

Training Needs of Academics on Inclusive Education and Disability

SAGE Open July-September 2020: I–10 © The Author(s) 2020 DOI: 10.1177/2158244020962758 journals.sagepub.com/home/sgo



Anabel Moriña (D), Víctor H. Perera (D), and Rafael Carballo²

Abstract

The aim of this article is to analyze, from the academic staff's perspective, the training needs they require to provide an inclusive education to students with disability. Academics from a Spanish university participated in this research. We used a qualitative methodology. We collected the information through semi-structured interviews and open-ended written questionnaires. We analyzed data using an inductive system of categories and codes. Three topics were addressed in the results: profile of academics according to their previous training, the importance of such training for them and the reasons for training, and the contents considered essential for training. In the conclusions section, the need for universities to design and implement training policies was addressed. In addition, the participants stated that they would be more sensitive and better prepared if they received training on disability-related issues. A clear conclusion of this study is that inclusive universities require the involvement of everyone.

Keywords

training needs, academics, inclusive education, disability, qualitative methodology

Introduction

Globally, as well as in Spain, there is a move toward a more inclusive university and toward the access of groups that were not traditionally represented, as is the case of students with disabilities (Lipka et al., 2019; Thomas, 2016). However, guaranteeing admission to higher education is insufficient. In recent years, different authors claim that new policies are needed to ensure these students' continuation and success (Kilpatrick et al., 2017; Wilson et al., 2016). In fact, although the number of students with disabilities who enroll in universities is increasing, their retention is not ensured. The main reason to explain this situation is a lack of educational actions which respond adequately to the needs of these students (Gibson et al., 2016). In addition, these students have a much higher dropout risk than the rest of the students (Lombardi et al., 2016; Quinn, 2013). Such policies are particularly relevant considering that achieving a university degree can improve the access to the labor market for people with disabilities (Järkestig-Berggren et al., 2016). Higher education has been acknowledged in various studies as an opportunity for these students to improve their quality of life (Cook et al., 2009; Papay & Griffin, 2013).

As in previous educational stages, inclusivity in the university is necessary because it provides high-quality education for all students, including those with different types of disability (Messiou et al., 2016). According to Lourens and

Swartz (2016), inclusivity is related to the feeling of being a welcomed member; a student who truly belongs and participates, like any other student. Teaching for inclusivity entails embedding the practices of universal design for learning in the classroom and the syllabus (Griful-Freixenet et al., 2017; Hitch et al., 2015; Hockings, 2010).

In recent years, in addition to the development of educational policies for inclusion of students with disabilities, some actions have been developed and resources have been introduced to favor the inclusion of students with disabilities. For example, the creation of support offices for students with disabilities or the incorporation of technologies for inclusive learning. In spite of that, and as Gale et al. (2017) point out, providing resources to universities is not enough to achieve a total inclusion of the students. The efforts must focus on knowing more about the educational processes and actions developed by the academics and their improvement, to walk toward more inclusive classrooms.

Corresponding Author:

Víctor H. Perera, Department of Teaching and Organization of Education, Educational Sciences Faculty, University of Seville, Office 4.13, Pirotecnia Street, Seville 41013, Spain.

Email: vhperera@us.es

¹University of Seville, Spain

²International University of La Rioja, Logroño, Spain

Learning Barriers for Students With Disabilities

Students with disabilities encounter significant barriers in their university trajectories (Anderson et al., 2018; Bell et al., 2017; Hong, 2015; Riddell & Weedon, 2014). Some of them are architectural and organizational, whereas others involve the access to the subjects (aspects that hinder the teaching and learning processes). In some studies, students with disabilities identify the academic staff as the main barrier, referring to their negative attitudes and lack of training to meet the students' educational needs (Collins et al., 2018; Garrison-Wade, 2012; Moswela & Mukhopadhyay, 2011; Strnadová et al., 2015). As Hopkins (2011) and Thomas and May (2010) conclude, the curriculum is frequently rigid and non-inclusive, and can exclude certain students. For example, some academics refuse to adapt their exams and materials, or they use teaching methods that do not promote inclusivity (Mutanga, 2018; Yssel et al., 2016). Moreover, various works have highlighted that the knowledge, attitudes, and good will of academics to offer curricular adaptations are critical factors for the success of students with disabilities (Langørgen & Magnus, 2018; Leyser et al., 2011; Zhang et al., 2019). Considering this situation, students demand more trained, informed, and aware academic staff (Vickerman & Blundell, 2010).

Academics' Training Needs on Inclusive Education

Although most studies have shown the students' perspectives, other researches have given voice to academics to know their experiences and their training needs on inclusive education and disability (Black et al., 2014; Kendall, 2017).

Several studies point out the limited experience, the lack of training with students with disabilities, and even the instructional practices of academics (Cook et al., 2009; Kendall, 2017). Academics usually recognize their little experience teaching students with disabilities. Moreover, they explain that they do not have enough knowledge about inclusive educational practices and teaching methods to attend to diversity (Black et al., 2014; Langørgen et al., 2018; Lombardi et al., 2016). In spite of that, academics show a willingness to make all the adaptations that students may need (Collins et al., 2018; Martins et al., 2018), and they display a high interest in receiving training on inclusive education (Becker & Palladino, 2016). In fact, they sometimes demand more training experiences from universities. In addition to the topic of inclusive practices, academics ask universities for more training and information on support services for students with disabilities and the legislation governing the rights of these students (Cook et al., 2009; Gelbar et al., 2015). In short, university staff need to know what the university expects of them and what to do when they have students with disability in their classrooms.

