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## *The role of university teachers in providing support to their students with disabilities*

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*University academic teachers have the responsibility to ensure the inclusion of students with intellectual disabilities in their classrooms. To this end, as has been confirmed in several studies, it is necessary to incorporate competences in the teaching CVs; specific training on disability, social, communicative and pedagogical skills among others... Also, university teaching staff must be supported by their institutions and be predisposed to be trained in such competences. The Universal Design for Learning (UDL) is responsible for facilitating flexible and inclusive educational practice; it aims to respond to the training needs of both students and teaching staff in all their diversity.*

**Key words:** *exceptional students, high education, inclusive education, academics*

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## *Introduction*

Despite the fact that the inclusion of students with disabilities in higher education is legally supported in European countries, they still face numerous barriers: computer, bureaucratic, architectural, learning, personal, and social (García-González et al., 2021). It often happens that university teachers do not have enough experience in working with students with disabilities and their level of formation in inclusive education could be insufficient (Kokhan et al., 2021). Although the attitudes of university teachers towards inclusive education is generally positive, they do not have enough knowledge and experience, and that is why they need specialized training (Polo Sánchez et al., 2021). This is especially true in the case of students with intellectual disabilities (ID) who are still rarely enrolled in higher education (Corbí et al., 2021).

Of the few students with ID who reach university, most encounter difficulties and problems, since teachers do not have the training and knowledge to address the sufficient needs they raise. Therefore, universities have to move towards the inclusion of these students and achieve equal conditions, without seeing their disability as a limitation, considering differences as opportunities, and not as problems.

The challenge is including a student with a disability not only assigning him a tuition or giving him a space where he can take his classes, but also launching a series of academic, economic, material, significant technological, psychological and self-management supports and services that allow him to integrate in a fully to school life, a situation for which very few universities are prepared (Bunbury, 2020; Paviotti et al., 2021; Pérez-Castro, 2019).

Various studies that give voice to students with disabilities indicate that teachers are key in inclusion processes: The training and preparation of teachers to serve students with disabilities in their classes is considered one of the main factors that favor educational integration (Couzens et al., 2015; Martínez Martín & Bilbao León, 2013).

## *Expectations for teachers*

Teachers, when including students with ID in their classrooms, must take into account the learning rhythms of each one and for this reason it

is essential that they develop different teaching strategies, and that the programs are adapted to individual needs. For this reason, it is essential that they have the skills to give an adequate response.

According Rodríguez and Álvarez (2016), curricular adaptations at the university should follow the same approach that is carried out in non-university stages. This process necessarily requires considering two aspects: teacher training and awareness of the university community aimed at full participation of students with disabilities. The training plans must include all the teaching staff, since the contact, the training and the information received have been shown to be determining variables that influence more positive attitudes and the improvement of relations in the university community. As for the contents, they will have to address the reference regulations; the services and initiatives available to the university; the most common types of disabilities and their repercussions on learning, as well as the most frequent needs. Problem-based learning and case studies must be present in any methodological design of these training actions as they allow teachers to reflect on possible curricular adaptations by sharing concerns with other colleagues from the same and different degrees. For a greater degree of deepening, it is considered convenient to develop an initial training of a general nature and, subsequently, another specific one adapted to the nature of the areas of knowledge (Suriá-Martínez, 2011).

In the research carried out by Moriña et al. (2020), according to the data collected from interviews with 119 university professors, it is concluded that the essential training that a teacher must have to adequately respond to the needs of students with disability should be the following:

- Specific training on disability.
- Training in psychological and pedagogical content (how to teach to make use of the different methodological strategies).
- Teaching skills related to communication, motivation or how to connect emotionally with students.
- Training aimed at raising awareness of disability and the needs of students.
- Technological training (which supports student learning).
- Training in the content to be taught (updated content).

On the other hand, de Boer et al. (2011) carried out a bibliographic review of twenty-six studies about teachers' attitudes towards inclusion and

pointed out that most teachers have a neutral or negative attitude towards the inclusion of children. Students with special education needs in regular education, being training, gender, years of experience working in inclusive environments and the type of educational needs, are factors that would impact their attitudes.

