Inclusive faculty members who teach student teachers: An analysis from the learning ecologies framework

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Abstract

This qualitative study draws from learning ecologies as a framework of analysis in order to explore the activities, resources, and relationships practised by 25 Spanish faculty members who teach in the area of Education. Their students nominated them as inclusive faculty. Individual, semi-structured and in-depth interviews were conducted. The results show that the activities, resources and relationships are multiple, diverse and learner-centred. This paper concludes that teaching to be a future inclusive teacher involves being consistent and acting as a role model, by being just an inclusive faculty in the university classes. These faculty voices provide recommendations on how universities should teach with a view to promote lifelong learning in which all students feel welcome.

Keywords: Faculty members; student teacher; inclusive education; learning ecologies

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Introduction

The diversity of the university student body is increasing and non-traditional groups that previously did not have access to university, such as mature students, students with disabilities and minority ethnic groups, among others, are now present (Padilla-Carmona et al. 2020; Thomas 2016). The technological progress in which we are immersed, which has been made even more evident by the training needs derived from the pandemic, has also driven the need for continuous updating and lifelong learning (Bong and Chen 2021; UNESCO 2020).

Moreover, educational policies (e.g., in Europe, through the Bologna process), have challenged how teaching and learning takes place in universities. While the prevailing teaching models used to be faculty-centred, overly directed and based on the lecture, currently, the focus is rather on student-centred models, with methodologies that allow students to build their knowledge, cooperation, active participation, empowerment and success (Gibson et al. 2018; Weedon and Riddell 2016). Therefore, teaching at university currently means not only being able to master the content of a subject in a single way, but also knowing how to teach, adjusting to the needs of the learners and using different teaching resources, including technology (Seale et al. 2020).

Nowadays, we realise that inclusive education does not refer to a particular group, but rather consists in providing quality learning for all students, making learning accessible and relevant to everyone (Larkin and Devlin 2014; Thomas and May 2010). Faculty members are a key element in the progress toward inclusion in the university (Carballo et al. 2021; Li et al. 2021; Lipka et al. 2019). Numerous studies conclude that inclusive faculty members benefit all students, not only specific groups (Bunbury 2020; Cunningham 2013; Livingston-Galloway and Robinson-Neal 2021). Although there are studies that identify the faculty as a barrier (Lorenzo-Lledó et al. 2020; Svendby 2020),

others have concluded that inclusive teaching practices facilitate students' learning processes and participation by showing positive attitudes, providing diverse learning opportunities and being sensitive to students' different needs (Carballo et al. 2021; González and Colmenero 2021; Sandoval et al. 2020). Many of these faculty members incorporate the principles of Universal Design for Learning (UDL) into their practices, offering multiple means of representation, engagement, and expression (Lawrie et al. 2017). UDL gives more control to students over the learning process and values the fact that each person builds their own training itinerary based on their interests and needs (Estévez et al. 2021; Rodrigo and Tabuenca 2020).

The metaphor of learning ecology contributes to a broader perspective on learning and is linked to UDL in that it aims to respect all the learning styles of students (Looi 2001). A learning ecology is understood as a set of learning environments (physical or virtual) which people access, constituted by the interaction of activities, resources and relationships that promote personalised learning opportunities (Barron 2006). This metaphor is intended to provide multiple pathways, possibilities and contexts for everyone to learn (Jackson 2013). In fact, it is essential that students know their needs and preferences, and choose from the most appropriate options to reflect their learning (Fovet 2021). Thus, a learning ecology is inevitably linked to how to teach. Hence, it has also been defined as the framework of contexts and elements of diverse nature that people use and manage to train and learn (Sangrá, Raffaghelli, and Guitert 2019).

Different studies on higher education (HE) have concluded that the most effective teaching is that which is based on a learner-centred approach (Alcalá del Olmo et al. 2020; Williams and O'Dow 2021). Currently, we know that there are a number of pedagogical approaches that enable effective teaching. For example, inquiry-based

approaches including simulations, problem-based and project-based learning, case studies, flipped classroom (Altemueller and Lindquist 2017; Author 2020; Nkhoma et al. 2017), and assessment initiatives with students as producers, co-assessors and self-evaluators (Sagy et al. 2019). Peer tutoring has also been demonstrated as an inclusive strategy to promote student learning, as well as cooperative learning (Tombak and Altun 2016).

Overall, faculty members who practice inclusion design their syllabi for all students, taking into account the diversity that is present in the classrooms. These inclusive practices are characterised by the diversity of methodologies, activities and resources used, flexibility, collaborative work, celebration of diversity and personalised support (Martin et al. 2020).

In this scenario of inclusive teaching practices, it is also crucial to consider the emotional and affective component of how teaching takes place. Research concludes that not only effective teaching strategies are required, but that positive interactions between faculty members and their students, personal connections, respect and considering all students play an essential role in learning and academic success (Kezar and Maxey 2014; Quinlan 2016). In addition, such strategies can be a determining factor in students' motivation to learn and remain at university (Clément and Dukes 2017). The work of Aguirre et al. (2020) about faculty members who carry out inclusive pedagogy corroborates the importance of student-faculty relationships. In this study, faculty members were characterised as respectful, empathetic, close and caring toward their students.