Academics' Training on Disability and Inclusive Education

In Spain, as in most countries, academics' training is voluntary and free, and pedagogical training is not mandatory to be able to teach (Gunersel & Etienne, 2014). Teaching at the university requires a PhD, which qualifies to be a researcher, but no training is needed for the teaching function. Moreover, research is the most relevant area in the academics' career, so they normally prioritize more the development of their curriculum as a researcher than the improvement of their teaching skills through continuous training. This is why academics pay less attention and time to their teaching activities. It has been a problematic area when we talk about training. In spite of that, all the Spanish universities offer a variety of courses and programs for the academics' qualification and for the improvement of the teaching processes' quality (Stes & Van Petegem, 2015). However, the pedagogical training should not be left to the goodwill of the staff and should be mandatory (Moriña, 2019).

In relation to training on inclusive education and disability, this is the area that receives less interest among the courses offered, whereas topics like data analysis, technologies, or general teaching strategies are the most important for training centers. As mentioned before, there are some studies focused on knowing the academics' training needs on inclusive education, but we find fewer studies centered on developing training experiences on this topic. For example, in Spain, Moriña (2019) designed a program to develop inclusive education in higher education. In Scotland, the Teachability Project (Simpson, 2002) provided a resource to facilitate a review of teaching and learning for academic staff, with the aim of improving accessibility for students with disabilities. In the United States, the accommodating students with disbilities (ASD) project was developed to train university teachers on inclusive education (Debrand & Salzberg, 2005). They also wanted to identify the contents and knowledge that academics consider essential for the development of an inclusive teaching process. In England, Hockings et al. (2012) offered a repository of more than 100 video clips of authentic classroom practices using Open Educational Resources (OER), illustrating inclusive learning and teaching practices. Other training programs have been designed, developed, and evaluated by authors like Murray et al. (2014), Rohland et al. (2003), or Sowers and Smith (2004). These programs included contents like disability awareness, university legislation, and supports for students with disabilities.

The training programs developed show that university teacher training on disability, inclusive education, and Universal Design for Learning has a positive impact on students with or without disabilities (Cunningham, 2013; Garrison-Wade, 2012; Madriaga et al., 2010; Murray et al., 2014; Redpath et al., 2013). Several studies conclude that the training received by academics produces better outcomes in

knowledge and sensitivity toward students with disabilities, while also improving their attitude (Davies et al., 2013; Lombardi et al., 2011; Murray et al., 2011; Schelly et al., 2011). Thus, training on disability and inclusive practices is necessary and recommended. Moreover, considering that many students decide not to disclose their disability (Grimes et al., 2018), academic staff should design accessible and inclusive syllabi beforehand.

Regarding training contents, according to the academics, the following aspects are important: knowledge about legal obligations, learning techniques to design the syllabus, providing an adequate environment for students in the classroom, receiving information about available resources for students with disabilities, effective instructional practices, knowledge of the characteristics of a disability, or information about how students with disabilities can have access to the services (Cook et al., 2009; Gelbar et al., 2015).

Considering the barriers that students with disabilities encounter during their degrees, and the academics' training needs, devoting more effort to academic staff training should become a key task for universities. As Doughty and Allan (2008) reclaim, universities must take responsibility for meeting the needs of all students.

This article focuses on analyzing the training needs of academics with respect to inclusive education and disability. We conducted an initial evaluation before starting a training program on inclusive education. Our purpose was to know the answers to the following questions: What was the profile of academics according to their previous training? Why is there a need for training on disability and inclusive education? What training topics did they consider essential?

Method

The study presented in this article is part of a research project funded by the Ministry of Economy and Competitiveness of Spain, "Inclusive Pedagogy at universies: Stories by academics" (EDU2016-76587-R). The study aimed to design, develop, and evaluate a training program on inclusive education and disability for academics. Before designing the program, an initial evaluation was carried out to know the training needs and previous knowledge of the participants. Through this phase, we wanted to ensure that the program was tailored to the real characteristics and needs of the participants that would receive the training.

Participants

A total of 20 academics from the same university participated in this study. To make up the convenience sample, the program was advertised through the one university training center, which is in charge of university staff training. The training course was conducted by authors. In addition, the course advertisement stated that training participants should commit themselves to making changes in their classrooms.

In the first instance, we wanted to follow a set of criteria for the selection of participants.

- Participants with experience working with students with disability,
- Both genders represented in the sample,
- Diversity regarding participants' years of experience working as academic staff,
- Participants who showed a strong commitment to introduce changes in the classroom,
- Availability to participate in the complete program,
- Representation of all fields of knowledge (Health Science, Experimental Science, Technical Training, Liberal Arts, and Social and Juridical Science).

We offered 30 places and 23 participants initially enrolled in the training program. Our sample was defined foremost by people's willingness to participate. Finally, 20 academics participated, as two people did not start the program and a third person dropped out after starting. For this reason, we did not have the opportunity to select the participants, and some criteria were not met. In particular, some of them had never had students with disabilities in their classrooms. Moreover, in two branches of knowledge —Experimental Science and Technical Training—nobody was interested in participating. Nevertheless, other criteria like diversity in gender and in years of experience could be met. Regarding their commitment to put into practice the knowledge and skills learned during the training, we informed the academics that it was a fundamental key to participate, and after the development of the training, we would make an evaluation and monitoring of their practice in the classrooms.

