabilities rated the professors positively in their attitude (65%), their interest (54.4%) and their teaching skills (50.5%). As for the negative aspects in the

teaching staff, the students highlighted the time commitment (56.3%) and the extent of this implication (50.5%). With the specific needs these students have, the educative response from a big number of the professors does not comply with the principles of inclusive education, which worsens its educational process and the achievement of personal, academic and professional targets.

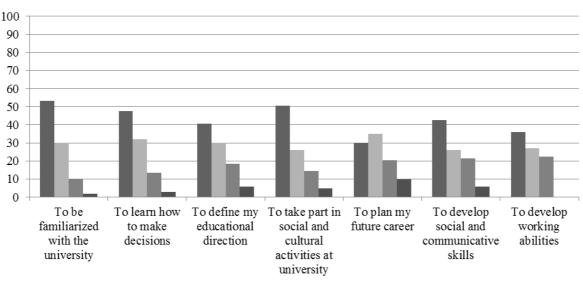
As for support, the surveyed students asked for further information about economic support for students with disabilities (66.9%), the attention program for students with disabilities (49.5%), technologies and specific technical support (43.7%) and resources provided by other entities not connected to the university (41.7%). Out of the total number of the surveyed students, 53.4% believed that the University of La Laguna didn't have the adequate resources to face the needs of students with disabilities. Specifically, the students pointed out that the university should improve the support to students with disabilities through "the improvement in access to the classrooms" (P6),"professional guidance" (P13), "psychological and pedagogical guidance" (P22) and "a more empathetic attitude from the professors" (P85). In this respect, the students demanded a specific attention program for students with disabilities, that develops aspects (r=.454; to academic guidance related p=<0.000), the knowledge of university life (r=.436; p<0.000) and the definition of their academic-professional plan (r=.489; p<0.000).

Tutorial sessions

On a general level, and taking into account all the data collected, it can be stated that a university tutorial sessions are an unknown resource and are scarcely used by the students with disabilities. 70% of the surveyed students said they didn't know that Tutorial Planning addressed to the students who enter university existed in their Faculty or Center. Some of the participants pointed out that "they hadn't thought of it" (P2) or "they didn't know their schedule or their teaching" (P38) when answering about the reasons why they didn't take part in the tutorial plan in their faculty. Only 20.4% of the students knew of them and, out of these, only a third took part. The participation in the Tutorial Plan was understood "as a means to support them in projects, to ask questions, etc." (P24) and they thought it would be important "for new incoming students" (P49), as it would ease their integration into university life "especially in their first year when they are new in the university and they don't know how they have to do things, where to go, etc." (P18)

64.1% of the students with disabilities did not use the tutorial sessions regularly because they thought "they didn't need them" (P53) or because of "lack of time" (P64) and they only made use of it right before exams. However, 33% of the surveyed students stated that they regularly attended the tutorials and it was mainly to ask about questions they had on their subject contents, the assessment criteria, to go over their exams and to dissolve doubts about administrative aspects (test official announcements, validations, etc.).

The existence of a specific tutorial program for students with disabilities was rated positively by 74.8% of the surveyed students, highlighting that it would be necessary to make a program with these characteristics in their Faculty or Center to guide this group of students. Connected to other actions that could be made from the tutorials, the students with disabilities stated that they needed "quite a lot/a lot" of help to develop working abilities as well as to plan their future career and to develop social and communicative skills.



■None ■Little ■Quite a lot ■A lot

Graph 4.Type of information/orientation required

According to who they considered should lead the tutorial sessions, the students with disabilities chose a teacher who taught them any of the subjects as their first choice, secondly, they chose a student doing the same studies but coming from a higher level, and thirdly, they chose a disabled person.

Relationship among classmates

68% of the students with disabilities stated that the relationship they had with their classmates was good and 15.5% of them said it was excellent. Deeper in this matter, 35% of the students stated that they usually grouped with just a small number of classmates (6-10 people). 28% stated to have told their classmates of their disabilities and 49.5% stated "they only had informed some classmates" (P57). Out of the group who had not reported it to their classmates, almost half of them (11 out of 24), pointed out that they hadn't done it because they thought "it was not necessary" (P31) or "I'm not confident enough to say it" (P14). It stands out that a lot of the students considered it was not a good idea to show their disability to their classmates since "it does not have any interest to them; I prefer to keep it to myself and be like anyone else in the classroom, without getting any special treatment" (P9).

