

## Article

# Evaluation of Diversity Programs in Higher Education Training Contexts in Spain

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**Abstract:** Measures adopted by educational systems to improve and adapt the educational response of pupils with disability or diversity conditions arising from their personal and social conditions, have enabled them to gain tenure throughout the various stages of education. Educational institutions have been progressively adapting and responding to the educational needs of students who start university, and this fact highlights the lack of inclusive culture in university institutions. The lack of training of university teachers in the educational response to the needs of students with disabilities is evidenced by the high dropout rates of this group and in successive complaints of teachers who do not have the skills or tools to cope with this situation successfully. The review of a set of 75 programs developed by different Spanish universities to meet the needs of these students shows an insufficient institutional and administrative response while reflecting the lack of unity of jointly developed criteria.

**Keywords:** inclusion; special educational needs; diversity; university; program evaluation



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## 1. Introduction

The political, social and cultural changes of recent years have brought a set of normative changes focused on improving the socio-educational insertion of groups especially affected by segregationist policies of the past. Likewise, education systems have tried to respond to the diversity and needs of students, which has become a reality that is increasingly present in classrooms [1,2]. These changes have allowed the progression and improvement of the educational response of students with disabilities. The adaptation of spaces and the set of changes promoted by the different educational laws have turned educational centres into more inclusive learning contexts adapted to students with special needs. The individualized performance of teachers and the network of support and aid to adapt the educational response, based on the psychoeducational characteristics of the students, has turned out to be fundamental for the development of inclusive cultures in schools [3–6].

The process of consolidating this inclusive culture has allowed an increasing number of students with disabilities or specific educational needs to reach university. This has led university institutions to initiate changed policies in the framework of higher education [7]. In Spain, the educational response given to students with disabilities or with specific educational needs has improved the academic success rates of this group of students, while favouring the transition to higher educational levels [6]. There is an increasing number of young people with disabilities who want to attend university [8]. Specifically, in the 2018–2019 academic year, in Spain, a total of 22,190 male and female students with disabilities were enrolled, 1.5% of all university students. These data represent the highest

number recorded since 2008, where only 8230 students with disabilities were studying at university. The figures on students with disabilities collected by the Organization for Economic Cooperation and Development [8] and the European Agency for Development in Special Needs Education [9,10] confirm the increasing trend, although this effect is not significant in relation to the set of measures that have been implemented [11–14]. These measures mark a clear trend towards the development of special consideration in the improvement of the educational response and of the awareness towards the collective in the university context [15,16].

The implementation process of the European Higher Education Area (EHEA) was a response to globalization and the knowledge society of that time and marked the beginning of the set of reforms that Spanish universities had to carry out to face the economic reality, social and cultural aspects of the new European context of higher education. This demanded a set of norms, laws and decrees that improved the educational response in the university context. These should include the needs and requirements that had already arisen from fundamental laws, such as the Spanish Constitution (1978), Law 13/1982, on the Social Integration of the Disabled; Organic Law 1/1990 of General Organization of the Educational System; and the same Law 51/2003 of equal opportunities, non-discrimination and universal accessibility for people with disabilities (LIONDAU), and were considered for the whole of Spain.

A new perspective, promoted by the members of the new Europe, required leaving behind the classic vision of the university [17] and investing in what is [18–23] called “multiversity”. Faced with the vision of the traditional university, based on the mastery of knowledge and rationality, objectivity and systematics of the scientific method [20], a new value is given to education [23].

“[ . . . ] The opportunity to place the student apprentice in a learning situation by stimulating their creativity, by allowing them to see reality with questioning eyes, unravelling the interest in knowing the environment in its essence, principles, origins, through recognition of error and uncertainty, in order to prepare him for the knowledge of global problems (p. 45).”

The process of reflection and change in higher education in Spain involved questioning the role played by universities, where the educational focus was not purely and exclusively on teaching and research. Furthermore, the new university was established to generate social value and requires an inclusive and universal approach for responding to students, regardless of their condition or diversity [18].

The aim of this new concept was to bring a more critical, humanizing, multidisciplinary and sustainable vision to the university, which focused on new competencies and roles on the part of teachers and students; see Table 1.

Universities are required to adapt to their context, their social and economic reality, and offer quality services that meet the expectations and needs of the community, both academically and socially [24]. As stated in the 2020 Strategy of the European Commission, the new university should promote the development of skills and the acquisition of knowledge; promote productivity, innovation and economic growth; be sustainable and inclusive, focused on the removal of barriers to accessibility; encourage participation, equality, employment, education and training, social protection, health and external action [25–28].

The Convention on the Rights of Persons with Disabilities, signed on March 30 of 2007, by a total of 82 countries, and to which Spain adhered on December 3 of that same year, ensured the need for the development of a system of inclusive education at all levels, including higher education. The intention was that each country could develop and implement the necessary policies for the full development of each and every citizen based on respect for human rights, a sense of dignity and self-esteem, fundamental freedoms and human diversity, enhancing the development of personality, creativity and the set of capacities, abilities and mental and physical aptitudes, whatever the disability or condition associated with it [21].

**Table 1.** Legislation in relation to the response to diversity in the university context.

Regulatory Development	Inputs
Organic Law 6/2001, Organic Law of Universities (LOU)	Promulgates equal opportunities and non-discrimination, configuring them as student rights. Universities are responsible for their statutory development. Introduction and promotion of active policies that guarantee the accessibility of the university environment, as well as equal opportunities for people with disabilities who are at the university.
Organic Law 4/2007, which modifies Organic Law 6/2001.	Organizational and structural changes focused on the design of degrees and on the roles of teachers and students.
Royal Decree 1791/2010.	It approves the Statute of the University Student and supposes a modification of the LOU. It contains 17 articles in relation to the group of students with disabilities: basic principles of non-discrimination (arts. 4 and 13.j), participation (arts. 38.3.c, 38.5, 62.5 and 64.4), representation (arts. 35.5 and 36. f), access and admission (art. 15), tutorials (art. 22), academic practices (art. 24.4); mobility (art. 18), assessment tests (art. 26), communication and review of grades (arts. 29.2 and 30.2) and creation of student care services (arts. 65.5 to 8 and 66.4). Article 12.b obliges universities to establish the necessary resources and adaptations so that students with disabilities exercise all their rights on equal terms without lowering their academic level.
Law 26/2011.	Normative adaptation to the International Convention on the Rights of Persons with Disabilities. Designation of the Spanish Committee of Representatives of People with Disabilities (CERMI) as a supervisory and control body, which controls universities in the application of the Convention and regulations on disability.
Royal Legislative Decree 1/2013 of November 29, which approves the Consolidated Text of the General Law on the rights of people with disabilities and their social inclusion Royal Legislative Decree 1/2013 of November 29, by which approves the Consolidated Text of the General Law on the rights of persons with disabilities.	It reiterates its commitment to the principles and mandates of the convention and international and national regulations. They establish the following mandates: (a) education must be inclusive, of high quality and free; (b) equality of conditions must be respected; (c) guarantees to be ensured by educational administrations; regulation of support and reasonable adjustments, especially in learning, and inclusion of students who require special attention.
Royal Decree 412/2014, which establishes the regulations for the admission procedures for official undergraduate university studies	It establishes access to undergraduate education from the principles of equality and non-discrimination, and the accessibility of entrance exams for students with disabilities or special needs. Regarding the entrance tests, it establishes the appropriate measures with respect to the organizing committees of the tests and the qualifying processes. Place reservation system for disabled people; 5% for students who have a recognized disability level of at least 33%.
Royal Decree 592/2014.	Regulates the external academic practices of university students and establishes: That they are accessible to students with disabilities, ensuring the availability of the necessary human, material and technological resources that ensure equal opportunities. Have the necessary resources for the access of students with disabilities to guardianship, information, evaluation and the performance of the practices in equal conditions. Reconcile for students with disabilities, practical lessons with activities and personal situations derived from the disability situation.