Likewise, in the study carried out by Angenscheidt Bidegain and Navarrete Antola (2017, p. 239) on teachers' attitudes about inclusive education, it is stated that half of its respondents agree that all students benefit academically from being in regular classrooms, and 70% agree or strongly agree that all students benefit socially in inclusive schools. The majority (68%) also maintain that inclusion is possible at all educational stages and that inclusion has more advantages than disadvantages.

Teachers must carry out a series of actions to guarantee the permanence of students with disabilities in higher education, since the majority drop out earlier and do not finish university. Some of the actions are the following, according to the study carried out by Galán-Mañas (2015, p. 93):

- Academic guidance and monitoring. It is undoubtedly one of the most important; it involves actions aimed at guiding the student with disabilities in the acquisition of the academic skills of the studies enrolled and to carry out a follow-up in their learning process (review of the contents in each subject, subject planning...).
- Personal/life advice. The permanence of the student in the university implies that counseling processes are carried out that go beyond what is strictly academic and that favor the development of inclusion in the university context (access to housing, transport, places of leisure for share with your peers).
- Study techniques and support. Throughout the stay of the student with a disability, different study and support techniques can be offered (ICTs can be a fundamental pillar for achieving the objectives).
- Curricular flexibility. Changes and modifications (curricular adaptations) related to objectives, timing, evaluation, completion of tasks, etc.
- Development of social skills. It is important to develop social skills in students with disabilities in order to reach higher levels in the process of educational inclusion (creation of heterogeneous work teams such as participation in social events of the university community, etc.).

- Network of support and collaboration among equals. This last action refers to the creation of support mechanisms through the different university instances: specific support services of the university, the faculty or the teaching staff. Likewise, the role that classmates can play through the figure of the support student is included, which, among others, can favor the collection of notes, the search for material, etc.

### *Attitudes of university teachers towards higher education of persons with disabilities*

Most research finds that faculty teachers generally have positive attitudes toward the inclusion of people with disabilities in higher education institutions. (e.g. Banks, 2019; Gibbons et al., 2015; Helena Martins, et al., 2018; Hong & Himmel, 2009; Leyser et al., 2011; Sniatecki et al., 2015). Teachers' experience with persons with disabilities (defined as previous or current experience of teaching persons with disabilities or previous contact in the form of close friendships, relatives or colleagues with disabilities) (Aksamit et al., 1987; Gibbons, et al., 2015; Rao, 2004), as well as better knowledge of the laws concerning persons with disabilities (Fekete, 2013; Zhang et al., 2010) are associated with better attitudes. In studies that find a gender difference, female teachers have more positive attitudes (for a review of the research, see Rao, 2004; Zhang et al., 2010). Likewise, teachers who teach in universities in the fields of education, as well as those who feel they have the support of the institution in which they work in this regard (Szymanski et al., 1999) have more positive attitudes towards people with disabilities. Sometimes the influence of the age of the teacher is also found, so older teachers more often than young and middle-aged people think that students with ADHD deserve teaching accommodation. Likewise, older and middle-aged teachers are less likely than younger ones to believe that difficulties experienced by students with ADHD are the result of a "bad" character, lack of discipline, or motivation (Buchanan et al., 2010).

Teachers' personal beliefs have the most direct impact on teachers' willingness to provide accommodation (Zhang et al., 2010). They would rather adapt classes by allowing students to record lectures, provide individual assistance, extend assignment time and extend test time, than be willing to give them a copy of their notes, alternative forms of assignments, or a different form of exam (Vogel et al., 1999).

University teachers are often not sufficiently prepared to make appropriate adjustments and make teaching more inclusive (Lopez-Gavira et al., 2021). On the other hand, it is important for students with disabilities that their teachers have knowledge and awareness of disability (Getzel, 2008). It is therefore important that teachers receive training so that they can meet the needs of a diverse population of students with disabilities (Moriña et al., 2020). Studies show that teacher training increases their knowledge of students with disabilities, improves sensitivity and attitudes towards them, as well as the willingness to provide these students with appropriate adjustments (Leyser et al., 2011; Lombardi & Murray, 2011; Lombardi et al., 2013; Murray et al., 2011).

