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To cite this article: Pablo Rodríguez Herrero, Pablo José García Sempere & Andrés Cabrera García (29 Nov 2023): Inclusive co-teaching with teachers with intellectual disabilities in teacher education, European Journal of Teacher Education, DOI: [10.1080/02619768.2023.2288550](https://doi.org/10.1080/02619768.2023.2288550)

To link to this article: <https://doi.org/10.1080/02619768.2023.2288550>



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Published online: 29 Nov 2023.



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Inclusive co-teaching with teachers with intellectual disabilities in teacher education

Pablo Rodríguez Herrero ^a, Pablo José García Sempere ^b
and Andrés Cabrera García^a

^aDepartment of Pedagogy, Universidad Autónoma de Madrid, Madrid, Spain; ^bDepartment of Didactics and School Organization, Universidad de Granada, Granada, Spain

ABSTRACT

A new model of teacher education in inclusive methodology was studied: co-teaching with teachers with intellectual disabilities in pre-service teacher education. The main objectives were to understand how this educational experiment was perceived by three teachers (one tenured and two with intellectual disabilities) and trainees on a postgraduate course on inclusive education, and to identify implications for teacher education. The methodology was qualitative and phenomenological. Individual interviews were conducted with the three teachers, and a focus group with three trainees. The main conclusions were: (1) the co-teaching experience had a significant and positive impact on the teachers' concept of inclusion, teaching identity and personal and professional development; (2) having teachers with intellectual disabilities contributed to education on inclusive approaches; (3) the teaching model needed to be further developed. As an outcome of the results analysis, the characteristics of an inclusive co-teaching model for university teaching are defined.

ARTICLE HISTORY

Received 8 November 2022
Accepted 10 November 2023

KEYWORDS

Teacher education; inclusive education; university education; intellectual disability; inclusive co-teaching

Introduction

Teacher education in inclusive methodology is a global political and pedagogical priority (UNESCO 2020), reflected in a line of research based on the phenomenological study of education and teacher education. Inclusiveness requires a deep form of teacher education that develops competences for the social inclusion of all human diversity and for becoming aware of the need to find what is common to all human beings as an essential element in building more inclusive education.

The dialogue between diversity and our shared humanity requires original initiatives in teacher education in inclusiveness. It is necessary to overcome our biases and social representations regarding diversity and inclusion (Moscovici 1988). Such stereotypes sustain a dominant worldview that will always be biased until it is complemented by

CONTACT Pablo Rodríguez Herrero  pablo.rodriguez@uam.es  Department of Pedagogy, Universidad Autónoma de Madrid, Madrid, Spain

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the views – and teaching – of traditionally marginalised groups. Moving towards greater inclusiveness requires us to decolonise education (e. g. Toohey and Smythe 2022) and to rectify what Sousa Santos (2014) calls ‘epistemicide’: the annihilation of knowledge that differs from the prevailing norms. This study, then, has a strong critical component, drawing on this current of pedagogy and on the experience of people with intellectual disabilities in both general and teacher education. Thus, we attempt to counter the homogenised model of the university teacher (Keane, Heinz, and McDaid 2022).

The research presented in this article is the first in the literature to analyse the formative impact of a co-teaching model with teachers with intellectual disabilities in teacher education. It is a study of an innovative and disruptive educational experience, which addresses both the perspective of the teachers involved and of the students who have been taught through this teaching approach.

Theoretical background

Teacher education training in inclusive methodology

Teacher education in inclusive methodology is a key challenge of recent decades and the topic of a debate centring on how to train teachers in the knowledge, skills and attitudes needed for more inclusive teaching (Ball and Tyson 2011). The identification of inclusive education as an international goal in the UN Sustainable Development Goals (United Nations 2015) has reinforced this long-standing trend. Pre-service teacher education in inclusiveness is an essential foundation for understanding inclusion and its application in education (Sosu, Mtika, and Colucci-Gray 2010). Numerous methods and approaches for this type of pre-service teacher education have been described (e. g. Alves 2020). However, in the literature we found no models that included teachers with intellectual disabilities in actual teaching practices.

Co-teaching and the testimony of people with intellectual disabilities

Co-teaching has traditionally meant two teachers working jointly in classrooms with students with disabilities or special educational needs (Jurkowski, Müller, and Müller 2020). Co-teaching can be applied at any stage of education. Although it has gained in popularity and legitimacy in university teaching (Salifu 2021), there is less research into this context than in schools. Co-teaching with two or more teachers is especially relevant when teaching subjects with more problematic content (Roland and Jones 2020). Since approaches to diversity, inclusion and disability are inherently problematic, team teaching would seem an appropriate choice.