This has allowed universities to acquire a commitment and responsibility regarding the implications of responding to the needs of students with disabilities. Universities, as social agents, must ensure the free and effective participation of students; develop the potential of each student, adapting the necessary resources and strategies; promote quality employment; and favour independence and freedom in decision making. Diversity is a value and a right and responds to the requirements of the group of students with special needs. The achievement and fulfilment of one of the Sustainable Development Goals

(SDGs) that [22] has been scheduled for 2030 will depend on the capacity and commitment of the countries, which is “guaranteeing inclusive and equitable quality education, and promote lifelong learning opportunities for all” (p. 71).

### *The Reality and Evolution of Disability in Universities*

It is interesting to consider the effects of the measures adopted by universities regarding the response of students with disabilities. Reflecting on this phenomenon requires an analysis of the reality of disability in higher education contexts, as studies on disability in college are not as abundant.

Studies in the context of higher education have taken account of those carried out at non-university educational levels and have mainly focused on access to university studies and the transition to university [29–35]; attitudes towards students with disabilities [36–40]; university support services and programs [34–39,41]; teachers’ attitudes [40–43]; and universal accessibility and design [40–45].

This complexity of aspects that converge in what must be an adequate educational response in the university context [42] has disregarded issues related to university access and transition [28,43]. The current challenge of responding to the educational needs of students with disabilities who attend university is centered on the challenge for universities to prevent these students from dropping out of education and ensure that they finish their degree [17].

Universities are committed to equal opportunities; they are concerned with generating measures that guarantee the inclusion of students with disabilities, thus improving the quality of care, aimed at promoting educational promotion and job placement [44]. However, despite the efforts made to promote diversity and improve access and permanence for all people with disabilities, the percentage of university students with disabilities remains low, according to data from [46]. In 2020 [47], according to the State Disability Observatory, only 1.5% of students with disabilities completed undergraduate studies at public universities and 1.2% at private universities, and 1.2% completed postgraduate and master’s degrees. Regarding doctoral studies, the percentages are significantly lower—below 1%.

The evolution data of the enrolment of students with disabilities in Spanish universities have been developing slowly but progressively; see Table 2.

**Table 2.** Evolution of enrolment of students with disabilities.

	2011–2012	2013–2014	2015–2016	2017–2018
<b>Undergraduate</b>	1.2%	1.3%	1.8%	1.8%
<b>Postgraduate and Master</b>	0.5%	1.2%	1.2%	1.2%
<b>Doctorate</b>	0.3%	0.6%	0.9%	0.7%

Source. Universia Foundation. Reports on universities and disability.

The analysis of the data according to the type of disability and the areas and levels that the students are studying allows us to investigate the need for a differentiated response, adapted to the needs of the individual [25–27]. If we take the latest report from [9] as a reference, the prevalence of physical disability (55.9%) is revealed, compared to others, such as psychosocial/intellectual/developmental (26.5%) and sensory (17.6%) disability. In relation to the evidence, 54% of students with special educational needs have completed degrees in social and legal sciences; 26% in science, technology, engineering and mathematics; and 19.5% in arts and humanities. The data reflect the need to reinforce and articulate a specific support and orientation mechanism for those branches in which there are more students with disabilities.

Focusing specifically on the support offered to students with disabilities, Spanish universities have a service for students with disabilities, in the form of a service, office or internal area. At this point, it is necessary to be aware of and value the types of services, activities or programs that the universities carry out to address the diversity of university students. In [8], it is confirmed that 76% of universities focus their actions on providing

care for students with disabilities, in the development of programs and activities aimed at pre-university students, and 90% of Spanish universities carry out the monitoring and tutoring of students with disabilities. In addition, out of all Spanish universities, 68% currently have a psychoeducational orientation service. The resources made available to students by the universities are well valued by students with disabilities, and the Service for Attention to Students with Disabilities is the main resource used by these students (52.5%). These percentages are higher in public universities (53.4%) than in private ones (43.7%), as well as in face-to-face universities (62.0%) compared to non-face-to-face (36.5%).

This study analyses the educational response that Spanish universities have given through different programs, student care services or other services in order to promote the educational inclusion of students with disabilities in the university context. In addition, it aims to assess the degree of development of the strategies used to favour the improvement of the educational response of this student body.

## 2. Materials and Methods

The Universia Foundation has spent years investigating the inclusion processes and the measures that different Spanish universities have implemented to improve the educational response of university students with disabilities. The guide [48] describes the set of activities and tasks included in different programs, student care services or other services developed by universities. Specifically, it states curricular adaptations; special attention to disability education; conferences and courses oriented to disability; disability training plans for teachers; space reservation fees; total exemption from payment of fees; reception procedure and orientation of new students; scholarships, grants and credits; web accessibility and electronic media; accessibility in spaces and buildings; accessible educational materials; Spanish Sign Language (SSLE) interpreters; volunteer programs; specific advice to people with mental illness; high-capacity student care programs; language learning for hearing impaired students; orientation and labour intermediation actions and actions to promote entrepreneurship.

To carry out this work, the data from the reports on inclusion in universities of the Universia Foundation were considered. In relation to the objective that was defined for this study, common variables described in the reports for the years 2011 to 2018 and those which referred to the set of tasks and activities included in the different programs were selected. The self-reported data from 75 universities were selected from the questionnaire that the Universia Foundation sent to specific or general services, related to the care and improvement of the inclusion of people with disabilities, in their various denominations.

Two questionnaires were used for data collection: (a) the questionnaire addressed to universities contained 86 questions grouped into 10 blocks: 1. general aspects of the university, 2. university community with disabilities, 3. services for students with disabilities 4. scholarships and aid to students with disabilities, 5. accessibility, 6. training and awareness, 7. policies and study plan, 8. governance, 9. specific regulations and 10. other considerations; (b) the questionnaire for students with disabilities made up of 25 questions related to 1. general data (university, level of studies, course, etc.), 2. orientation, 3. barriers and 4. general comments.

The response was obtained from a total of 1720 students with disabilities, which was distributed as follows; see Table 3.

The analyses were performed using the SPSS V25.0 statistical package and are presented descriptively.

**Table 3.** Characteristics of students with disabilities.

Gender	Studies		
	Undergraduate	Postgraduate	Doctorate
Women	49.1%	48.7%	43.4%
Men	50.9%	51.3%	56.6%
<b>Type of disability</b>			
Physical		55.9%	
Psychosocial/Intellectual/Developmental		26.5%	
Sensory		17.6%	
<b>Branch of studies</b>			
Social and Legal Sciences		54%	
Science, Technology, Engineering and Mathematics		26%	
Arts and Humanities		19.5%	

### 3. Results

The set of activities and tasks developed within the framework of care for people with disabilities in university contexts are different in terms of intensity and variability. Spanish universities have adapted and applied the accessibility law for people with disabilities (89.6%); carried out curricular adaptations (87%); organized diversity-oriented courses and seminars (81.80%); or provided their students with disability-friendly web accessibility, electronic means (77.9%) and accessible educational materials (75.3%), amongst other actions. However, they have not developed response programs for highly capable students (80.5%); they have not made language learning possible for students with hearing disabilities (68.8%); they have not promoted entrepreneurship among students with disabilities (62.3%); and they have not adequately promoted training plans for people with disabilities (62.3%); see Figure 1.