53% of those surveyed stated that they had not asked for any kind of help from any of their classmates whereas 40.8% had, especially to ask for "class notes" (P8), "class material" (P34), "to move around" (P1) and "to solve any confusion about any subject" (P86). Therefore, the exchange of class notes and the explanation of questions connected to the subjects are the two types of support demanded more frequently by the students with disabilities.

Conclusions

This research about the needs of the students with disabilities to succeed in their integration in the context of higher education and around the classroom shows that there are many various difficulties in both institutional matters and personal and academic matters, which they face throughout their academic and vital experience. It also shows that it will take a very big effort to reach the inclusive educational approach that Stainback & Stainback (1999) demanded, to see it in the university classrooms and to generalize it beyond isolated and specific experiences.

The results obtained in the research are conclusive as for the possibilities that students with disabilities have to integrate into universi-

ty education, since not only is physical disability the highest in number but also the rating was between 33% and 66% which shows that these students show that their handicaps are minor, therefore they are not incapacitating. This fact leads us to think that with adequate measures to adapt teaching, with more personalized attention, with programs and specific assistance guides, etc. these students could reach their established education objectives for this education level. In order to get it, social and entity policies should be improved for diversity and disability so that an effective response could be provided for the students' needs.

As in other studies (Feliz & Ricoy, 2004), the reality that we have analyzed shows that the adaptation of learning materials needed to make them accessible to the students with disabilities is still uncommon and shows a deficit. From the data collected in this research, it must be highlighted the lack or non-existence of adjustments that, according to the students, the professors used in the teaching-learning process. Therefore, we are facing a challenge and a priority due to the difficulties that the students show to be able to follow their lessons as it was seen in other studies such as the Castellana & Sala (2005) one, where 84% of interviewed disabled students claimed to have problems adjusting to the teaching-learning processes.

Likewise, these results point to the need to improve the university staff's sensibility and education to meet the inclusive learning environment where equality can be seen in all students, where the positive discrimination principle gets its meaning as Luque & Rodriguez (2008) stated and where everyone has the possibility to develop his or her social and personal identity. The lack of information among many of the professors on disability and adjusted methodological strategies make an inclusive and individual response impossible in many cases for the needs of students with disabilities.

According to the access of the students with disabilities to their university studies, it stands out that 50% stated not to have received information or guidance about the previous stages related to the university studies they could choose. Although it is possible that it could have been due to the fact that the information provided by the university was not enough or that the adequate resources were not used, it is also true that there is a lack of competence amongst students accessing for themselves the information that the university institution provides its users. Through the institution web site, open seminars and the Information and Orientation Service to the students (in Spanish, Servicio de Orientación e Información – SIO), a lot of information is provided to the students who will enter their university studies every year.

Out of the data collected, we can conclude that the needs of the students with disabilities must be placed in different stages and moments of their educational process. They demand more information and guidance at the pre-university stages as they faced the transition to the university studies without the adequate support and preparation. According to the time prior to university education entrance, it is important that work be done with the family, as in many cases they are the ones who make students think of the lack of possibilities in their educational and professional development due to the lack of information, insecurity and distrust.

In the university teaching, the students demand the need to adjust the physical spaces, the furniture in classrooms or the improvement of acoustics. As for other support measures such as the university tutorials, although quite a high percentage of students demand the need to have a specific tutorial program for the students with disabilities, the daily use they make of it is sporadic and they attend the sessions just to solve academic or administrative problems. Moreover, most of them don't know the existence of a Tutorial Plan in their Faculty or Center.

According to the resources, it must be pointed out the evidence of the need to improve the conditions and the coordination among the university services that can solve the specific needs of the students with disabilities. As Díez & Alonso (2008) highlighted, the diversity of services that exist among the different centers and the lack of communication among them create difficulties and problems, not only to the professional staff themselves but also to the students with disabilities who, most of the times, are limited when making decisions.

Related to the social integration and the relationship with their classmates they seem to be good, and this allows them to solve many of the academic difficulties that come from their disabilities. In this sense, the students with disabilities stated that through their classmates they found the answers to the questions about the subject contents and they got materials and notes on the subjects. As other authors have stated (Velasco, Blanco & Santos, 2010), the learning process among peers or the mentor work in the field of the university tutorial comes as an important strategy, which in the case of the students with disabilities can highly contribute to improve their learning process and their integration in the university teaching context

References

- Abad, M., Álvarez, P. & Castro, J. (2008). Apoyo a la integración de estudiantes con discapacidad en la enseñanza universitaria: algunas medidas y propuestas de actuación orientadora. *Educación y Diversidad: Anuario Internacional de Investigación sobre Discapacidad e Interculturalidad*, 2, 129-150.
- Ainscow, M. (2001). Desarrollo de escuelas inclusivas. Ideas, propuestas y experiencias para mejorar las instituciones escolares. Madrid: Narcea.
- Alcantud, F.; Ávila, V. & Asensi, M. (2000). La integración de estudiantes con discapacidad en los estudios superiores. Servicio de publicaciones: Universidad de Valencia.