This project was grounded in the educational potential in the university context of giving voice to people with intellectual disabilities and actively acknowledging their expertise in issues relating to their life experience. The concept of the ‘pedagogic voice’ (Parr and Hawe 2020) underpins this notion. Pedagogical voices can be understood as those which, unlike the ordinary teacher, can shape the teaching-learning process by sharing personal visions and experiences, leading to a more open and complete educational process (Parr and Hawe 2020). This concept can be understood from a critical and decolonising perspective of education (e.g. Toohey and Smythe 2022), which recognises

the marginalisation of some groups and the undervaluing of their discourse and knowledge associated with their living conditions. Analysts who have defined and applied the concept have focused mainly on the voices of students (Parr and Hawe 2020) and student participation in teaching. However, these practices have not been transferred to pre-service or postgraduate teacher education on inclusiveness, in which teachers from groups experiencing exclusion, such as people with intellectual disabilities, can potentially be included.

Some studies have dealt with the experiences of teachers with disabilities, highlighting their difficulties in achieving a teaching career (Neca, Borges, and Campos 2022) and the numerous political and cultural barriers they face (Ware, Singal, and Groce 2022). In an inclusive education model, access for people with disabilities to the teaching profession could contribute to greater coherence and a more inclusive society in actual practice (Vogel and Sharoni 2011). Thus, teachers with disabilities can have a positive added value for teaching (Tal-Alon and Shapira-Lishchinsky 2019), even being an example for their students to motivate them in the face of life's difficulties (Aldakhil 2019).

Although numbers of university students with intellectual disabilities are rising in many countries (Rodríguez, Izuzquiza, and Cabrera 2021), research on educational experiences in which they actually participate in teaching is very scarce. We only found only one such study; undertaken at Trinity College Dublin, it investigated social science students' perceptions of a module in which they were taught by women teachers with intellectual disabilities, jointly with a tenured lecturer (Feely et al. 2022). The students' perceptions were very positive, reporting greater empathy for people with disabilities and greater ease in relating to people with disabilities at the end of the academic year. The students also highlighted some issues that had caused them concern during the course, such as the involvement of teachers with intellectual disabilities in assessment.

No similar experiments or studies were found in the field of pre-service or postgraduate teacher education. In this light, the main objectives of this study were: (1) to explore how three teachers (one tenured teacher and two with intellectual disabilities) perceived a co-teaching experiment in university education in inclusive methodology; (2) to determine how students perceived this co-teaching approach; and (3) to identify pedagogical implications for teacher education in inclusive methodology.

Method

Methodological design

The study design was qualitative and phenomenological and set out to garner participants' perceptions of their experiences and meanings attributed to them. The phenomenological approach used is not only descriptive but also interpretative and investigative of the participants' reflections, following Van Manen's (2014) model. Although phenomenological designs can include different resources that are not necessarily qualitative (Stolz 2023), this study focuses on the content analysis of the perceptions of the main participants in the educational experience being analysed. This approach was also chosen due to its potential for openness and flexibility, in this case giving voice to people with intellectual disabilities. It enabled us to analyse the testimony, experiences, thoughts and emotions of teachers with

intellectual disabilities with greater respect, rigour and openness, and to represent participants' experience of the educational phenomenon studied, in this case the teaching of a pre-service module on inclusive education with three teachers, two with intellectual disabilities.

The research team was made up of five researchers, three of whom (the authors of this article) were active in all the phases of the study. All five are involved in researching inclusive education.

Context and participants

The study was conducted on a module titled 'Advanced Educational Intervention with People with Functional Diversity', part of the Master's Degree in Quality and Improvement of Education at the Autonomous University of Madrid (Spain), a course mainly designed to complete pre-service teacher education. The module was an optional part of the Inclusive Education section of the course, taught in the academic year 2021/2022 by one tenured teacher and two teachers with intellectual disabilities. The module dealt with lifelong education among people with intellectual or other disabilities. Using our research funding, two teaching positions were advertised for teachers with intellectual disabilities to complement the tenured teacher of the module. The reasons for carrying out the study among teachers whose disabilities were intellectual and not of any other type were firstly that the content of the module was closely related to this type of disability, and secondly that the group's main research line was the inclusion of people with intellectual disabilities. The application criteria were: recognised intellectual disability; adequate communicative competence; and good personal and professional maturity. The successful candidates were chosen by a committee set up by the university. The module lasted four months, from the last week of January to the last week of May 2022, with a weekly two-hour session.