In general terms and based on the results extracted from the 2018 report of the Universia Foundation, three out of ten students with disabilities have received some accommodation by their university. Adaptations are the most frequent measures among those who have accessed the shift to reserve places for students with disabilities (40.9%), which is not the case for free access (26.7%). The most frequent adaptations are those of means and supports (69.1%). They mainly consist of adaptations of dates and times (14.5%); adaptations in the form, content or duration of the exams (8.9%); adaptations of accessibility, transport or parking (3.9%); economic adaptations (1.9%); and curricular adaptations (0.8%).

For a better interpretation, we present the average value represented as a trend line.

#### 3.1. University Type (Public/Private)

Considering the type of university, in general terms, the response of public universities is far superior to that of private universities.

Especially noteworthy are the differences with respect to courses and seminars oriented to diversity, disability training plans for teachers, space reservation fees, total exemption from payment of fees, web accessibility and electronic media accessible educational materials, LSE interpreter and specific advice to people with mental illness.

Aspects such as a high-capacity student care programs or language learning for hearing impaired students do not reach 50% in either public neither or private universities, although the trend of being higher in public universities than in private ones is maintained.

Regarding orientation actions and labour intermediation, the trend is reversed, being greater in the case of private universities; see Figure 2.

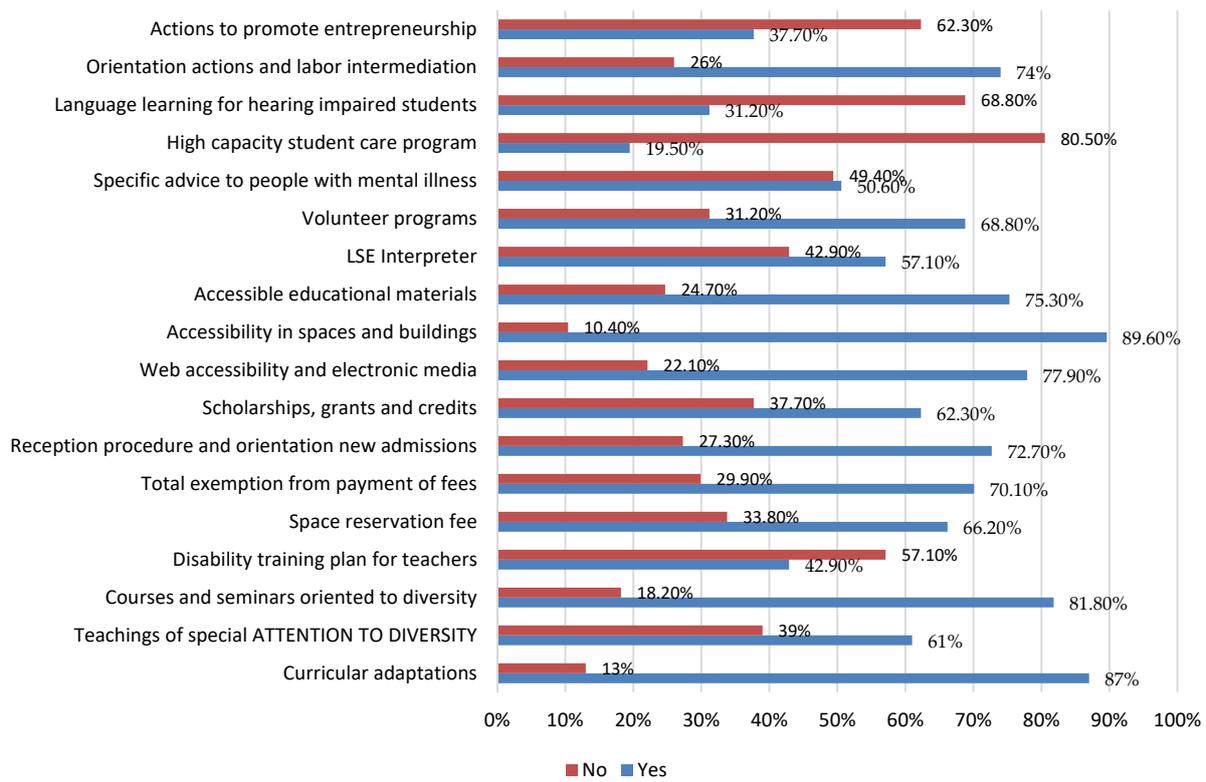


Figure 1. Activities and tasks carried out within the framework of care for people with disabilities in university contexts.

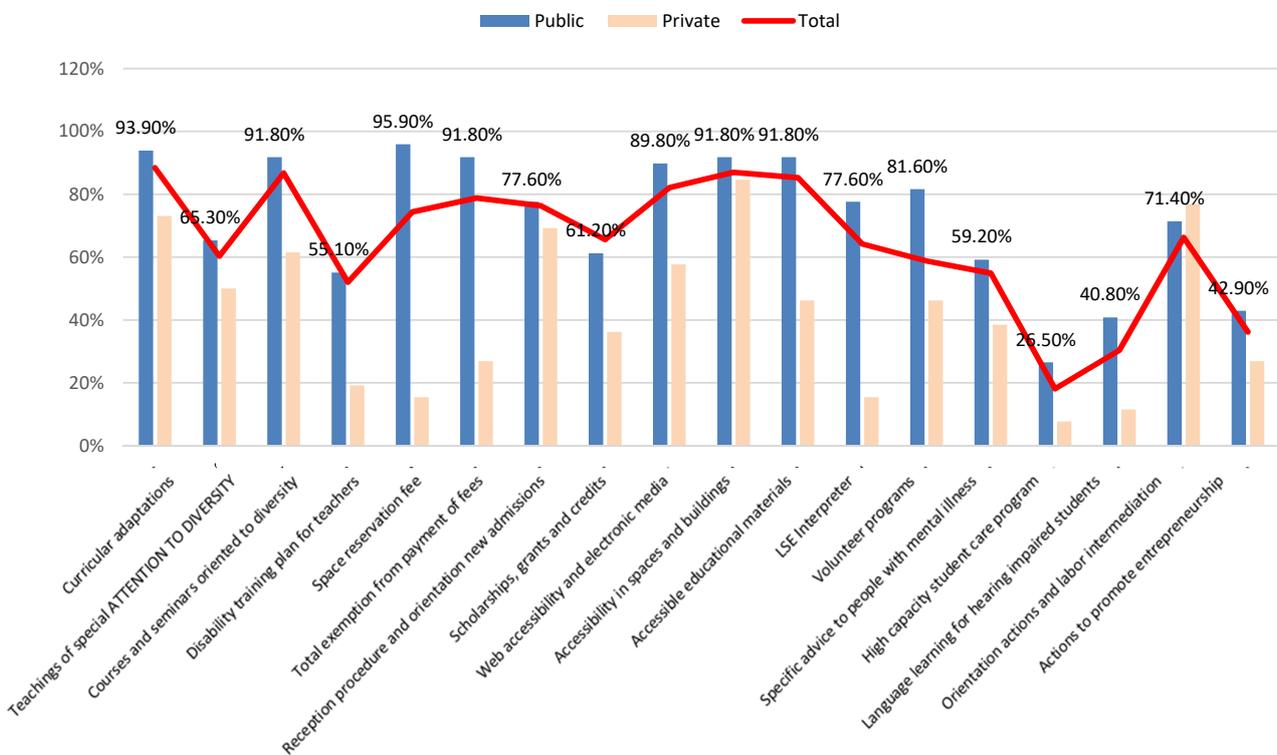


Figure 2. Type of university (public/private).