Ways of training university teachers can be different: intensive multi-day workshops, short trainings in informal environments, flexible online modules, written materials - printed or in the form of e-newsletters (Dallas et al., 2014; Izzo et al., 2008; Lombardi et al., 2013; Lombardi et al., 2015; Schelly et al., 2011). Although the use of different training methods is recommended (Dallas et al., 2014; Lombardi et al., 2015), Murray et al. (2011) find that university staff members who have previously participated in disability workshops and courses have had more positive attitudes than university staff members who have participated in other forms of training (reading books and articles or visiting websites). Various methods such as presentations, simulations and scenarios are also used. Thus, Rohland et al. (2003) sessions began with short (about 30 minutes) interactive presentations with basic information on the topic, and then moved on to simulations and scenarios with accompanying discussions. In addition, panels were organized with the participation of students with disabilities, as well as films about the lives of persons with disabilities. University teachers are more distrustful of students who have disabilities that are not visible, such as learning disabilities, ADHD, or mental illness (Beilke & Yssel, 1999; Jensen et al., 2004). They are also found to be more willing to adapt teaching to students who have learning difficulties, as well as those who have visual or hearing impairments, than to students who have emotional difficulties (Wolman et al., 2004).

Most university teacher training focuses on disability awareness, disability education regulations, and teaching strategies and accommodations in an inclusive environment (Lombardi et al., 2013; Rohland et al., 2003). In addition to these, Murray et al. (2011) include topics related to the support that teachers can receive at the university level and knowledge related to technology in teaching. Cook et al. (2009) recommend that the training and

information provided on them be focused on specific issues that teachers do not understand enough, and not just on changing attitudes or general, conceptual issues. Moriña et al. (2020) find that university teachers are interested in (a) disability regulations, (b) practical knowledge that will bring them closer not only to what but also how to work with students with disabilities, (c) familiarization with disability services, support and specialists at the university, (d) institutional and information support, (e) the types of disabilities and their specific educational needs, and (f) the development of personal skills needed to communicate with different students, whether or not they have disabilities.

Recent training programs for university teachers include universal design for learning among the dominant areas. Because it was developed as a framework to encourage teachers to be more inclusive in planning, conducting, and evaluation of teaching (Lombardi & Lalor, 2017), it brings benefits to all students, not just those with disabilities (Getzel, 2008; Lopez-Gavira et al., 2021). The results of the research show that the training of teachers in universal design for learning has a positive effect on their knowledge, attitudes, but also the confidence to continue applying this approach in practice (Lombardi et al., 2013; Schelly et al., 2011; Wynants & Dennis, 2017). Dallas et al. (2014) find that teachers who have previously had more than 48 hours of disability-related training are more willing to apply some aspects of universal design for learning than teachers who have not received such training. Positive results are also reported by Wynants & Dennis (2017) who dedicated one of the online training modules for teachers to the principles of universal design for learning and examples of teaching strategies used in it. The module consisted of video material showing teachers from different universities who described and presented universal design techniques in the classrooms. Izzo et al. (2008) provide seven guidelines for incorporating universal design for learning into higher education: (a) create a climate that fosters trust and respect, (b) identify the most important contents of the course, (c) use different teaching methods, (d) enable students so they can access the content of the course in different ways, (e) integrate natural support into learning, (f) use different methods that encourage understanding of the most important course content, and (d) follow new and promising teaching technologies.

Phillips et al. (2012) propose three levels of teacher training to work with students with disabilities. At the grassroots level, guidelines should be provided that describe expectations, types of accommodations, and

available resources. Intermediate level trainings should be organized as meetings with experts in the field and realized through focused work in small groups. At the highest level of training, support should be individual and address issues related to specific and complex adjustment issues needed by individual students.

### *The Universal Design for Learning as a way to achieve the inclusion of students with disabilities at university level*

Universal Design for Learning (UDL) is an approach, developed during the 1990s by the Center for Applied Special Technology (CAST), based on a set of principles for the design and development of approaches that offer all individuals equal learning opportunities through the construction of a flexible and accessible curriculum, which can be effective for all students, regardless of the presence or otherwise of difficulties. UDL addresses learner variability by delineating the varied ways in which individuals process, express, and engage with information. It “facilitates the access to the curriculum, to learning activities and to the social life in the classroom to all students” (Katz, 2012, p. 25).