With regard to the participants' branches of knowledge, 12 were from Social and Juridical Sciences (of whom eight were academics at the Faculty of Educational Sciences), four taught in Health Sciences, and four in Liberal Arts. In relation to gender, 12 were women and eight were men. With respect to prior experience with students with disabilities in the classroom, 14 participants had had at least one student with a disability in their classes. Finally, one half of the participants had 5 or less years of university experience and the rest had more years of experience.

Instruments and Data Analysis

The methodology of the study was qualitative. The data were collected through group semi-structured interviews and open-ended written questionnaires. We opted for group interviews over individual interviews due to the diversity of intersubjective ideas and approaches that would be generated from the interaction between the participants. They had the opportunity to share their experiences, previous knowledge, and training expectations. Moreover, it was a chance for participants and researchers to get to know each other, and to learn about the needs of the group as a whole. However,

three of the participants were unable to attend the group interviews. In those cases, we decided to conduct individual interviews. In addition, open-ended questionnaires were used to know participants' knowledge about some concepts that would be studied in the program and to collect personal information.

First, each participant filled the questionnaire individually. Second, the participants were divided into three groups and each group interview was carried out by a research team member. Some of the questions that guided both instruments were as follows: Why are you interested in participating in this training program? Do you think it is necessary to receive training on disability and inclusive education? Why? What training do you consider essential to attend to students with disabilities? What are your expectations for this training? What do you expect to learn? What prior knowledge about disability-related issues do you have? What do you already know? What are your current needs with regard to attention to students with disabilities? What are the possible benefits of the training you are going to undertake? What areas or people do you think it will affect?

The duration of the group interviews was approximately 1 hr 30 min each, and the individual interviews lasted between 40 and 60 min. All the information gathered was audio recorded and transcribed verbatim.

Following the proposal of Miles and Huberman (1994) for data analysis, an inductive system of categories and codes was used to compare all the information, which was previously transcribed. For the thematic and structural analysis, this system was made up of different themes: motivations, expectations, previous training, training importance, and training needs. The data were analyzed with the computer program MaxQDA12.

Ethical Issues

Finally, regarding the ethical issues of this research, the confidentiality and anonymity of the information were guaranteed. In addition, the participants were informed that, should they wish to withdraw from the study, their data would not be taken into account for the analysis and would be deleted. This research received the approval of the Spanish government's ethics committee.

Results

The findings are organized in three topics: profiles of academics according to their previous training, the need for training on disability for participants, and the contents they considered essential for their training.

Profiles of Academics According to Their Training

We identified three different profiles of academic staff according to their previous training. On one hand, we found people who had never participated in a training program related to inclusive education and who lacked experience in meeting the needs of students with disabilities. These professionals were not only unaware of anything concerning curricular adaptations and the institutional rules on disability-related matters, but also admitted a lack of training in teaching practices in general.

I've been teaching for 6 years. I feel that I do not have enough training as a university teacher. As a researcher, I have a PhD, but I don't know how to teach. I can try to do my best based on my own concern and buy a book on how to teach at the university, but that's all I have as a teacher. (Academic 6)

On the other hand, there were some faculty who had received basic training through programs and/or workshops on disability. In spite of participating in this training, they thought that their knowledge was scarce and focused exclusively on theory, without any practical orientation. Many of these activities had been introductory training sessions that did not provide them with the necessary tools to attend to students with disabilities, although they were an initial approach. In other cases, prior training in this topic consisted of degrees in the fields of Psychology or Education. Even with this preparation, they considered that this did not enable them to adapt their teaching in the university because, in these degrees, they had learned about inclusive education in compulsory educational stages, not in higher education.

Finally, we identified the profile of academics who, without much training on inclusive education, had to teach this content at the university, so they had self-taught themselves to perform their teaching activity.

Well . . . to be sincere, I knew absolutely nothing. But I taught two courses about educational needs. Then I really got down to work, you know? That's why I said: "well, the concept of inclusive education, yes, I worked on it, I know what it's all about." (Academic 20)

Academic Staffs' Training as the Key to Inclusive Education in the University

The participants in this study stated that the situation in a classroom with a student with a disability was not easy, especially when they had no prior preparation. Their lack of knowledge and training on disability was identified as one of the biggest obstacles to these students' learning and inclusion. These academics said that such training was essential and could benefit them because they often felt social pressure or fear in new situations related to students' needs. The training could help them to feel confident about what they could encounter in the classroom. Therefore, the participants recognized the need for training on disability and inclusive education. Those who had students with disabilities acquired

experience on the topic and were sensitized, although they did not know how to meet the students' needs.

You think that you are prepared until you face the problem and you realise that you're not prepared. (Academic 17)

Some of the arguments that justified the importance of training referred to the obligation to attend to these students in accordance with the university ruling, for example, fulfilling the criteria of a highly qualified academic staff. In general, the participants expressed high commitment to the quality of their teaching; their intention was that this quality should be met for all the students, regardless of their characteristics.