### 3.2. Teaching Modality (Face-to-Face/Virtual)

In the case of the teaching modality, in general, face-to-face universities outnumber virtual ones in most of the activities and tasks carried out for attention to diversity.

Virtual universities, however, outperform face-to-face ones in measures such as curricular adaptations (public = 86.3%; private = 100%); total exemption from payment of fees; (public = 69.9%; private = 75.0%); scholarships, grants and credits (public = 61.6%; private = 75.0%); accessibility to spaces and buildings (public = 89.0%; private = 100.0%); and orientation actions and labour intermediation (public = 74.0%; private = 75.0%).

Public universities outperform private universities in the rest of the actions in relation to the response to students with disabilities. In this regard, actions such as high-capacity student care programs and language learning for hearing impaired students that are not present in private universities are remarkable; see Figure 3.

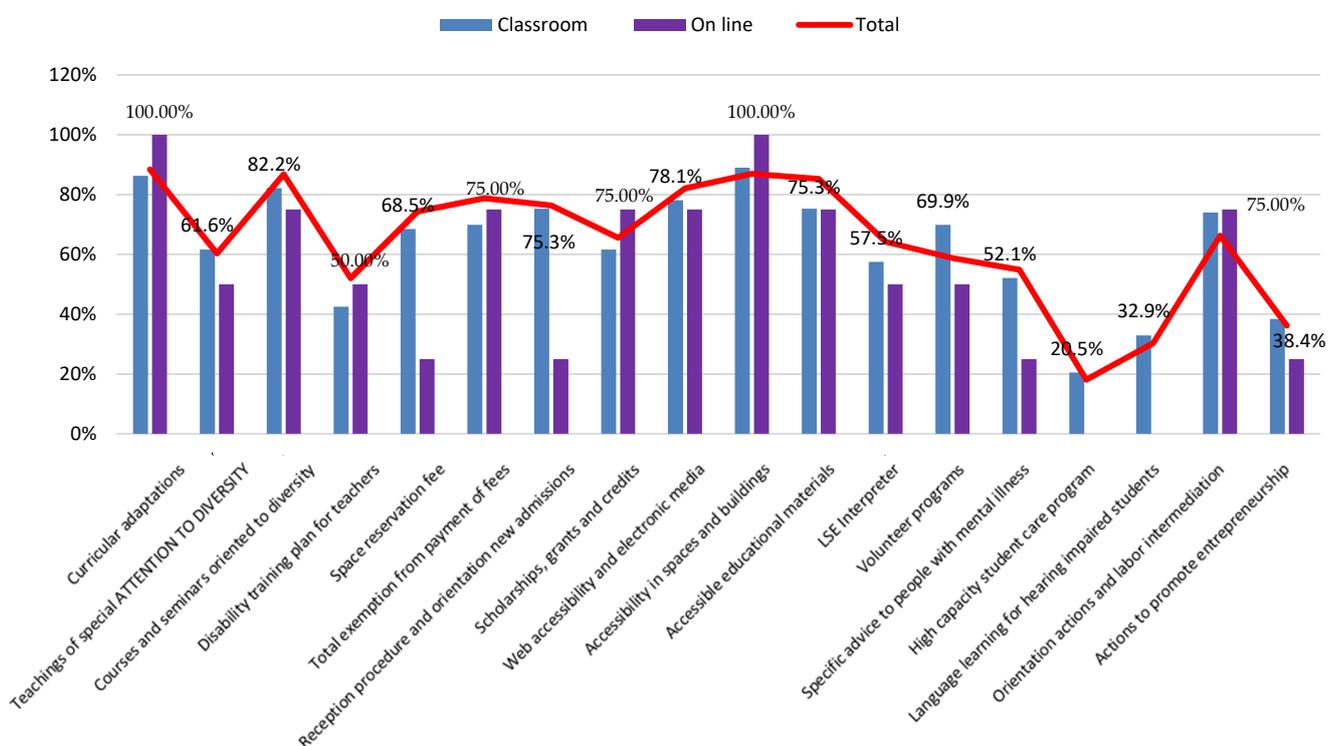


Figure 3. Teaching modality (face-to-face/virtual).

At this point, we present the results in relation to the number of universities by autonomous communities, based on the financing data of the universities published in 2019 (CRUE—Spanish Universities 2019), which state the income of the autonomous communities for their respective universities.

### 3.3. Autonomous Communities with More Than 10 Universities

To assess the results, the communities were grouped according to the number of universities per autonomous community. Thus, in the case of communities with more than 10 universities, the community of Andalucía stands out. This community surpasses the rest in most activities and tasks developed to prioritise diversity. They stand out especially in resources such as space reservation fee (90.9%); total exemption from payment of fees (100.0%); LSE interpreter (81.8%); volunteer programs (100.0%); specific advice to people with mental illness (72.7%); high-capacity student care program (54.5%); language learning for hearing impaired students (54.5%).

According to data on the financing of these universities, the communities of Madrid and Cataluña cut funding to their universities by 9.1% and 23.6%, respectively, compared to the community of Andalusia, which increased its funding by 2%; see Figure 4.

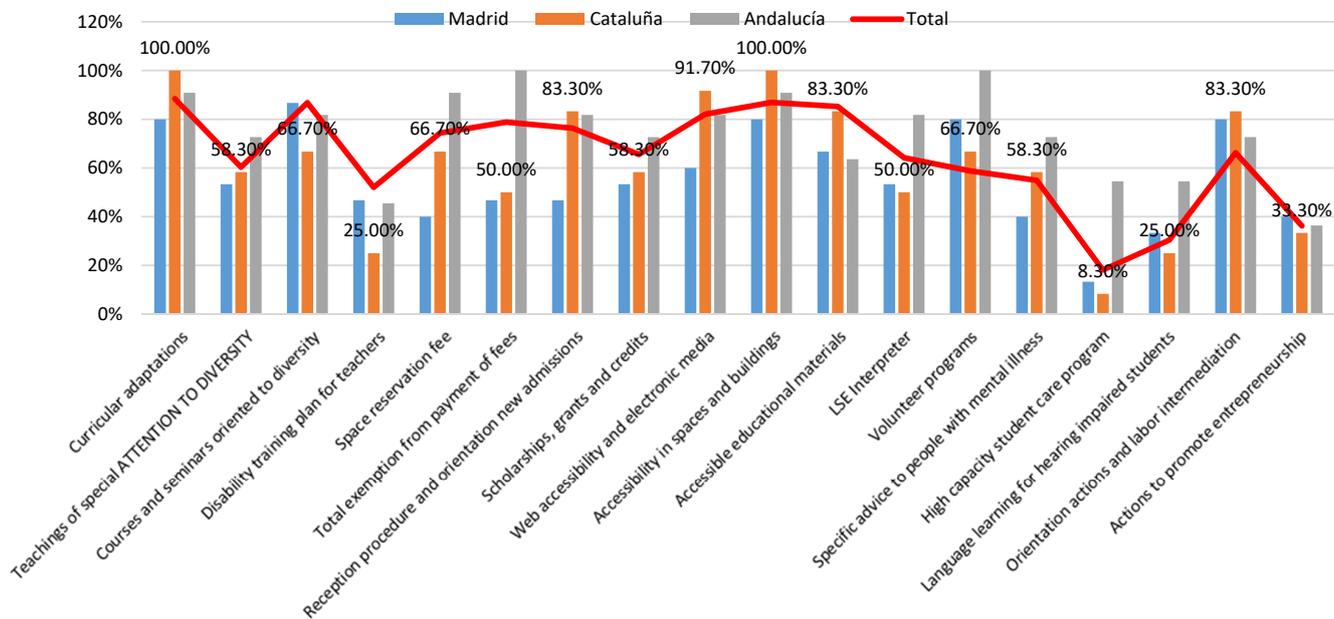


Figure 4. Autonomous communities with more than 10 universities.