Six people from two different groups participated in the study. Purposive sampling without exclusion criteria was performed. The first group were the teachers of the module: the main teacher (T1) and the two teachers with intellectual disabilities (T2, T3). T1 was male and 38 years old, with 11 years of previous teaching experience and four years teaching the module. T2 was a 40-year-old woman with an intellectual disability due to Down syndrome. T3 was female, aged 22 and with an unspecified intellectual disability. Both T2 and T3, apart from teaching work at the university, had other jobs as company administrative staff. This was their first teaching experience. During their school years, T2 had studied at a special education centre and T3 in regular schools. As for the group of students, three female students participated out of a total of six enrolled in the module (it should be noted that the module is optional, and for this reason there are fewer students). The three students were women aged between 21 and 22. S1 and S2 were graduates in Early Childhood Education and S3 in Early Childhood and Primary Education. None of them had professional educational experience in schools or with students with disabilities. On a personal level, S1 had a cousin with Down syndrome.

Prior to conducting the fieldwork, the ethics committee of the coordinating university approved the study. All participants were informed of the objective of the research, the voluntary nature of their participation and the confidentiality of the data. It was particularly important to convey these issues to the teachers with intellectual disabilities,

specifying that their role as teachers did not involve a commitment to participate in the research.

Instruments

The interviews with the three teachers were semi-structured. The research team designed a fifteen-question script (with the possibility of including other questions during the interview) based on the following three analytical dimensions: module planning, module delivery and teacher competencies and characteristics. In the interviews with teachers with intellectual disabilities, the questions were framed in accordance with accessible reading criteria. It was decided to conduct individual interviews so that the main teacher's views would not influence those of his colleagues.

The fieldwork among the students was performed using a focus group, with a script of 18 questions, also open to further emerging questions. The initial dimensions of analysis were: educational experience; conventional teaching and co-teaching; impact; and assessment. A focus group was conducted amongst the students because communicative interaction among people with shared experiences as students was seen as important.

Since there is no theory of this teaching model or similar research prior to this study, the definition of the initial categories of analysis was based on the analysis of the educational processes involved in the experience.

The clarity and relevance of the questions in both scripts were validated by four external researchers with expertise in university teaching, inclusion and disability.

Procedure and data analysis

The interviews and focus group were conducted at the end of the course and outside the assessment period, so as not to influence student participation. They were conducted by two members of the research team with no previous participation in teaching the module. The interviews lasted from 30 to 40 minutes and the focus group 120 minutes.

A content analysis of the transcripts was performed by coding the citations using MAXQDA 2022 software. We based ourselves on the initial categories described above, but carrying out an analysis that was open to the emergence of further categories. Categories were saturated when they reached nine or more coded citations, taking into account not only this quantitative data but also the importance of the citations according to their qualitative interpretation. Data was triangulated by each researcher analysing the information independently, highlighting the most relevant and significant results. Lastly, in the discussion section below, we combine the results obtained from both teachers and students.

Results

Below we present the results obtained for each group in terms of the categories emerging on the basis of those initially identified.

Teachers

Planning the module

As part of the co-teaching approach, the three teachers planned classes jointly. A weekly work routine was set up: 'First, on Mondays we met to prepare the Wednesday classes' (T2). In addition, the teachers met on Wednesdays before class: 'To review everything, we'd meet about an hour before, around five in the afternoon, at our university desks, and the three of us would meet to continue reviewing what we'd discussed on Monday' (T3). Thus, the teachers' planning developed from a relatively rigid and highly organised structure to a more flexible and spontaneous style. T1 also stated: 'sometimes I had to take a more directive role [...] but in other subjects I didn't. I wasn't so directive and they made a lot of suggestions'.

Regarding the course content, all three teachers agreed that the materials in the teaching guide were taught as planned, from different perspectives, as T3 stated: 'All the topics included in the teaching guide were covered, both the theoretical ones and the experiential, the practical'. T1 also reflected the complementarity of teaching approaches identified by T3, directly related to the co-teaching approach: 'I think we even used approaches and content that aren't in the guide. I mean, we broadened the perspective, also because of the flexibility co-teaching gives you'. It can be seen how co-teaching can contribute to broadening approaches and teaching content not initially envisaged, due to the inter-subjective construction that is carried out on teaching.

Teaching methods

In class, the usual approach was that the theoretical component was taught by the main educator, while the teachers with intellectual disabilities imparted their personal experience: 'At the beginning of the class, first T1 would start by teaching the theory, and then when T1 was finishing, either T2 would start or I'd start teaching, and so on', T3 told us. Apart from this staged planning of the session, dialogues and debates on the topics covered were also interspersed in the class: 'T2 said one thing, I said another, T1 said another. And so the students also gave their own opinion about things' (T3).