To implement this approach, it is necessary to understand the variability of the students’ educational and training needs and any learning barriers posed by the environment and curriculum from the very beginning – in other words, design flexible training courses that are accessible to as many students as possible without the need for subsequent adaptations (Rose & Meyer, 2002). Therefore, it is necessary to plan proactively, designing the curricula on the assumption that the curricula, and not the students, are disabled. Wehmeyer (2006) stated that educational content should be designed to be truly accessible to all students in advance, using technological means and pedagogical strategies.

UDL promotes a holistic as well as an authentic approach to learning and assessment. Its framework is based on the principle according to which the student has a typical and systematic variability. UDL is not simply a series of principles but, acquiring importance over the years, has become a standard in new forms of educational planning. The guidelines can be applied to design objectives, methods, materials, and assessments (Meyer et al., 2014). The idea of learning is linked to the results and not to the means



of achieving them. These means are left open in the sense that each student will find a way to achieve the result by expressing their educational needs. The emphasis is placed on personal characteristics and transversal skills combined with the curriculum and collaborative planning with teachers (Nevin et al., 2013). Students with disabilities experience university life by focusing more on learning than on experiences of inclusion and academic socialization, which are often insignificant. UDL provides flexible pathways that help all students, including those with significant disabilities (Sailor & McCart, 2014), to cope with learning objectives and also social inclusion (Rao et al., 2014). By applying UDL principles, students with disabilities would encounter more inclusive experiences and better academic results. Only in this way we can guarantee access to the general curriculum for people with ID. Research on UDL in an academic context shows a positive relationship between academic results and the application of UDL principles (Rao et al., 2014).

The UDL is based on brain science and evidence-based educational practices. The three principles on which UDL is based were derived from this research:

- Multiple means of representation (the “what” of learning) – using a variety of methods to present information, provide a range of means to support.
- Multiple means of action and expression (the “how” of learning) – providing learners with alternative ways to act skilfully and demonstrate what they know.
- Multiple means of engagement (the “why” of learning) – tapping into learners’ interests by offering choices of content and tools; motivating learners by offering adjustable levels of challenge.

Nine guidelines were developed (CAST, 2008; 2011; 2018) from these three principles, representing UDL’s fundamental principles. The guidelines offer a series of concrete suggestions that can be applied to any discipline. This approach can help teachers customize a curriculum to serve all learners, regardless of ability, disability, age, gender, or cultural and linguistic background. UDL provides a plan for designing strategies, materials, assessments, and tools to reach and teach students with different needs.

## *Universal design in training of university teachers*

The inclusion of students with ID in university is a reality, but it still faces numerous barriers: informatics, bureaucratic, architectural, learning, personal and social. The role of the University's teacher becomes fundamental, as they need to be well prepared (Almeida, 2018). The University teacher should be trained in Universal Design for Learning (UDL), and face the challenge of creating a valid education for all, proposing concrete criteria for implementation, which guides their practice towards a radical change in educational systems. The University teacher by using UDL will cater for diversity through the use of various resources (pedagogical and technological), materials, techniques and strategies, facilitating learning and, consequently, access to the curriculum (Bock et al., 2018). The traditional "one-size-fits-all" teaching approach has been shown to be insufficient to meet the diversity of the university students. The university teacher should use the UDL proposals as a method to benefit all students (Craddock & Mcnutt, 2017) as it offers diverse ways of presenting the content, performing and engaging with the task. In order for students with disabilities to access their chosen course curriculum, there is the need to have the three principles of UDL (diverse means of content presentation, diverse means of action and diverse means of task engagement) available, as they provide more support to students and maximize learning (Dell et al., 2015). UDL lowers learning barriers, and facilitates access to the curriculum, being also able to provide more personalized teaching in which the student is able to self-regulate (Basham, 2016). The application of the UDL guidelines by the university teacher is fundamental in the teaching and learning process of the students with ID. The teacher: makes the selection of content that, in fact, promotes the cognitive development of students with ID; Designs appropriate assessments for students with ID, which are able to verify the acquisition of conceptual content; and uses technology combined with other resources (Rao et al., 2017); Training for teachers to learn about UDL and disabilities in general; Flexibility in the curriculum, making it more accessible to everyone; Personalized learning, with the use of technology to help students self-regulate; Use of UDL in distance and online courses; The university teacher must have solid theoretical knowledge in education and in UDL. Pearson (2015) wrote that the use of UDL, technology, the knowledge of various learning techniques and the design of appropriate assessments are key elements for a good professional performance, which ultimately results in high learning rates.