Alegre, O.M. (2004). Atienda a la diversidad del alumnado universitario. En L. M. Villar Angulo (Coord.), *Programa para la mejora de la docencia universitaria*. Madrid: Pearson-McGraw Hill.

- Alegre, O.M. & Villar, L.M. (2006). Online Faculty Development in the Canary Islands: A Study of E-Mentoring. *Higher Education in Europe*, 3 (1), 65-81.
- Alegre, O.M. & Villar, L.M. (2009a). Evaluation of a 10-year special education masters's degree program: the case of La Laguna University. *International Journal of Special Education*, 24 (2), 116-129.
- Alegre, O.M. & Villar, L.M. (2009b). Master's Degree "Education in Diversity" (MDED): Toward Inclusion Education Quality. *International Journal of Training and Learning in Higher Education*, 22 (1), 1-13.
- Alonso, A. & Diéz, E. (2008). Universidad y Discapacidad: indicadores de buenas prácticas. *Siglo Cero. Revista Española sobre Discapacidad Intelectua*l, vol. 39 (2), nº 226, pp. 82-98.
- Álvarez, P. (2002). La función tutorial en la Universidad: una apuesta por la mejora de la calidad de la enseñanza. Madrid: EOS.
- Álvarez, P. (2009). Tutoría para la integración del alumnado con discapacidad: un reto para la universidad actual. En Castro y O. Alegre (Coords) (2009), *Alumnado con discapacidad en la universidad*. Tenerife: Turquesa.
- Álvarez, P. (coord.) (2012). *Tutoría universitaria inclusiva*. Madrid: Narcea.
- Álvarez, P.; Asensio, I; Forner, A. & Sobrado, L. (2006). Los planes de acción tutorial en la Universidad. En T. Escudero & A. Correa (coords.). *Investigación e innovación educativa: algunos ámbitos relevantes*. Madrid: La Muralla.
- Alzugaray, S.; Mederos, L. & Sutz, J. (2011). La investigación científica contribuyendo a la inclusión social. *Revista CTS: Revista Iberoamericana de ciencia, tecnología y sociedad, 17* (6), 11-30.
- Bayot, A.; Rincón, B. & Hernández, F. (2002). Orientación y atención a la diversidad: des-

cripción de programas y acciones en algunos grupos emergentes. *RELIEVE*, 8 (1), 66-87. Consultado en

http://www.uv.es/RELIEVE/v8n1/RELIEVE v8n1_2.htm Consultado el 10 de Febrero de 2012.

Campo, M.; Verdugo, M; Diez, E. & Sancho, I. (2006). Mirando al futuro: comparación crítica de la situación de los servicios españoles de atención a los universitarios con discapacidad. *XI Reunión del Real Patronato sobre Discapacidad* (pp. 367-377). Madrid: Universidad Complutense de Madrid.

Castellana, M. & Sala, I. (2005). Estudiantes con discapacidad en las aulas universitarias; estudio sobre la atención a la diversidad dentro de las aulas universitarias. *I Congreso Nacional de Universidad y Discapacidad*, Salamanca.

- Castro, J. & Alegre, O (2009). (Coords.). Alumnado con discapacidad en la Universidad. Guías para el profesorado. Tenerife: Turquesa.
- CERMI (2006): *Guía de recursos para alumnos con discapacidad*. MEC: intersocial.

Colás, M. (1994). Los métodos descriptivos. En M^a Colás & L. Buendía. *Investigación Educativa*. Sevilla: Alfar

Eckes, S. y Ochoa, T. (2005). Students with disabilities: transition from high school to higher education. *American Secondary Education*, 33 (3), 1-16.

Feliz, T. & Ricoy, M. (2004). Aproximación del alumnado con necesidades educativas especiales en la Universidad. *REOP*, Vol. 15, nº 1, 155-168.

Fernández, J. & García, C. (2002): Transición de estudiantes con necesidades educativas de la educación secundaria a la Universidad. En Marchena, R. y Martín, J. D. (Coords.): *De la integración a una educación para todos: la atención a la diversidad desde la Educación primaria a la Universidad*. Madrid: CEPE.