Because the law upholds it, it is the right of the student who stands before you; therefore, it is an obligation for the person who organises the classroom, that is, the teacher. (Academic 2)

In general, according to the participants, training is the solution to many of the barriers in their teaching practices identified by students with disabilities. They were aware that improving their teaching implies commitment to their professional development through in-service training. These participants acknowledged that if they were better trained and knew how to meet the students' needs, people with disabilities could enjoy their university experience and participate normally in a learning process, just like their classmates.

But first of all, they considered that academic staff should be first sensitized, and subsequently trained in this topic. The compulsory nature of training was justified, as it is a vehicle to promote the change of attitudes and to become a good professional, and, thereby, be able to teach all the students, from the viewpoint of diversity, respecting their heterogeneity.

On the contrary, the participants were aware that the university is changing, and increasingly more students with disabilities are enrolling in the university. Therefore, academics must be better prepared. However, they informed us that there were hardly any training courses aimed at the inclusion of people with disabilities in the university. University training was scarce and there was a lack of information about it. We also observed that the participants who were more sensitized and more trained in this topic were usually those who had participated in these training programs.

What to Train in: From Theory to Practice

The participants indicated the areas and aspects of the training that they considered crucial.

Legislation on disability. Accordingly, one of the first issues that emerged was to know the university legislation on disability, which they considered essential. They had absolutely no knowledge about the university legislation on the rights of

students with disabilities, or about the obligations of academics toward this group.

I know absolutely nothing about what the law says regarding the university. I know the law in Primary Education but I know nothing at all about the university. (Academic 2)

Support services. The participants also indicated the need to know the university services and specialists in the university from whom they could seek support and learn the protocol on how to treat these students fairly. They did not even know that there was a support office for students with disabilities from which they could request help. Although Spanish universities have support offices for students with disabilities to aid both students and academics to meet needs, most of the participants were unaware of its existence and did not use this valuable resource. Therefore, they requested more information about the functioning of this service to seek the aid that could guide their teaching practice.

Practical knowledge. However, their greatest concern was how to apply the law. For the participants, knowing this regulatory framework meant that they would know what to do and how to behave in specific situations, as they were currently unaware of the protocols to be followed with students with disabilities. They realized that the regulations could tell them what to do but not how to do it. Therefore, their interest was focused on acquiring useful and applicable knowledge, rather than just learning theory and laws. By useful knowledge, they meant those abilities, skills, and resources that they could acquire and use to deal with students with a disability in the classroom, such as curricular adaptations. Indeed, there were many types of adaptations that academic staff could carry out in the classroom with students with specific needs. Among these, the ones that were repeated the most in the interviewees' discourse referred to modifications of the exam times and formats, study materials, classroom activities, presentations with slides, and technological resources and the infrastructure of the classroom. These were their main concerns because they thought that, in some cases, the students could not pass the subject without these necessary adaptations.

Let's imagine that there is this student with these characteristics; now take your material and adapt it. How would you do it? Then, I think that we should acquire concepts and theoretical topics, but afterwards, practice; practice in case such a student comes to our class, make use of the resources we have and put them into practice. (Academic 13)

Information and institutional support. They also noted the need for specific plans at the academic staff level that are really committed to inclusive education, informing about the available services, considering the importance of developing inclusive courses and helping the academics to understand

how to apply the university legislation that regulates the interventions and protocols to be followed. This would be possible if the information was made accessible, and the resources to address the difficulties were available at the institution.

Types of disability and specific educational needs. Among the skills that they would like to learn was the capacity to identify students with disabilities in the classroom, as well as to differentiate the types of disabilities so as to know what adaptations they could need. This related to the participants' lack of information because they were not informed in advance when there was a student with disabilities enrolled in their course. This was due to the students' right not to disclose their disability, if they so wished. Therefore, the participants thought that if they knew how to identify specific cases during the first contact, they could gain time to design the relevant adaptations.

I would like to know how to recognise each of the disabilities, to know what adaptations I can provide to assist them; and strategies, real strategies. (Academic 6)

A controversial aspect for the participants was the difficulty of applying the tools and skills acquired to all students with disabilities, regardless of the specific disability. This is very difficult because each student is unique and presents specific and different needs, a reality also recognized by the participants. Thus, the solution to this concern should be found in a more generic study of guidelines and specific adaptations for different types of disability, which would serve as a starting point.

I would like to be able to deal with it but, from the viewpoint of regulations, it should not be something special: "since I have this case, how am I going to manage it?" but rather "how can I include this student so he/she will be just one more one student?" (Academic 5)

Developing personal skills. The participants also highlighted the importance of certain personal skills in their work as academics. They pointed out the need to acquire the knowledge required by the situations, and to know how to communicate with and treat these students appropriately. For this purpose, they needed to develop personal skills that would allow them to use all their knowledge within a normalized and egalitarian relationship with the students in general, without having to interact in a special way with students with disabilities.

In summary, there were several areas in which they were interested in training. They wanted their learning to be really applicable, so they would not only get to know situations or specific cases of students with disabilities, but also so they could work in simulated settings in which they could analyze the types of adaptations made to be able to reproduce them or learn from them. The theoretical knowledge they expected to learn was directly related to the need to identify disabilities that are invisible or difficult to detect (e.g., mental disorders,

which could be recognized through a technical diagnosis), or to know the typology of disability, related needs, and possible actions derived from it.