### 3.4. Communities with Four and Eight Universities

In the case of the communities with four and eight universities, the communities of the País Vasco and Castilla León stand out. In general, these communities carry out more activities and pay more attention to diversity. Specifically, the universities of the Basque Country (funding cut of 2.7%) stand out in resources such as total exemption from payment of fees; scholarships, grants and credits; accessibility to spaces and buildings; and accessible educational materials, all of them with 100.0%. The universities of Castilla y León (funding cut of 9.7%) stand out in resources such as teachings of special attention to diversity (71.4%); total exemption from payment of fees (85.7%); accessibility to spaces and buildings (100.0%); volunteer programs (57.1%); orientation actions and labour intermediation (100.0%).

The universities of the community of Valencia (those with the greatest cut, 17.1%) offered, in general terms, fewer resources and were below the universities that suffered fewer cuts in funding. They stood out above the rest in curricular adaptations (87.5%); courses and seminars oriented to diversity (87.5%); space reservation fees (75.0%); reception procedure and orientation new admissions (87.5%); web accessibility and electronic media (87.5%); accessibility to spaces and buildings (100.0%); and actions to promote entrepreneurship (50.0%); see Figure 5.

### 3.5. Communities with three or Fewer Universities

In the case of communities with three or fewer universities, the offer of activities and tasks that focus on diversity is below the Spanish average. In general, it can be observed that of the 21 universities that make up this group, 81% suffered cuts between 0.2% in the case of Aragon and 34% in the case of the universities of Castilla la Mancha. In this sense, the universities of the communities that cut funding the most were those that were the most affected in regard to their supply of resources and means for responding to the diversity of their students—mainly Canarias Murcia Navarra and Cantabria.

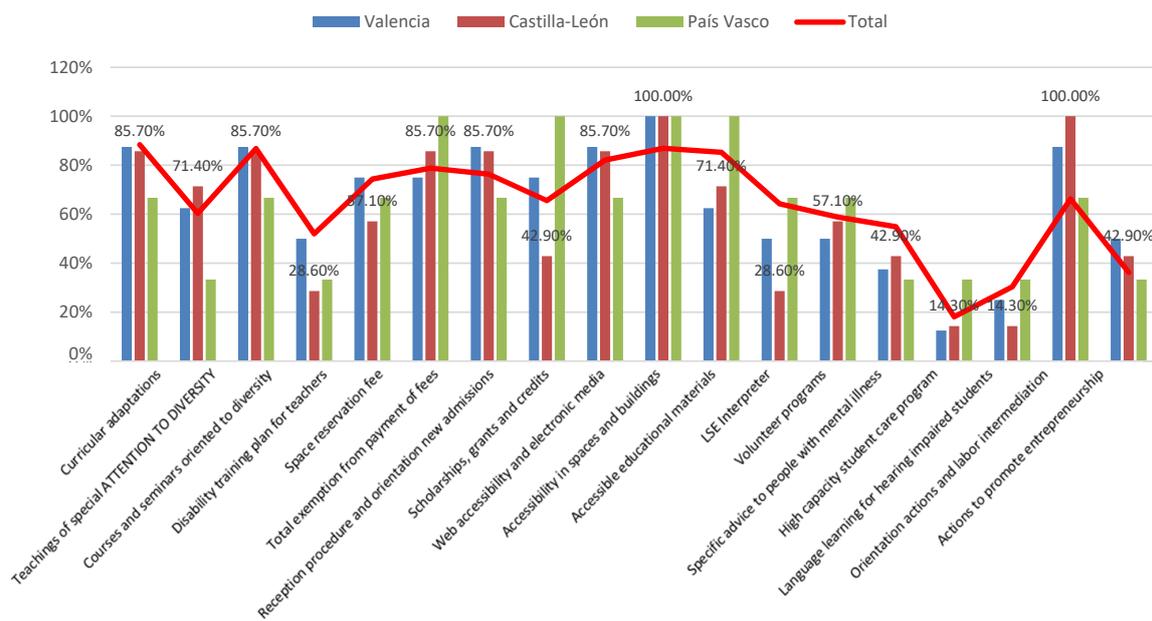


Figure 5. Communities with between 4 and 8 universities.

### 3.6. Students with Disabilities in Universities

Based on the number of students with disabilities attending universities, the data show that the universities with the highest enrolment rate of students with disabilities are the ones that offer the most activities and attention to diversity; see Figure 6.

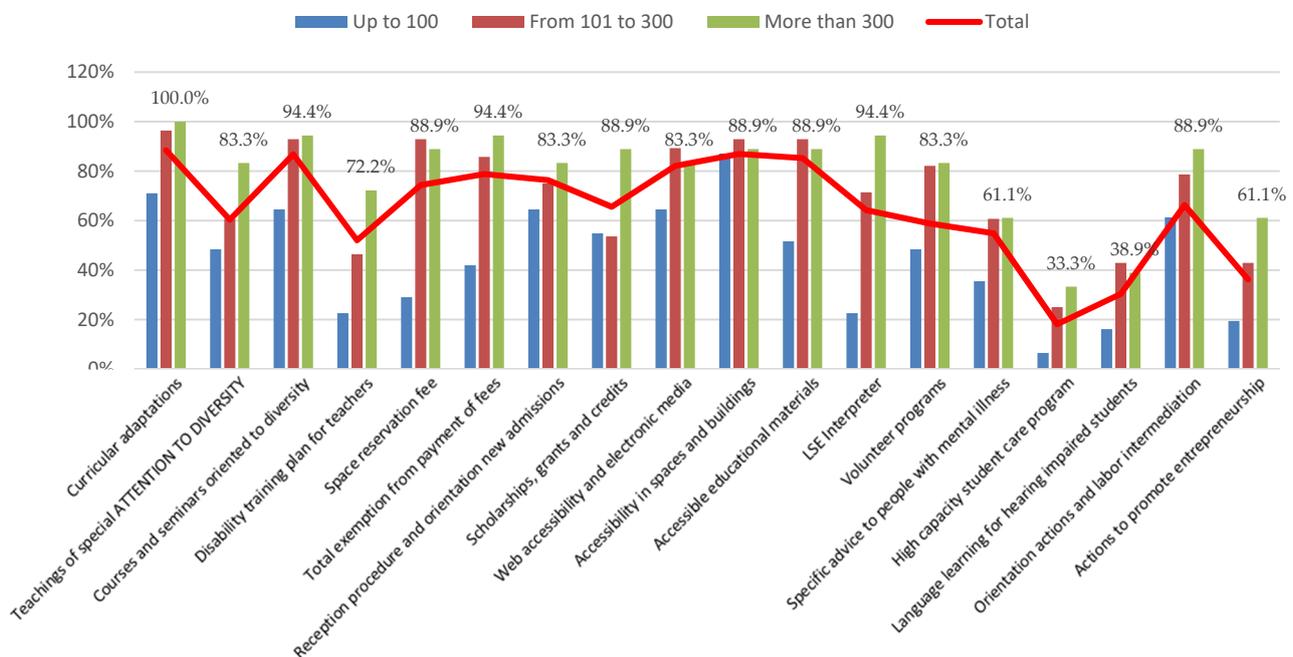


Figure 6. Students with disabilities in universities.