University teachers should not confuse curricular adaptation with adaptation of teaching activities. Curricular adaptation should occur because students are different from each other and need specific strategies, methodologies, assessments and learning objectives to themselves, that is, a set of pedagogical practices that ensure access to academic content. Adapting activities is only one item in this larger process. When activities are adapted without this reflection, there is improvisation what does not guarantee the academic and cognitive development of these students. This difficulty results in offering, especially for students with disabilities, a content in which scientific, mathematical, linguistic concepts, among others, are not taught (Heredero, 2020).

The training of University teachers on the UDL guidelines, either in in-service training courses, or in the understanding of disabilities, results in a professional performance more in tune with the needs of each student. It is essential to disseminate the theoretical basis of UDL. Universal design for learning is a facilitator of the university teacher's pedagogical practices (Heredero, 2020).

According to the guiding principles of UDL, da Silva et al. (2019) highlight the importance of thinking about the "diversity of the learning process" when thinking about teaching for all, because if the way each student learns is not respected, there is the possibility of continuing a traditional, homogeneous and excluding teaching model.

It is essential to apply the principles of UDL in the teaching practice of the university's teacher, because it makes more flexible classes, strategies to benefit a greater diversity of students, and thus increase the effectiveness of teaching, facilitating access, participation and progress of all students without exception (Katz & Sugden 2013; King-Sears, 2014).

Nunes and Madureira (2015), emphasize that the UDL perspective is directly linked to a curriculum approach, as it "seeks to minimize barriers to learning and maximize success for all students, and to that extent requires the university teacher to be able to analyze constraints on curriculum management, rather than highlighting students' constraints" (p.133). This approach begins through the identification made by teachers in relation to the learning needs of the students from the class, and that this, seek resources and didactic procedures that seek to improve the performance of students, promoting an educational action proposed in and for the learning of the content (Zerbato, 2018). Thinking about inclusion at the University under

this perspective corroborates Zerbato (2018) statement about the need for an “Inclusive and collaborative Culture”. The first step for the concept of UDL to be applied is in changing the environment, not the person who is in that environment. We can use the classic example when talking about the applicability of universal design which are the doors with sensors, which open to everyone, all they have to do is get close. The university needs to be the place, where everyone who has the right to access it can have it, without their limitation being evidenced, because the environment, where the university teacher is included, will be prepared for everyone.

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## ULOGA UNIVERZITETSKIH NASTAVNIKA U PRUŽANJU PODRŠKE STUDENTIMA SA TEŠKOĆAMA

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### Sažetak

Univerzitetski nastavnici imaju odgovornost da obezbede uključivanje studenata sa intelektualnim teškoćama u učionice. U tom cilju, kao što je i potvrđeno u nekoliko studija, neophodno je, između ostalog, u biografije nastavnika dodati određene kompetencije; specifične obuke o invalidnosti, socijalnim, komunikativnim i pedagoškim veštinama... Takođe, univerzitetsko nastavno osoblje mora imati podršku svojih institucija i biti skloni sticanju ovih kompetencija. Univerzalni dizajn za učenje (UDU) je odgovoran za omogućavanje fleksibilne i inkluzivne obrazovne prakse; ima za cilj da odgovori na potrebe obuke kako studenata tako i nastavnog osoblja u svojoj njihovoj različitosti.

**Ključne reči:** izuzetni studenti, visoko obrazovanje, inkluzivno obrazovanje, akademci