The classes that had the greatest impact were those in which the teachers with intellectual disabilities took on greater responsibility. For example, they recalled a class in which T2 and T3 invited those of their own teachers who, in their opinion, practised inclusiveness: 'I think the seminar we did with inclusive teachers went down really well' (T1). T2 and T3 also referred to the importance of the sessions in which they imparted their experience in schools (each of them had different experiences of school, one in special education and the other in regular education, thus enriching the training experience). T2 stated that the sessions where they recounted 'our school experience so far' were among those that worked best. T3 also explained that 'The [classes] that most caught [students'] attention, particularly, is when T2 and I were explaining how we'd like inclusive classes to be'.

The least satisfactory were those that were more distant from the personal experiences of teachers with intellectual disabilities. T1 told us that 'the most difficult classes, in terms of doing them with the co-teaching model, were the ones on Universal Teaching Design. I think T2 and T3 had to make a big effort to put themselves in the teacher's place'. The

teacher added that 'in other topics [...] there was more congruence [with their personal experiences]: in the topics of occupational inclusion, families and educational pathways'. These data invite us to define some limitations of this co-teaching model, such as the identification of the contents that can be co-taught and those that cannot from this model.

Pedagogical relationships with students

A basic issue in any teaching model is recognition of the teacher's pedagogical authority. In this case this acquires an even more specific meaning, since it was a matter of recognising teachers with intellectual disabilities for their knowledge of the content and competencies taught on the module. The results were significant in this respect. When asked if the students addressed the teachers with intellectual disabilities differently, both stated that they were addressed 'from student to teacher' (T3). 'They treated us the same as T1', T2 added.

The main teacher gave a participant's view of this issue, describing his observations of his colleagues' relationships with students and identifying some nuances where differences may have occurred: 'I was pleasantly surprised by the relationship that the students established from the beginning with the three of us. And I think it was pretty similar, that the relationship was with model figures, as teachers. Perhaps in the more formal aspects of the module, for example, deadlines, they were more directed to me. But apart from these formal or structural issues, the relationship was excellent and I think it was pretty similar to the one they had with me'.

Relationships between teachers

The transformation of the teachers' identities also occurred in their relationships with the main teacher. T3 told us: 'T1 was a teacher before, and now, well, our fellow teacher, it was a bit weird, wasn't it? Oh, me giving classes with a teacher! [...] it was a bit odd, but then you get used to teaching and all that'. This change was not only perceived by the teachers with intellectual disabilities, but also by the lead teacher: 'The relationship I had until now with people with intellectual disabilities was more vertical, more like a teacher's. I had to change that with T2 and T3. It's been really nice'. T1 added that the experience had transformed his idea of teaching and inclusive education:

One of the things that I would acknowledge in class [in past courses], just to show people the difficulty of inclusion, was [...] that after so many years relating to people with disabilities, feeling that I hadn't had a friendship with a person with a disability. And I'd say that so that the students would be aware of the difficulties you can face in relationships among students in different life situations. And I think that's changed, I believe much more in inclusion than before. Especially when there are horizontal, equal relationships, when these environments are created. (T1)

This was an environment, then, that not only enabled the teachers to work together effectively in planning and delivering classes, but also represented an opportunity for their professional and personal development and for their personal relations. As T1 noted: 'We had a relationship that I'd say was really close to friendship'.

Nevertheless, an account of these relationships should be further nuanced, due to their novelty and their connection to the subjects being taught. T1 described a situation in class where an external speaker was invited to a session: 'I think it'd be good for us to talk to the [invited] teachers beforehand. Because, for example, we had a situation where a teacher came to give a seminar. They talked about historical moments when people with disabilities have been not only discriminated against, but annihilated. Like Nazi Germany, or extreme bullying. And that's when T3 had a hard time'.

Competencies, teacher education and proposals for improvement

The teachers with intellectual disabilities had no training as teachers prior to the experience, although they had participated in activities such as round tables on the rights of people with disabilities (T3). Their teacher education consisted in 'learning as we go along', in T3's words. According to T1, 'It was informal training by observation, as, when planning the classes, we talked about methodologies and types of assessment'.

Teaching practice 'involved effort' (T2) and 'a lot of responsibility' (T3). Thus, these teachers, new to university classrooms, were aware of the need for training in some areas, for example, 'correction' and 'speaking more in public' (T2). The same teacher particularly stressed that 'what worried me most was giving grades'. We wondered if this statement reflected not only the awareness of the need for training, but also perhaps the 'surprise' and impact on identity that evaluating adult students without disabilities had for a teacher with intellectual disabilities.