## 4. Discussion

The results presented in this study analyse the set of activities and tasks developed within the framework of care for people with disabilities in university contexts. According to the State Observatory of Disability [49], the increase in students with educational needs in the university context is a reality for which few universities are prepared [2,25,46]. The individual or isolated actions of the teaching staff are not enough, and in this sense, the

universities have implemented a series of actions within the framework of the regulatory norms for attention to diversity. These actions, in the set of universities, have been specified as essential actions focused mainly on the adaptation of spaces and resources [28] and training strategies [7]. Even though, as stated in [15,16], these measures mark a trend of awareness towards the collective in the university context, they are still not sufficient, at least in light of the results of this study.

The processes of inclusion in the context of higher education have led to a new approach in the roles and performances of both the university and the teaching staff who must respond to the needs of new students. The new context of higher education supposes the adoption of a new perspective focused on social value and requires an inclusive and universal approach to respond to students, regardless of their condition or diversity [3–6,18,27]. This new concept requires a critical, humanizing, multidisciplinary and sustainable perspective [25]. This new perspective will help universities to achieve the Sustainable Development Goals (SDGs), through a commitment to promoting good practices that are both inclusive and sustainable.

The actions described and implemented by Spanish universities have revealed shortcomings and limitations inherent to the transition model of the university [29–34]; in this sense, actions aimed at training, awareness raising and academic and professional orientation are required for students with disabilities. The aim is to favour the improvement of attitudes towards these students [35,39,40,50,51] and to offer services and university support programs adapted to their needs [41,52–57].

Universities in this sense have followed a continuity model, in relation to the diversity response model used in secondary education. It is urgent to evaluate the adequacy of the response to the students and the availability of resources that are currently used in relation to the needs expressed by this group [58–63]. With regard to adapting the contents, the reservation of places due to disability; the total exemption from the payment of fees, scholarships, grants and credits; or web accessibility or electronic media and educational materials is not enough. These are responses that do not imply concrete actions to improve learning opportunities or the quality of the educational response. A real analysis of the conditions and circumstances surrounding students with disabilities is required to respond effectively to their needs [6]. Generic actions or student support programs are part of the global response model, but new measures and work models focused on students are required for Spanish universities. We can choose to focus the response on specific intervention and support actions whose effectiveness has been conditioned by the number of students with disabilities who access each university, by the teaching modality (virtual or face-to-face) or by nature itself and financing offered by the autonomous communities in which these universities are located. However, not all universities have the same economic, educational or professional resources, nor is there a common action that favours the equity of resources, programs and financing based on the needs derived from the response to diversity in the context of higher education [26]. It is necessary to rethink the model and the type of response that is being offered by the universities to students with educational needs. The adaptation of physical spaces and the elimination of barriers that generally exist in all universities are due to the reality of the profile of the student body that they host and who mostly present some type of physical or motor disability (55.9%), which indicates that 89.60% of the universities carry out actions to adapt spaces to improve accessibility. However, is that the only accessibility that should be considered when we consider improving the educational response of students? We can clearly state that it requires the mastery of specific strategies to improve the response to diversity, more curricular adaptations, better procedures for the evaluation and monitoring of students with disabilities [4–6] and better training and teacher qualification. Supporting learning for all students requires an understanding of the interrelationships that shape student learning experiences [64–67]. This requires an ecological approach that addresses the barriers to learning within institutions and from a model and culture of diversity [18,25]. An adequate response to students requires the improvement of the competencies of the teaching staff

and the rest of the educational community. The information received and the quality of the training have been shown to be determining variables for the generation of more positive attitudes and expectations of success towards diverse students [15,17].

Studies on the scope and effects of improving inclusive processes derived from quality teacher training in non-university contexts have been widely studied; however, there are few studies focused on the context of higher education. We consider it necessary to explore the impact on the inclusive practice of university teachers who participate in training sessions to improve the response to diversity. An analysis of the teacher training plans in the field of diversity, in this case, carried out in the context of the University of La Laguna, reveals that few sessions are focused on this aspect. This fact could seem to be isolated and rare, but the reality is that by reviewing the rest of the plans developed by Spanish universities in 2019, it was evidenced that it is more common than it might seem.

Future studies should analyse whether the low rate of promotion and permanence of students with disabilities in universities depends on the types of resources and support available, which requires an analysis of the quality of services that allows all universities to understand and contribute to good practices for inclusion.

It is important to carry out future research with larger samples and in different university contexts that confirms the importance of the variables analysed and the longer-term effect of the set of measures developed and promoted by Spanish universities.

Likewise, it would be useful to carry out longitudinal studies to gain insight into the evolution of students with disabilities in the university context, as well as the study of the success and dropout rates [25] of the students who receive support and resources for their adaptation to the context of higher education.

## 5. Conclusions

This study shows the adaptation process and the efforts of Spanish universities to respond to the needs of an increasing percentage of students with disabilities or functional diversity who access higher education. The resources allocated to processes of adaptation of spaces and material adaptation are the most frequent; the reality of the more focused measures on the adequacy of the educational response shows less frequent actions in universities with fewer students with disabilities or with worse funding. The deficiencies and limitations detected in the response to the diversity of the students requires the improvement of the teacher training plans and the development of a culture of inclusion, which is sensitive to the reality of each of the students with educational needs who access higher education.

The increase in specific measures for the adaptation of the educational response is especially necessary for degrees in the branch of social and legal sciences due to the high demand of students with disabilities.

This requires an increase in funding from universities who see, in the response to the diversity of their students, an inescapable challenge and social commitment as educational institutions. The challenges and fulfilment of the sustainable development objectives, in the case of universities, involves the commitment to provide an equitable, adequate, adapted and effective educational response to all their students, regardless of their condition.