Forteza, D. & Ortego, J. (2003). Los servicios y programas de apoyo universitarios para personas con discapacidad. Estándares de cali-

dad, acción y evaluación. *Revista de Educación Especial*, 33, 9-26.

Furlonger, B.E., Sharma, U., Moore, D.W., & King, B.S. (2010). A new approach to training teachers to meet the diverse learning needs of deaf and hard-of-hearing children within inclusive Australian schools. *International Journal of Inclusive Education*, 14 (3), 289-308.

- García, M. & Cotrina, M. (2011). Accesibilidad, inclusión e innovación docente en la Universidad. *Quaderns digitals: Revista de Nuevas Tecnologías y Sociedad*, 67, 1-12.
- Leyser, Y., Zeiger, T., & Romi, S. (2011). Changes in Self-efficacy of Prospective Special and General Education Teachers: Implication for inclusive education, *International Journal of Disability, Development and Education, 58* (3), 241-255.
- Luque, D. & Rodríguez, G. (2005). Accesibilidad y adaptaciones curriculares al alumnado con discapacidad en la Universidad. Una reflexión docente. *I Congreso Nacional de Universidad y Discapacidad*, Salamanca.
- Luque, D. & Rodríguez, G. (2008). Alumnado universitario con discapacidad: elementos para la reflexión psicopedagógica. *REOP*, 19 (3), 270-281.
- Opertti, R. & Brady, J. (2011). Developing inclusive teachers from an inclusive curricular perspective. *Prospects*, *41* (3), 459-472.

Rodríguez, S. (Coord) (2004). *Manual de tutoria universitaria*. Barcelona: Octaedro.

Shi-Xu (2001). Critical Pedagogy and Intercultural Communication: Creating discourses of diversity, equality, common goals and rational-moral motivation. *Journal of Intercultural Studies*, 22 (3), 279-293.

Stainback, S.; Stainback, W. & Jones, J. (1999). *Aulas Inclusivass*. Madrid: Narcea.

Susinos, T. y Rojas, S. (2003). Los servicios de apoyo universitarios y la orientación para el acceso a la Universidad. *Revista de Educa-ción Especial*, 33, 27-38.

Tolrá, M. J. (1998). Retos de los servicios universitarios de apoyo a la integración. XVII Seminario Interuniversitario de Teoría de la

Educación "La Educación Universitaria: nuevos retos educativos y tecnológicos". Málaga.

Trujillo, E. & González, J. (2006). Universidad y Discapacidad. Guía de Recursos. Madrid: Cinca.

Velasco, P.; Blanco, A. & Santos, F. (2010). *Nuevos retos de la mentoría universitaria española*.
V Jornadas Internacionales Mentoring & Coaching: Universidad – Empresa.

Voss, J.A., & Bufkin, L.J. (2011). Teaching All Children: Preparing Early Childhood Preservice Teachers in Inclusive Settings. *Journal of Early Childhood Teacher Education*, 32 (4), 338-354.

Villar, L. M. & Alegre, O. M. (2008). Measuring Faculty Learning in Curriculum and Teaching competence (CTC). On line Courses. *Interactive learning Environments*, 16.

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The need for specific attention for the personal, social, academic and professional development of students with disabilities is a challenge that the university is committed to. Although significant progress has been made, promoted by an inclusive educational approach, there are still many difficulties faced by students to intergrate into university education. To advance a deeper understanding of the issues affecting these students, research has been conducted with a sample of 113 students with disabilities from different centers in the University of La Laguna (Spain). The results have highlighted, the lack of guidance and information regarding access to university courses, the need to implement support measures to assist the learning process and also the urgency for improving institutional policies favouring the disabled. La necesidad de una atención específica para el desarrollo personal, social, académico y profesional del alumnado con discapacidad es un reto que tiene contraída la institución universitaria. Aunque ha habido avances importantes promovidos desde un enfoque de educación inclusiva, son todavía muchas las dificultades a las que se enfrentan los estudiantes para integrarse en los estudiantes, se ha llevado a cabo una investigación con una muestra de 113 estudiantes con discapacidad de distintos centros de la Universidad de La Laguna, que ha puesto de manifiesto la falta de orientación e información con la que afrontan el acceso a los estudios universitarios, la necesidad de implantar medidas de apoyo para facilitar el proceso de aprendizaje y la urgencia de mejorar las políticas institucionales en favor de la discapacidad.
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