Teacher education requirements centre on the type of teacher characteristics needed to co-teach effectively with people with disabilities. According to T1, the university teacher with intellectual disabilities 'should be a mature enough person to take on teaching other people, i.e. with a certain empathy and awareness of why he/she is there'. Therefore, knowing that 'not only is he/she there to talk about his/her experience, but so that this experience can help students be better teachers [in the future]'. He also mentioned the competence of 'communication and organisation of ideas'. Lastly, he commented that these teachers needed 'training in basic teaching methodologies, presentation methods, groupwork and cooperative methods, case studies, project-based studies, assessment, etc'. He suggested some possible improvements in pre-service teacher education, not only in these areas for teachers with intellectual disabilities, which 'we've [...] had the chance to have', but also in training for other teachers. The experience with his co-teaching colleagues had also been an opportunity for his own teacher education. Thus, he commented:

I had to learn a lot. To be quiet, for example. There were classes where I had to intervene very little. It's also helped me to understand different ways of teaching. At the beginning, I think I influenced them a bit more, because I was a bit more rigid. Then [later I noticed that] they worked really well with the students. So who was I to try and change that?. (T1)

Personal and professional teacher development

The categories discussed above afford glimpses of how the teaching experience impacted the three teachers involved. Although some of what we have quoted relates to personal

and professional teacher development and complements what we discuss in this section, the importance of this issue for our study requires a separate category with a distinct character. For T1, this was the ‘experience in inclusion that’s had the greatest impact on me, also the most difficult and rewarding at the same time’. The main reason for this was the change in his relationships with people with intellectual disabilities, as mentioned previously.

The impact was also significant for the two teachers with intellectual disabilities. T2 said she felt ‘really proud’ of the experience. She remarked that at times she ‘didn’t believe it’: ‘when they told me that I was going to teach female students, I didn’t believe it, until now’. For her part, T3 told us: ‘It was a really nice challenge, because teaching students like the ones I had was a lot of fun. Because I could say what I thought, or what my [ideal] classes are like, or what the stages of my life have been like, for example. And that was really nice and rewarding’. Also T3, like her colleague, stated that she had never imagined she would become a university teacher.

The common denominator among all three teachers was therefore the strong impact of the experience on their lives, both in terms of their personal development (openness to non-judgemental relationships with people with disabilities, transformation of personal identity and roles, etc.) and professional development (concept of inclusive education, development of competencies, etc.).

Students

Differences from conventional teaching

In the focus group, the students participating in the study valued a number of differences between conventional teaching and the co-teaching approach with teachers with disabilities. They described how they saw the coordination between teachers: ‘The coordination was really good between them, because the classes were really well prepared’ (S2). This coordination was perhaps not necessarily strictly linked to the co-teaching model, but to the increased attention given to this novel approach. They also noted an ‘atmosphere of closeness’ (S3) that was ‘more relaxed’ (S2) and ‘provoked much more discussion’ (S1) than in conventional classes. The three participants all agreed on the value of this atmosphere of openness and closeness in the classroom. S1 emphasised the difference in the teaching approach: ‘For me, it was like a totally different module, as if our lives were linked. But not because of the syllabus, but because of what I felt when I went to class’.

Students’ appreciation may be related to the inclusion of different teaching perspectives involved in the co-teaching approach; not only due to having educators with intellectual disability, but also because each teacher focused on different aspects of the content covered. ‘We don’t only see the perspective of a single teacher [. . .] Because we had other teachers, there were more points of view, more to think about, more to reflect on’ (S2). Diversity of teachers, therefore, can afford a flexibility that creates a more relaxed and freer atmosphere in which to build knowledge, as S1 remarked. S2 indicated the importance of having two teachers with intellectual disabilities with differing perspectives: ‘I think, not only that, but the experiences of T2 and T3 were completely different. So, of course, it wasn’t the same situation or the same experience, but they were

completely different [S1 and S3 nod]. This really gave the co-teaching an extra dimension'. It can thus be interpreted that students receive an education that broadens their understanding of the phenomenon being studied, with different points of view about the same reality.

Lastly, the students commented on the values that teachers with intellectual disabilities could bring to teaching. As S3 remarked: 'Through the teachers' experiences we could see their humanity'. Also, S1 told us of a situation outside the classroom: 'Once I had a bad day, I went to the train [after class] feeling a bit rough, crying, and my teacher came up and asked me, "What's wrong, is it something that happened to you on the course?" No teacher had ever done that before and at the time I thought, "Hey, that's weird!" But that's really what we should do as teachers, right? Be human with our students'.