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## References

- Ruiz-Ruiz, J.; Pérez-Jorge, D.; García García, L.; Lorenzetti, G. *Gestión de la Convivencia*; Ediciones Octaedro: Barcelona, Spain, 2021. (In Spanish)
- Moriña, A. Inclusive education in higher education: Challenges and opportunities. *Eur. J. Spec. Needs Educ.* **2017**, *32*, 3–17. [CrossRef]
- Pérez-Jorge, D.; de la Rosa, O.M.A.; del Carmen Rodríguez-Jiménez, M.; Márquez-Domínguez, Y. La Identificación Del Conocimiento Y Actitudes Del Profesorado Hacia Inclusión De Los Alumnos Con Necesidades Educativas Especiales. *Eur. Sci. J.* **2016**, *12*, 64–81. (In Spanish) [CrossRef]
- Pérez-Jorge, D.; Barragán, F.; Molina-Fernández, E. A Study of Educational Programmes that Promote Attitude Change and Values Education in Spain. *Asian Soc. Sci.* **2017**, *13*, 112–130. [CrossRef]
- Pérez-Jorge, D.; Pérez-Martín, A.; Barragán-Medero, F.; Rodríguez-Jiménez, M.C.; Hernández-Torres, A. Self-and Hetero-Perception and Discrimination in Attention Deficit Hyperactivity Disorder. *Heliyon* **2020**, *6*, e04504. [CrossRef]
- Danforth, S. Becoming the rolling quads: Disability politics at the university of California, Berkeley, in the 1960s. *Hist. Edu. Q.* **2018**, *58*, 506–536. [CrossRef]
- Hutcheon, E.J.; Wolbring, G. Voices of ‘Disabled’ Post Secondary Students: Examining Higher Education ‘disability’ Policy Using an Ableism Lens. *J. Divers. High. Educ.* **2012**, *5*, 39–49. [CrossRef]
- Pérez-Jorge, D.; Rodríguez-Jiménez, M.C.; Ariño-Mateo, E.; Barragán-Medero, F. The effect of Covid 19 on synchronous and asynchronous models of university tutoring. *Sustainability* **2020**, *12*, 8631. [CrossRef]
- Konur, O. Teaching disabled students in higher education. *Teach. High. Educ.* **2016**, *211*, 351–363. [CrossRef]
- Universia Foundation. IV Estudio Sobre el Grado de Inclusión del Sistema Universitario Español Respecto de la Realidad de la Discapacidad. 2019. Available online: <https://www.consaludmental.org/publicaciones/IV-estudio-universidad-discapacidad.pdf> (accessed on 1 December 2020).
- OECD. Disability at Higher Education. 2003. Available online: <https://www.oecd.org/education/school/CBR%20Spain%20Spanish%20version.pdf> (accessed on 1 December 2020).
- EADSNE-European Agency for Development in Special Needs Education. *Mapping the Implementation of Policy For. Inclusive Education: An. Exploration of Challenges and Opportunities for Developing Indicators*; European Agency for Development in Special Needs Education: Odense, Denmark, 2011. Available online: <https://www.european-agency.org/resources/publications/mapping-implementation-policy-inclusive-education-exploration-challenges-and> (accessed on 1 December 2020).
- Eurydice. The European Higher Education Area in 2012: Bologna Process. *Implementation Report; Audiovisual and Culture Executive Agency*. 2012. Available online: [https://www.ehea.info/media.ehea.info/file/2012\\_Bucharest/79/5/Bologna\\_Process\\_Implementation\\_Report\\_607795.pdf](https://www.ehea.info/media.ehea.info/file/2012_Bucharest/79/5/Bologna_Process_Implementation_Report_607795.pdf) (accessed on 1 December 2020).
- Aguilar, N.M.; Moriña, A.; Perera, V.H. Acciones del profesorado para una práctica inclusiva en la universidad. *Rev. Bras. Educ.* **2019**, *24*, 1–19. (In Spanish) [CrossRef]
- Ebersold, S. Adapting higher education to the needs of disabled students: Development, challenges and prospects in OECD. In *Higher Education to 2030*; OECDiLibrary: Paris, France, 2008.
- López-Bastias, J.L.; Moreno-Rodríguez, R.; Díaz-Vega, M. Attention to the special educational needs of university students with disabilities: The Caussen tool as part of the educational inclusion process. *Cult. Educ.* **2020**, *32*, 27–42. (In Spanish) [CrossRef]
- Roth, D.; Pure, T.; Rabinowitz, S.; Kaufman-Scarborough, C. Disability awareness, training, and empowerment: A new paradigm for raising disability awareness on a university campus for faculty, staff, and students. *Soc. Incl.* **2018**, *6*, 116–124. [CrossRef]
- Lopez-Gavira, R.; Moriña, A.; Morgado, B. Challenges to inclusive education at the university: The perspective of students and disability support service staff. *Innov. Eur. J. Soc. Sci. Res.* **2019**, *32*, 1–13. [CrossRef]
- Watkins, A. Special Needs Education Country Data 2010. European Agency for Development in Special Needs Education. 2011. Available online: [https://www.european-agency.org/sites/default/files/special-needs-education-country-data-2010\\_SNE-Country-Data-2010.pdf](https://www.european-agency.org/sites/default/files/special-needs-education-country-data-2010_SNE-Country-Data-2010.pdf) (accessed on 9 December 2020).
- Bedrossian, L. Understand and promote use of Universal Design for Learning in higher education. *Disabil. Compliance High. Educ.* **2018**, *23*, 7. [CrossRef]
- De Jesús, M.I.; Méndez, R.; Andrade, R.; Martínez, D.R. Didáctica: Docencia y método. Una visión comparada entre la universidad tradicional y la multiversidad compleja. *Rev. Teor. Didact. Cien. Soc.* **2007**, *12*, 9–29. (In Spanish)
- Morín, E. *Introducción al Pensamiento Complejo*; Gedisa: Buenos Aires, Argentina, 1998. (In Spanish)