Conclusion and Discussion

The participants in this study recognized their training needs and expressed their desire to receive training in how to provide inclusive education to students with disabilities. Prior investigations achieved the same conclusions and, in addition, they studied how to train on disability-related matters (Debrand & Salzberg, 2005; Healey et al., 2001; Hockings et al., 2012). In fact, training to meet the needs of students with disabilities is critical for higher education (Love et al., 2015). In some of the studies carried out, it is concluded that the attitude of academics improved after they had been trained and had more experience in satisfying the needs of students with disabilities (Hong, 2015; Murray et al., 2011).

All participants agree, regardless of their previous training, that they do not have sufficient skills to adequately meet the needs arising from disability. Works such as Cook et al. (2009) or Kendall (2017) reached the same conclusion. This is a worrying fact, as it shows that training policies are not working properly. Universities, rather than proposing annual courses without evaluating whether they are really working or not, should analyze whether they are succeeding. They should evaluate what kind of training is really working and what the academics' training needs are.

However, universities should not only be concerned about training, they should also design a strategy for dissemination of information to university staff. These actions should make visible the information about students with disabilities. Formal mechanisms of access to the information about the available services to help the students could be established, such as disability support offices, the existing rules that regulate the rights and possible curricular modifications for these students (Martins et al., 2018). In short, access to any type of information that would be of interest to academics should be facilitated. The ways to transmit information could be diverse: institutional mails, specific web links, social networks, or information points in each Faculty.

For these academics, training is indispensable and essential to address inclusive education. They feel the need to be well-prepared. They also believe that such training not only benefits students with disabilities but also the rest of the students. In this sense, these results coincide with prior works that reached the same conclusion (Powney, 2002; Shaw, 2009; Warren, 2002). Therefore, adopting approaches like Universal Design for Learning would be beneficial to the university (Griful-Freixenet et al., 2017), so as to make it possible to act in a proactive way rather than reactively.

In addition, the participants of this study highlighted the contents they considered critical to feel prepared and confident to meet the diverse needs of the students. For them, as in the studies of Cook et al. (2009) and Gelbar et al. (2015), it would be essential to include contents about the support

services and resources provided by the university, in addition to university regulations regarding disability. However, beyond this legal knowledge, practical training about how to apply the rules is also crucial. Therefore, training experiences should be focused on types of disabilities, the needs related to them, and curricular adaptations (e.g., one type of adaptation related to assessment for a student with celebral paralysis could be to exchange an oral exam for a computer exam, and give more time for it to be done). Universities' training centers could draw inspiration from these suggestions and take them into account in course designs. This would make it possible to plan training actions that meet the real demands of future participants in the training processes.

On the contrary, this study confirms the paradox by which the academics who needed training the most were not interested in it, and therefore, did not participate. The more sensitized academics enrolled in the training programs proposed by the university. This is evident in the sample of this study, in which the faculty of Experimental Sciences and Engineering was not included. As concluded in the study of Moriña et al. (2015), students with disabilities perceive that the professionals of these areas of knowledge are more reluctant to include them in their classrooms. Due to this contradiction, the participants believe that it is extremely important to develop institutional policies with measures to raise the awareness of the academics who are suspicious of training that, in addition to being scanty, provokes little personal interest. They propose that training should not be voluntary because it favors changing attitudes to become a good professional and thus be able to teach students from the perspective of diversity, respecting their heterogeneity. In this sense, it would be the same as teachers training in schools, because pedagogical training is compulsory for them. We believe that only through training we can contribute to generate university scenarios in which attention to disability does not remain in the theory, and inclusive education becomes a reality in higher education institutions.

Finally, a clear conclusion of this study is that no academic can make the university inclusive. This requires the involvement of everyone, particularly the institution (Hutcheon & Wolbring, 2012). The university should contribute to designing actions, plans, and training programs to promote awareness and inclusive practices. Designing and developing training programs on inclusive education for academic staff is a proposal to improve this reality, which would train them to promote inclusivity using accessible methodologies and materials that allow the participation of all students.

Limitations

Some limitations of this work should be addressed. First, it would have been preferable to have a sample of participants from all branches of knowledge to determine possible differences in their knowledge and experience as a function of their field. Another limitation, also referred to the sample, is

the number of participants. Our offer of 30 places was aimed at having a greater number of academics participating in the training; however, only 20 people participated in the entire process. Finally, we initially planned that all participants in the training program would have had students with disabilities in their classes. However, this was not possible. This would have been ideal because we would have had more teachers who could share their experience teaching students with disabilities and this would have further enriched the training process.

Nevertheless, although these issues should be considered in future studies, we believe that this work provides valuable results for universities to take students with disabilities into account in their training policies and design actions, promoting the principles of inclusive education.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Ministry of Economy and Competitiveness of Spain, The Spanish State Research Agency and FEDER funds European Union [grant numbers EDU2016-76587-R/Feder Funds].