Pedagogical voices

Diversity of teachers and ways of teaching is enhanced by encompassing voices and discourses differing from the traditional academic ones, voices which are both pedagogical and educational due to their impact on students: 'After all the years that I've been studying education and functional diversity, I've had the chance to experience people with functional diversity telling their own story, identifying their own needs and teaching us from their own experience how and what we need to give them, in this case, as teachers' (S1). Through the pedagogical voices of teachers with intellectual disabilities, situations, prejudices and prior beliefs were questioned: 'Things that I thought were absolutely real, to see that it's not like that, that there are various realities and that, for example, [in issues in which] I was perhaps less in favour, less in agreement, I've realised on this module that it's not like I thought' (S2). The educational value of giving pedagogical authority to traditionally silenced groups was acknowledged: 'So, if you as a child, from when you're six, at some point in your education you have a teacher ... if we're talking about discriminated groups, a black teacher, if you have a gay teacher, if you also have a teacher with a disability, without a doubt it'll reduce your prejudices' (S3). Prejudice was also questioned by calling previous views into doubt, as the same student explained: 'It gives you other very different perspectives, and makes you doubt what you had before'.

The students, future teachers with all probability in environments attempting to encourage inclusion, heard through the experience of their teachers the educational requirements and needs that the latter saw as important: 'If we always speak on behalf of others, we're not listening to their own opinions, their own voices, and therefore their own needs and demands' (S2). The students saw the teaching as meaningful because it was real, because it came from people who had become experts through their personal experience in the field of knowledge being taught: 'I believe that the strongest impact is by example. When a person with functional diversity feels represented and can speak out, that means you have an example to follow' (S1). It was also said that inclusive education could embrace the views of those who had been students in vulnerable situations, for example, due to a disability. The voices of teachers with intellectual disabilities encouraged the students not only to question their vision of inclusion, but also to contribute, on the basis of this training course, to the transformation of society: 'The function of education is supposed to be to transform society, and to transform society you need to have these experiences' (S3).

Training received

The students noted their learning in terms of their professional future in education, but also in terms of their personal development (areas that are intertwined and in continuous dialogue in the teaching profession). Regarding pedagogical competencies and techniques, they stated that they had 'learned a lot of knowledge and resources' (S3). Yet perhaps the most relevant educational change was in their awareness of and attitudes towards educational inclusion: 'I think it was like breaking the mould' (S2). This was a change of attitude towards both profession and personal life, as S3 remarked: 'What I take with me, in addition to the knowledge, is an attitude. It's an attitude towards both the work I've chosen and towards life'. This process of 'breaking the mould' is not indifferent to the student, as it triggers what can be seen as a painful and at the same time a beautiful and necessary process: 'Breaking the mould creates the frustration of saying: "I *did* have stereotypes", and I'd have pigeonholed them too', S2 acknowledged. S1 added: 'I think that this subject has been painful for me, I guess you could say. As my classmates say. Recognizing your mistakes and being self-critical. . . recognizing "I do have prejudices, I do have stereotypes, I do have erroneous beliefs towards people with functional diversity" [. . .] I think I need to do this'. According to S3 these lessons were for life, not only for teaching: 'I think it's touched me a bit more on a personal level than an academic one, and I'll take that with me for life'.

The co-teaching model seemed to motivate the learning of the students participating in the study, as they indicated: '[It's] a module that made me want to come to class and with which I not only felt like coming, but I came out of class and needed to go on the underground talking to you [addressing another classmate] about everything we'd learned today'. According to S1 this motivation came from having an example in the classroom: 'It doesn't do me any good if you come to talk to me again about what inclusion and functional diversity are, because we've already studied it. We needed something that we hadn't really studied, and that's what the course has given us'.

This education in inclusiveness was different from what the trainees had previously received: 'An awareness and sensitisation towards the subject of inclusion and functional diversity that we hadn't had in other modules' (S3). The students' views indicated that in this module the theoretical teaching converged with the experiences of the teachers with intellectual disabilities, together with a third element, a form of classroom practice in which students related to people with disabilities and connected this to their future relationships with students with disabilities: 'I think that this module has really improved my training in terms of inclusive education, because, as my classmates commented, being able to put knowledge directly into practice helps us for when we have students with functional diversity in class' (S3). In this way, theory was linked to and integrated with practice, 'connecting more with reality' (S2).

Turning to the difficulties of the teaching model in terms of learning and teacher education, the trainees indicated some areas for development. For example, for assessment, the teachers had asked them to make their presentations of their work accessible, and they commented: 'More perhaps about us, than about the co-teaching. . . they've always asked us for more academic terminology, more "scientific" in quotation marks, and now [that they're asking for] simpler presentations [. . .] we weren't sure if we were doing it right' (S2). They also remarked on the incident that T1 described previously with regard to

the topic of bullying in a guest teacher's presentation: 'One of the teachers wasn't prepared, from my point of view, to face that situation' (S1). Further, they also highlighted some difficulties in teaching practice; for example, that sometimes the teachers with disabilities 'overextended themselves' (S2) or that 'at some point they stepped on each other's toes when speaking' (S1). Consequently, they emphasised the importance of 'providing them with training' (S3) in didactics and teaching skills.