23. Morín, E. *Los Siete Saberes Necesarios Para La Educación Del Future*; Santillana: Madrid, Spain, 1999. (In Spanish)
24. Morín, E. *La Cabeza Bien Puesta. Repensar La Reforma. Reformar El Pensamiento*; Nueva Visión: Buenos Aires, Argentina, 2001. (In Spanish)
25. Lanz, R.; Fergusson, A. La Reforma Universitaria en el Contexto de la Mundialización del Conocimiento (Documento Rector). Available online: <http://debatecultural.org/Observatorio/RigobertoLanz22.html> (accessed on 9 November 2020).
26. López Gavira, R.; Moriña, A. Hidden Voices in Higher Education: Inclusive Policies and Practices in Social Science and Law Classrooms. *Int. J. Incl. Educ.* **2015**, *19*, 365–378. [CrossRef]
27. Grimes, S. Student suggestions for improving learning at university for those with learning challenges/disability. In *Strategies for Supporting Inclusion and Diversity in the Academy*; Palgrave Macmillan: London, UK, 2020; pp. 329–352.
28. Kim, E.; Aquino, K.C. (Eds.) *Disability as Diversity in Higher Education: Policies and Practices To Enhance Student Success*; Taylor & Francis: London, UK, 2017.
29. Aust, R. Disability in higher education: Explanations and legitimisation from teachers at Leipzig University. *Soc. Incl.* **2018**, *6*, 125–136. [CrossRef]
30. Rillotta, F.; Rozengarten, T.; Mahar, C. Inclusive post-secondary education: The university experience for people with an intellectual disability. In Proceedings of the 4th IASSIDD Europe Congress, Vienna, Austria, 15 July 2014.
31. Araya-Cortés, A.; González-Arias, M.; Cerpa-Reyes, C. Actitud de universitarios hacia las personas con discapacidad. *Educ. Educ.* **2016**, *17*, 289–305. (In Spanish) [CrossRef]
32. Castro, J.F.; Abad, M. La incorporación a los estudios superiores: Situación del alumnado con discapacidad. *Rev. Currículum* **2009**, *22*, 165–188. (In Spanish)
33. De la Red, N.; De La Puente, R.; Gómez, M.C.; Carro, L. *El Acceso a los Estudios Superiores de las Personas con Discapacidad Física y Sensorial*; Universidad de Valladolid: Valladolid, Spain, 2002. (In Spanish)
34. Lorenzo, G.; Lledó Carreres, A. *Dificultades Percibidas por los Docentes Universitarios en la Atención del Alumnado con Discapacidad*; Ediciones Octaedro: Barcelona, Spain, 2017. (In Spanish)
35. Parra, D.J.L.; Luque-Rojas, M.J.; Bandera, E.E.; Arjona, D.C.; del Portal, L.M.I. Estudiantes universitarios con discapacidad. Cuestiones para una reflexión docente en un marco inclusivo. *Rev. Educ. Incl.* **2019**, *12*, 131–151. (In Spanish)
36. Rodríguez, A.; Álvarez, E. Estudiantes con discapacidad en la Universidad. Un estudio sobre su inclusión. *Rev. Complut. Educ.* **2016**, *25*, 457–479. (In Spanish) [CrossRef]
37. Alcantud, F.; Ávila, V.; Asensi, C. *La Integración de Estudiantes con Discapacidad en los Estudios Superiores*; Universitat de València Estudi General: València, Spain, 2000. (In Spanish)
38. Méndez, R.; Martínez, D.R.; De Jesús, M.I.; Andrade, R. El aula de la educación superior: Un enfoque comparado desde la visión y misión de la universidad tradicional y la multiversidad compleja. *Educere* **2008**, *12*, 41–52. (In Spanish)
39. Barragán-Medero, F.; Pérez-Jorge, D. Combating homophobia, lesbophobia, biphobia and transphobia: A liberating and subversive educational alternative for desires. *Heliyon* **2020**, *6*, e05225. [CrossRef] [PubMed]
40. UNESCO. Educación 2030. 2016. Available online: [https://unesdoc.unesco.org/ark:/48223/pf0000245656\\_spa](https://unesdoc.unesco.org/ark:/48223/pf0000245656_spa) (accessed on 18 November 2020).
41. Arias, M.G.B.; de Luna Velasco, L.E. Actitudes de alumnos hacia las personas con discapacidad en el centro universitario del sur. *Enseñ. Investig. Psicol.* **2019**, 65–78. Available online: <https://www.revistacneip.org/index.php/cneip/article/view/59> (accessed on 1 December 2020). (In Spanish)
42. Bastías, J.L.L.; Rodríguez, R.M. Las actitudes de los estudiantes universitarios de grado hacia la discapacidad. *Rev. Educ. Incl.* **2019**, *12*, 51–65. (In Spanish)
43. Moore, E.J.; Schelling, A. Postsecondary inclusion for individuals with an intellectual disability and its effects on employment. *J. Intellect. Disabil.* **2015**, *19*, 130–148. [CrossRef] [PubMed]
44. Abreu, M.; Hillier, A.; Frye, A.; Goldstein, J. Student experiences utilizing disability support services in a university setting. *Coll. Stud. J.* **2017**, *50*, 323–328.
45. Giust, A.M.; Valle-Riestra, D.M. Supporting mentors working with students with intellectual disabilities in higher education. *J. Intellect Disabil.* **2016**, *21*, 144–157. [CrossRef] [PubMed]
46. ONCE Foundation. Informe de la función ONCE. 2019. Available online: <https://biblioteca.fundaciononce.es/publicaciones/colecciones-propias/memoria-de-actividades/informe-de-valor-compartido-2019-de> (accessed on 1 November 2020).
47. Cayo, L. Guía para la elaboración de un Plan de acción al alumnado con discapacidad en la universidad. *Cuest. Univ.* **2008**, *6*, 103–116. (In Spanish)
48. Observatorio Estatal de la Discapacidad. 2020. Available online: <https://www.observatoriodeladiscapacidad.info/comienza-el-curso-2019-2020-situacion-de-las-personas-con-discapacidad-en-las-universidades-espanolas/> (accessed on 19 November 2020).
49. Universia Foundation. Disability Care at University. 2018. Available online: [https://www.fundacionuniversia.net/content/dam/fundacionuniversia/pdf/guias/Atencion-a-la-discapacidad\\_2018.pdf](https://www.fundacionuniversia.net/content/dam/fundacionuniversia/pdf/guias/Atencion-a-la-discapacidad_2018.pdf) (accessed on 21 November 2020).
50. Observatorio Internacional de Reformas Universitarias. 2005. Available online: <http://debatecultural.com/Observatorio/RigobertoLanz22> (accessed on 26 November 2020).
51. Bilbao, M.C.; Martínez, M.A.; De Juan, M.N.; García, M.I. Evolución de los servicios de apoyo a personas con discapacidad en las universidades españolas. In Proceedings of the I Congreso Internacional Universidad y Discapacidad, Madrid, Spain, 22–23 November 2012. (In Spanish)

52. Sachs, D.; Schreuer, N. Inclusion of Students with Disabilities in Higher Education: Performance and Participation In Student's Experiences. *Disabil. Stud. Q.* **2012**, *31*, 1561–1593. [[CrossRef](#)]
53. Álvarez, P.R.; Alegre, O.M.; López, D. Las dificultades de adaptación a la enseñanza universitaria de los estudiantes con discapacidad: Un análisis desde un enfoque de orientación inclusiva. *Relieve* **2012**, *18*, 1–18. (In Spanish) [[CrossRef](#)]
54. Conder, J.; Mirfin-Veitch, B.; Payne, D.; Channon, A.; Richardson, G. Increasing the participation of women with intellectual disabilities in women's health screening: A role for disability support services. *Res. Pract. Intellect. Dev. Disabil.* **2019**, *6*, 86–96. [[CrossRef](#)]
55. Díez, E.; Verdugo, M.A.; Campo, M.; Sancho, I.; Alonso, A.; Moral, E.; Calvo, I. *Protocolo de Actuación Para Favorecer la Equiparación de Oportunidades de los Estudiantes con Discapacidad en la Universidad*; Universidad de Salamanca: Salamanca, Spain, 2008. (In Spanish)
56. Forteza, D.; Ortego, J.L. Los servicios y programas de apoyo universitario para personas con discapacidad. Estándares de calidad, acción y evaluación. *Rev. Educ. Espec.* **2003**, *33*, 9–26. (In Spanish)
57. Lipka, O.; Forkosh Baruch, A.; Meer, Y. Academic support model for post-secondary school students with learning disabilities: Student and instructor perceptions. *Int.J. Incl. Educ.* **2019**, *23*, 142–157. [[CrossRef](#)]
58. Trujillo, E.; Cayo, L. *Guía de Recursos Sobre Universidad y Discapacidad*; Grupo Editorial Cinca: Madrid, Spain, 2006. (In Spanish)
59. Avramidis, E.; Norwich, B. Teachers' attitudes toward integration/inclusion: A review of the literature. *Eur. J. Spec. Needs Educ.* **2002**, *17*, 129–147. [[CrossRef](#)]
60. Corral, K. Educación inclusiva: Concepciones del profesorado ante el alumnado con necesidades educativas especiales asociadas a discapacidad. *Rev. Educ. Incl.* **2019**, *12*, 171–186. (In Spanish)
61. Fernández, J.M. Competencias docentes para la inclusión del alumnado universitario en el marco del Espacio Europeo de Educación Superior. *Rev. Educ. Incl.* **2011**, *4*, 137–147. (In Spanish)
62. Pais, M.E.M.; Salgado, F.R. La atención a la diversidad en el aula: Dificultades y necesidades del profesorado de educación secundaria y universidad. *Contextos Educ. Rev. Educ.* **2020**, *25*, 257–274. (In Spanish)
63. Fernández, M.D.; Álvarez, Q.; Malvar, M.L. Accesibilidad e inclusión en el Espacio Europeo de Educación Superior: El caso de la Universidad de Santiago de Compostela. *Aula Abierta* **2012**, *40*, 71–82. (In Spanish)
64. Guasch, D.; Dotras, P.; Llinares, M. *Los Principios de Accesibilidad Universal y Diseño; para Todos en la Docencia Universitaria*; Universidad de Córdoba: Córdoba, Spain, 2010. (In Spanish)
65. Broomhead, K.E. Acceptance or rejection? The social experiences of children with special educational needs and disabilities within a mainstream primary school. *Education 3–13* **2019**, *47*, 877–888. [[CrossRef](#)]
66. Alnasser, Y.A. The perspectives of Colorado general and special education teachers on the barriers to co-teaching in the inclusive elementary school classroom. *Education 3–13* **2020**, *48*, 1–14. [[CrossRef](#)]
67. Williams-Brown, Z.; Hodkinson, A. What is considered good for everyone may not be good for children with Special Educational Needs and Disabilities: Teacher's perspectives on inclusion in England. *Education 3–13* **2020**, *48*, 1–15. [[CrossRef](#)]