ORCID iDs

Anabel Moriña https://orcid.org/0000-0002-0852-7523 Víctor H. Perera https://orcid.org/0000-0002-3870-9475

References

Anderson, A. H., Carter, M., & Stephenson, J. (2018). Perspectives of university students with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 48(3), 651–665. https://doi.org/10.1007/s10803-017-3257-3

Becker, S., & Palladino, J. (2016). Assessing faculty perspectives about teaching and working with students with disabilities. *Journal of Postsecondary Education and Disability*, 29(1), 65–82. https://eric.ed.gov/?id=EJ1107476

Bell, S., Devecchi, C., McGuckin, C., & Shevlin, M. (2017). Making the transition to post-secondary education: Opportunities and challenges experienced by students with ASD in the Republic of Ireland. *European Journal of Special Needs Education*, 32(1), 54–70. https://doi.org/10.1080/08856257.2016.1254972

Black, R. D., Weinberg, L. A., & Brodwin, M. G. (2014). Universal design for instruction and learning: A pilot study of faculty instructional methods and attitudes related to students with disabilities in higher education. *Exceptionality Education International*, 24(1), 48–64. https://ir.lib.uwo.ca/eei/vol24/ iss1/5/

Collins, A., Azmat, A., & Rentschler, R. (2018). "Bringing everyone on the same journey": Revisiting inclusion in higher education. *Studies in Higher Education*, 44, 1475–1487. https://doi.org/10.1080/03075079.2018.1450852

Cook, L., Rumrill, P. D., & Tankersley, M. (2009). Priorities and understanding of faculty members regarding college students with disabilities. *International Journal of Teaching and Learning in Higher Education*, 21(1), 84–96. https://eric.ed.gov/?id=EJ896246

- Cunningham, S. (2013). Teaching a diverse student body—A proposed tool for lecturers to self-evaluate their approach to inclusive teaching. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*, 8(1), 3–27. http://eprints.mdx.ac.uk/11029/
- Davies, P. L., Schelly, C. L., & Spooner, C. L. (2013). Measuring the effectiveness of Universal Design for Learning intervention in postsecondary education. *Journal of Postsecondary Education and Disability*, 26(3), 195–220. https://eric.ed.gov/?id=EJ1026883
- Debrand, C. C., & Salzberg, C. L. (2005). A validated curriculum to provide training to faculty regarding students with disabilities in higher education. *Journal of Postsecondary Education and Disability*, 18(1), 49–61. https://eric.ed.gov/?id=EJ846380
- Doughty, H., & Allan, J. (2008). Social capital and the evaluation of inclusiveness in Scottish further education colleges. *Journal of Further and Higher Education*, 32(3), 275–284. https://doi.org/10.1080/03098770802220454
- Gale, T., Mills, C., & Cross, R. (2017). Socially inclusive teaching: Belief, design, action as pedagogic work. *Journal of Teacher Education*, 68(3), 345–356. https://journals.sagepub.com/doi/abs/10.1177/0022487116685754
- Garrison-Wade, D. F. (2012). Listening to their voices: Factors that inhibit or enhance postsecondary outcomes for students' with disabilities. *International Journal of Special Education*, 27(2), 113–125. https://eric.ed.gov/?id=EJ982866
- Gelbar, N. W., Madaus, J. W., Lombardi, A., Faggella-Luby, M., & Dukes, L. (2015). College students with physical disabilities: Common on campus, uncommon in the literature. *Physical Disabilities: Education and Related Services*, 34(2), 14–31. https://doi.org/10.14434/pders.v34i2.19224
- Gibson, S., Baskerville, D., Berry, A., Black, A., Norris, K., & Symeonidou, S. (2016). "Diversity" "widening participation" and "inclusion" in higher education: An international study. Widening Participation and Lifelong Learning, 18(3), 7–33. https://doi.org/10.5456/WPLL.18.3.7
- Griful-Freixenet, J., Struyven, K., Verstichele, M., & Andries, C. (2017). Higher education students with disabilities speaking out: Perceived barriers and opportunities of the Universal Design for Learning framework. *Disability & Society*, 32(10), 1627–1649. https://doi.org/10.1080/09687599.2017.1365695
- Grimes, S., Southgate, E., Scevak, J., & Buchanan, R. (2018). University student perspectives on institutional non-disclosure of disability and learning challenges: Reasons for staying invisible. *International Journal of Inclusive Education*, 23(6), 639–655. https://doi.org/10.1080/13603116.2018.1442507
- Gunersel, A. B., & Etienne, M. (2014). The impact of a faculty training program on teaching conceptions and strategies. *International Journal of Teaching and Learning in Higher Education*, 26(3), 404–413. https://eric.ed.gov/?id=EJ1061039
- Healey, M., Jenkins, A., Leach, J., & Roberts, C. (2001). Issues in providing learning support for disabled students undertaking fieldwork and related activities. Geography Discipline Network.

Hitch, D., Macfarlane, S., & Nihill, C. (2015). Inclusive pedagogy in Australian universities: A review of current policies and professional development activities. *The International Journal* of the First Year in Higher Education, 6(1), 135–145. https:// doi.org/10.5204/intjfyhe.v6i1.254