Teaching innovation and educational change

The students stressed the innovative nature of the experience: 'It's the first time we've had something like this', S1 stated. S3 related it to other historical milestones in universities: 'Co-teaching with people with functional diversity at this university is the first time it's been done in Spain. So, I think it's like a revolution. It's the same as when women weren't allowed to go to university, or weren't allowed to work in certain jobs, it's the same as that [...]. So I think it's the same with functional diversity, I think it's breaking down a barrier'.

They also highlighted the possible transfer of the experience to other educational stages and environments: S2 remarked, 'I'd do it on undergraduate degrees', and S1 added also 'in schools'. All the trainees stated that they would like to have received this training previously, in their initial teaching degree, since it was a model of inclusive education that should feature in curricula: 'I think that, in teacher education, there should be a module, a module [like this one] encouraging awareness, raising future teachers' awareness of their prejudices' (S3). In addition to being a teaching model that should be included in pre-service teacher education, they also highlighted its importance for ongoing education: 'I think we should train those who're already teaching too [...] teachers who're already active, so that they can also see these situations' (S1).

When asked about the possibility of transferring the co-teaching model to other disciplines or fields of knowledge, S3 was of the view that it could be used in 'health sciences, law or psychology', since 'not only teachers need it' (i.e. a social vision of people with intellectual disabilities). In other words, co-teaching with teachers with intellectual disabilities can provide a potentially fruitful model not only for teacher education, but also for training and awareness-raising among professionals in the healthcare and social fields.

Discussion

From the perspective of these educators and their students, the experience of co-teaching with teachers with intellectual disabilities had a strong impact, both in the professional and personal dimensions. Teachers with intellectual disabilities were recognised as having pedagogical authority (Harjunen 2011) in the subjects they were teaching. Those giving students guidance on the essential principles of inclusive education were people with personal experience of exclusion and inclusion throughout their lives. Their teaching started from what they were and had been in their lives, thus establishing 'positive exemplarity' (Gomá 2019) as a resource of great didactic scope.

Although their pedagogical authority was recognised by the students, the implementation of this model of university co-teaching was not exempt from certain tensions, as previous studies on conventional co-teaching have also found (Smith and Winn 2017). In our analysis we glimpsed the difficulty with which, for example, T2 approached issues

such as student assessment. Does this difficulty stem from the strict demands inherent in assessment, or from acquiring pedagogical authority in a teaching process where the traditional roles were reversed? Concern about assessment was also shown by the students, as in another study conducted in Ireland (Feely et al. 2022). A further issue observed was the definition of the relationship between the tenured teacher and the teachers with intellectual disabilities, in that some phases of course planning were recognised as relatively directive. We would ask, then, whether this directive relationship had to do with the difficulty of empowering teachers with intellectual disabilities and accepting fully their pedagogical authority. It seems difficult to achieve distance from the social and cultural representations (Moscovici 1988) of people with intellectual disabilities and to give them full credit as educators and producers of knowledge. The experience assessed in this article does not attempt to argue that a person with an intellectual disability can become a university teacher simply by virtue of having this disability. This would require a type of training and set of competencies that can only be the object of future investigation. Moreover, the model developed here was based on co-teaching with an academic teacher who, due to his or her teacher education, may have had to take on greater responsibility in the didactic planning of the subject. The experiment undertaken here was thus a substantial but insufficient advance, not without contradictions, in the recognition of the pedagogical authority of teachers with intellectual disabilities. Diversification in the teaching profession requires not only greater representation of other groups, but also a radical transformation of the system in order to promote a diverse and inclusive body of educators (McDaid, Keane, and Heinz 2022) at the same time acknowledging the academic training required to teach at university level. The model developed here seeks to capture both of these perspectives.

A core issue emerging in the students' testimony was their awareness of their prejudices, beliefs and previous ideas around inclusive education and people with disabilities. The presence of teachers with intellectual disabilities spurred them to reflect on and recognise the biases in their previous ideas. It highlighted doubt as a fundamental resource in teacher education (Hanley and Brown 2019) and ultimately afforded greater awareness of self and relationships with others. Also, the students highlighted that in class they had the opportunity to 'practice' their communicative and inclusive competences with their teachers with intellectual disabilities, through 'learning by doing' (Dewey 2012). This co-teaching model can thus contribute to a type of teacher education in inclusiveness that is more complete and closer to non-hegemonic views of human diversity. Teacher education, both in pre-service stages, where the essential keystones of inclusive values are studied (Sosu, Mtika, and Colucci-Gray 2010), and in in-service training, can be achieved through 'unlearning' students' previous ideas, concepts and prejudices regarding disability and diversity; in other words, through the acquisition of knowledge, skills, resources and attitudes (Ball and Tyson 2011), co-teaching with teachers with intellectual disabilities can provide training based on awareness and unlearning, as is evident from the students' responses in this study.