- Hockings, C. (2010). *Inclusive learning and teaching in higher education: A synthesis of research*. The Higher Education Academy.
- Hockings, C., Brett, P., & Terentjevs, M. (2012). Making a difference—Inclusive learning and teaching in higher education through open educational resources. *Distance Education*, 33(2), 237–252. https://doi.org/10.1080/01587919.2012.692066
- Hong, B. S. S. (2015). Qualitative analysis of the barriers college students with disabilities experience in higher education. *Journal of College Student Development*, 56(3), 209–226. https://doi.org/10.1353/csd.2015.0032
- Hopkins, L. (2011). The path of least resistance: A voice-relational analysis of disabled students' experiences of discrimination in English universities. *International Journal of Inclusive Education*, 15, 711–727. https://doi.org/10.1080/136031109 03317684
- Hutcheon, E. J., & Wolbring, G. (2012). Voices of "disabled" post-secondary students: Examining higher education "disability" policy using an ableism lens. *Journal of Diversity in Higher Education*, 5(1), 39–49. https://doi.org/10.1037/a0027002
- Järkestig-Berggren, U., Rowan, D., Bergbäck, E., & Blomberg, B. (2016). Disabled students' experiences of higher education in Sweden, the Czech Republic, and the United States—A comparative institutional analysis. *Disability & Society*, 31(3), 1–18. https://doi.org/10.1080/09687599.2016.1174103
- Kendall, L. (2017). Supporting students with disabilities within a UK university: Lecturer perspectives. *Innovations in Education* and *Teaching International*, 55(6), 694–703. https://doi.org/10 .1080/14703297.2017.1299630
- Kilpatrick, S., Johns, S., Barnes, R., Fischer, S., McLennan, D., & Magnussen, K. (2017). Exploring the retention and success of students with disability in Australian higher education. *International Journal of Inclusive Education*, 21(7), 747–762. https://doi.org/10.1080/13603116.2016.1251980
- Langørgen, E., Kermit, P., & Magnus, E. (2018). Gatekeeping in professional higher education in Norway: Ambivalence among academic staff and placement supervisors towards students with disabilities. *International Journal of Inclusive Education*, 24(6), 616–630. https://doi.org/10.1080/1360311 6.2018.1476599
- Langørgen, E., & Magnus, E. (2018). "We are just ordinary people working hard to reach our goals!" Disabled students' participation in Norwegian higher education. *Disability & Society*, *33*(4), 598–617. https://doi.org/10.1080/09687599.2 018.1436041
- Leyser, Y., Greenberger, L., Sharoni, V., & Vogel, G. (2011). Students with disabilities in teacher education: Changes in faculty attitudes toward accommodations over ten years. *International Journal of Special Education*, 26(1), 162–174. https://eric.ed.gov/?id=EJ921202
- Lipka, O., Forkosh Baruch, A., & Meer, Y. (2019). Academic support model for post-secondary school students with learning disabilities: Student and instructor perceptions. *International*

- Journal of Inclusive Education, 23(2), 142–157. https://doi.org/10.1080/13603116.2018.1427151
- Lombardi, A., Murray, C., & Kowitt, J. (2016). Social support and academic success for college students with disabilities: Do relationship types matter? *Journal of Vocational Rehabilitation*, *44*(1), 1–13. https://content.iospress.com/articles/journal-of-vocational-rehabilitation/jvr776
- Lombardi, A. R., Murray, C., & Gerdes, H. (2011). College faculty and inclusive instruction: Self-reported attitudes and actions pertaining to Universal Design. *Journal of Diversity* in Higher Education, 4(4), 250–261. http://psycnet.apa.org/ record/2011-18169-001
- Lourens, H., & Swartz, L. (2016). Experiences of visually impaired students in higher education: Bodily perspectives on inclusive education. *Disability & Society*, 31(2), 240–251. https://doi.org/10.1080/09687599.2016.1158092
- Love, T. S., Kresier, N., Camargo, E., Grubbs, M., Kin, E. J., Burge, P. L., & Culver, S. M. (2015). STEM faculty experiences with students with disabilities at a land grant institution. *Journal of Education and Training Studies*, 327-38(1). https:// doi.org/10.11114/jets.v3i1.573
- Madriaga, M., Hanson, K., Heaton, C., Kay, H., Newitt, S., & Walker, A. (2010). Confronting similar challenges? Disabled and non-disabled students' learning and assessment experiences. *Studies in Higher Education*, 35(6), 647–658. https://doi.org/10.1080/03075070903222633
- Martins, M. H., Borges, M. L., & Gonçalves, T. (2018). Attitudes towards inclusion in higher education in a Portuguese university. *International Journal of Inclusive Education*, 22(5), 527–542. https://doi.org/10.1080/13603116.2017.1377299
- Messiou, K., Ainscow, M., Echeita, G., Goldrick, S., Hope, M., Paes, I., Sandoval, M., Simon, C., & Vitorino, T. (2016). Learning from differences: A strategy for teacher development in respect to student diversity. *School Effectiveness and School Improvement*, 27(1), 45–61. https://doi.org/10.1080/09243453 .2014.966726
- Miles, M., & Huberman, M. A. (1994). *Qualitative data analysis*. Sage.
- Moriña, A. (2019). Learning from experience: Training for faculty members on disability. *Higher Education Policy*, 23(2–3), 86–92. https://doi.org/10.1080/13603108.2018.1534759
- Moriña, A., Cortés-Vega, M. D., & Molina, V. (2015). What if we could imagine the ideal professor? Proposals for improvement by university students with disabilities. *Teaching and Teacher Education*, 52, 91–98. https://doi.org/10.1016/j.tate .2015.09.008
- Moswela, E., & Mukhopadhyay, S. (2011). Asking for too much? The voices of students with disabilities in Botswana. *Disability & Society*, 26(3), 307–319. https://doi.org/10.1080/09687599. 2011.560414
- Murray, C., Lombardi, A., Seely, J. R., & Gerdes, H. (2014). Effects of an intensive disability-focused training experience on university faculty self-efficacy. *Journal of Postsecondary Education and Disability*, 27(2), 179–193. https://eric.ed.gov/?id=EJ1040537
- Murray, M., Lombardi, A., & Wren, C. T. (2011). The effects of disability-focused training on the attitudes and perceptions of university staff. *Remedial and Special Education*, *32*(4), 290–300. https://doi.org/10.1177/0741932510362188