Raising doubts and questions among students relates to the educational potential of 'pedagogical voices', applicable, as discussed above, not only to student voices (Parr and Hawe 2020), but also to those of traditionally marginalised and silenced groups such as people with intellectual disabilities. Their perspectives are potentially educational and can help improve the planning and delivery of teaching. It can also

contribute to the empowerment of people with intellectual disabilities by achieving a relevant and recognised social role such as university teacher, thus contributing to their social emancipation and overcoming negative stereotypes and social representations (Stefánsdóttir and Traustadóttir 2015). From a decolonising perspective of university education, it is not only about recognising the 'political voice' of people with intellectual disabilities (Altermark 2017) but also about including the educational knowledge they can bring to teacher education. However, the fact of having an intellectual disability does not necessarily qualify one to teach successfully. Other competencies and qualities of the two teachers with intellectual disabilities emerged from the teachers' and students' testimony: awareness of their teaching identity, personal maturity, communication skills and reflection on life experiences. These characteristics outline a working profile of an effective university teacher with intellectual disabilities.

Conclusions, limitations, implications and future lines of research

This study reached the following main conclusions in response to its initial objectives: (1) the co-teaching experience had a significant and positive impact on the concept of inclusion, the teaching identity and the personal and professional development of the three teachers involved; (2) having teachers with intellectual disabilities contributed to the training in inclusive education of the participating students, especially regarding the unlearning of previous ideas, beliefs and prejudices around disability, diversity and inclusion.

Some important limitations of the study should also be highlighted: for example, the number of students participating was low, although in relation to the total group they constituted half of the students. The reason for this was that the focus group was conducted at the end of the course and therefore it was difficult to contact the students once the semester had finished. This suggests that we should approach the results with caution, since those who participated may also have been those who, a priori, were more satisfied with the teaching experience. Another limitation was that the study did not follow or assess the entire planning and teaching process of the module.

The most salient outcome of this study is that it encourages us envisage a new model of university teaching that can complement other approaches. It is a model applicable to co-teaching with teachers with intellectual disabilities in educational inclusion, social inclusion and disability studies, which can also be transferred to other groups and subjects.

We call this model 'inclusive co-teaching': i.e. the shared teaching of a subject by academic or tenured teachers together with teachers whose life experience makes them experts in the field. In this study, these were teachers with intellectual disabilities, but this can also be applied to other fields. This model, in with both types of teachers are needed and complement each other, is considered inclusive because it incorporates into teaching processes both the scientific and theoretical knowledge of the tenured teacher and the knowledge gained from the living experience of the other teachers.

It is a model that is not free of risks, dilemmas and complexities. For example, one could discuss the absence of an academic trajectory of this teaching profile or the risk of excessively emotive discourses due to their link with significant life

experiences. It is necessary to be aware of these difficulties in order to develop a more consistent and effective model of inclusive co-teaching for teacher education.

As a novel line of research in teacher education and inclusion, it opens up numerous further possibilities, for example: replication of the study with higher numbers of students; the study of the desired teacher characteristics and skills and the training needed for these; the long-term impact of training with inclusive co-teaching and its effects on teaching practice in schools; and the transfer of this model to other fields and university degrees.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was funded by the Comunidad de Madrid and the Universidad Autónoma de Madrid (Spain) under Grant SI3/PJI/2021-00164 [Research Project: Pedagogical voices and co-teaching in university education. An inclusive research with people with intellectual disabilities].

Notes on contributors

Pablo Rodríguez Herrero is an Associate Professor at the Department of Pedagogy at the Universidad Autónoma de Madrid, Spain, and leader of the research group 'University, Innovation and Social and Educational Inclusion' (UNINC). His main research interest is inclusive education, university teaching and teacher education.

Pablo José García Sempere is an Assistant Professor at the Department of Didactics and School Organization at the Universidad de Granada, Spain. His main research interest is inclusive education, ICT, creativity and inclusive audiovisual production.

Andrés Cabrera García is a Part Time Lecturer at the Department of Pedagogy at the Universidad Autónoma de Madrid, Spain. His main research interest is inclusive education, inclusion at the university and intellectual disability.

ORCID

Pablo Rodríguez Herrero  <http://orcid.org/0000-0002-2152-0078>

Pablo José García Sempere  <http://orcid.org/0000-0001-6329-6089>

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