- Mutanga, O. (2018). Inclusion of students with disabilities in South African higher education. *International Journal of Disability, Development and Education*, 65(2), 229–242. https://doi.org/10.1080/1034912X.2017.1368460
- Papay, C., & Griffin, M. (2013). Developing inclusive college opportunities for students with intellectual and developmental disabilities. *Research and Practice for Persons with Severe Disabilities*, 38(2), 110–116. https://doi.org/10.2511 /027494813807714546
- Powney, J. (Ed.) (2002). Successful student diversity. Case studies of practice in learning and teaching and widening participation. Higher Education Funding Council for England.
- Quinn, J. (2013). Drop-out and completion in higher education in Europe among students from under-represented groups [An Independent report authored for the NESET network of experts]. European Commission, Brussels.
- Redpath, J., Kearney, P., Nicholl, P., Mulvenna, M., Wallace, J., & Martin, S. (2013). A qualitative study of the lived experiences of disabled post transition students in higher education institutions in Northern Ireland. *Studies in Higher Education*, 38(9), 1334–1350. https://doi.org/10.1080/03075079.2011.622746
- Riddell, S., & Weedon, E. (2014). Disabled students in higher education: Discourses of disability and the negotiation of identity. *International Journal of Educational Research*, 63, 38–46. https://doi.org/10.1016/j.ijer.2013.02.008
- Rohland, P., Erickson, B., Mathews, D., Roush, S. E., Quinlan, K., & Smith, A. D. (2003). Changing the culture (CTC): A collaborative training model to create systemic change. *Journal of Postsecondary Education and Disability*, 17(1), 49–58. https://eric.ed.gov/?id=EJ876002
- Schelly, C. L., Davies, P. L., & Spooner, C. L. (2011). Student perceptions of faculty implementation of universal design for learning. *Journal of Postsecondary Education and Disability*, 24(1), 17–30. https://eric.ed.gov/?id=EJ941729
- Shaw, J. (2009). The diversity paradox: Does student diversity enhance or challenge excellence? *Journal of Further and Higher Education*, *33*, 321–331. https://doi.org/10.1080/03098770903266018
- Simpson, A. (2002). The teachability project: Creating an accessible curriculum for students with disabilities. *Planet*, *6*(1), 13–15. https://doi.org/10.11120/plan.2002.00060013
- Sowers, J., & Smith, M. R. (2004). Evaluation of the effects of an inservice training program on nursing faculty members' perceptions, knowledge, and concerns about students with disabilities. *Journal of Nursing Education*, 43, 248–252. https://search.proquest.com/openview/c81b09c0120b20e9f2dd4dd84 2c5c965/1?pq-origsite=gscholar&cbl=47628
- Stes, A., & Van Petegem, P. (2015). Impacto de la formación del profesorado universitario [Impact of faculty training]. *Educar*, 51(1), 13–36. https://doi.org/10.5565/rev/educar.642
- Strnadová, I., Hájková, V., & Květoňová, L. (2015). Voices of university students with disabilities: Inclusive education on the tertiary level—A reality or a distant dream? *International Journal of Inclusive Education*, 19(10), 1080–1109. https://doi. org/10.1080/13603116.2015.1037868
- Thomas, L. (2016). Developing inclusive learning to improve the engagement, belonging, retention, and success of students from diverse groups. In M. Shah, A. Bennett, & E. Southgate (Eds.),

Widening higher education participation: A global perspective (pp. 135–159). Elsevier.

- Thomas, L., & May, H. (2010). *Inclusive learning and higher edu*cation. The Higher Education Academy.
- Vickerman, P., & Blundell, M. (2010). Hearing the voices of disabled students in higher education. *Disability & Society*, 25(1), 21–32. https://doi.org/10.1080/09687590903363290
- Warren, D. (2002). Curriculum design in a context of widening participation in higher education. Arts and Humanities in Higher Education, 1(1), 85–99. https://doi.org/10.1177/147402220201001007
- Wilson, K. L., Murphy, K. A., Pearson, A. G., Wallace, B. M., Reher, V. G. S., & Buys, N. (2016). Understanding the early

- transition needs of diverse commencing university students in a health faculty: Informing effective intervention practices. *Studies in Higher Education*, *41*(6), 1023–1040. https://doi.org/10.1080/03075079.2014.966070
- Yssel, N., Pak, N., & Beilke, J. (2016). A door must be opened: Perceptions of students with disabilities in higher education. *International Journal of Disability, Development and Education*, 63(3), 384–394. https://doi.org/10.1080/1034912X.2015.1123232
- Zhang, Y., Rosen, S., & Li, J. (2019). Inclusive higher education for students with disabilities in China: What do the university teachers think? *Higher Education Studies*, 8(4), 104–115. https://doi.org/10.5539/hes.v8n4p104