In this article, using learning ecologies as a framework for analysis, we explore the activities, resources and relationships of faculty members who develop inclusive education according to the students (Barron 2006; Jackson 2013). Although there are

studies focusing on learning ecology in online learning, HE and students with disabilities and technological accessibility (Estévez et al. 2021; Rodrigo and Tabuenca 2020), to date, inclusive learning ecologies have not been addressed for all learners and with the broad concept of diversity in mind.

Internationally, this study would be significant for any faculty member who wishes to design and develop actions for inclusion, regardless of the context to which he or she belongs. It is a qualitative study where each individual case can be an example of professional development for other colleagues. Following the theory of learning ecologies (Barron 2006), we provide a novel overview not only of inclusive practices (activities and resources), but also of affective and emotional strategies (relationships). Similarly, these three elements are beneficial for all learners and not only for those with disabilities. In fact, in our study the participants are not randomly selected, but are faculty members who have been nominated and considered "inclusive faculty" by their own student teachers in general. Therefore, we aim to fill the gap that currently exists in the ecological paradigm from the field of learning (Han and Ellis 2020). We chose learning ecologies because it is an effective and holistic framework of analysis for approaching faculty professional development. It helps us to understand all the ways in which learning can occur, and then to implement training plans adjusted to faculty' needs (Sangrá et al. 2019).

In this way, this study aims to answer three research questions:

1) What activities do inclusive faculty members design and practice in order to achieve participation and learning for all students? What are their reasons for designing such activities?

2) What teaching resources do inclusive faculty members use for learning? Why do they use them?

3) How do inclusive faculty members interact with their students? What kind of relationships do they establish?

Method

The work presented here is part of a larger research project entitled "Title omitted for anonymous review" and the first phase of a doctoral thesis that analyses the beliefs, knowledge, designs and actions of Spanish faculty members identified as ~~who~~ carrying out inclusive pedagogy in Early Childhood, Primary, Secondary, Further Education and HE. Specifically, this qualitative multi-case study (Stake 2006) explores the activities, resources and relationships that faculty members design and practice for the learning, participation and success of all their students. We have chosen to use this type of methodology because it is based on detail and uniqueness, which can help us understand and think about other cases (Smith 1978).

Context of Spanish universities

The structure of Spanish university education, which leads to the award of official degrees, is organised into two levels: 1) undergraduate studies, for a period of four years, which aim to prepare students for the exercise of professional activities; and 2) postgraduate studies, which include Master's degrees (1 year) and Doctorate degrees (3 years).

Most Spanish universities have face-to-face teaching. They use technological platforms as a resource to support teaching. Regarding disability services, almost all universities have disability support offices, which provide reasonable adjustments to help students to successfully complete their university degrees.

In Spain, 608,235 undergraduate students belong to the area of Social and Legal Sciences (Spanish Ministry of Universities 2021). Specifically, in the last academic year where this study was conducted in one Faculty of Education, a total of 726 student

teachers enrolled in Early Childhood Education and 2,337 in Primary Education (available data since academic year 2019/2020). In this Faculty, 372 faculty members taught in the different degrees. Of these, 95 faculty members taught to student teacher in Early Childhood Education and 185 in Primary Education.

Participants

Through purposive sampling, convenience and accessibility, we conducted face-to-face meetings at the faculty and exchanged numerous emails with a total of 207 students. These were both recent graduates of the Degrees in Early Childhood Education and Primary Education (major in inclusive education) from the same faculty, as well as students who were, during the study period, in their last year of these two degrees. We asked these student teachers to nominate faculty members who had contributed to inclusion of all students along their university career and the reasons for their choice.

To ensure the adequacy of the study participants, we previously provided the students with a list of the characteristics of the profile of this inclusive faculty (European Agency for Special Needs and Inclusive Education 2012; Author et al. 2015). Some of these characteristics were the following: he/she gets everyone to participate in class, the methodologies he/she uses are active, he/she makes the necessary adjustments in his/her planning, and he/she trusts in everyone's abilities and success.

The students chose a total of 82 faculty members. This faculty was ranked in a table from highest to lowest according to the number of times they had been nominated among the students along with their own comments. Some comments that accompanied their selection of inclusive faculty members were as follows: "He marked me, because he was a great advocate of project work when we were starting our degree and he

opened our eyes in the sense of seeing that there are many ways to get all students to learn. What's more, he gave us the opportunity to decide how to do certain tasks and we could choose the format we wanted", "I choose her because she taught us through discovery and I think it is a very useful methodology for Primary School and thanks to her I have a notion of how to carry it out".

Finally, 25 faculty members participated in the study on a voluntary basis and due to their availability. They wanted to pursue their profession based on their vocation, motivation for their discipline and research, being a trainer of other teachers, giving private lessons and having teaching experience at non-university levels. Table 1 presents a detailed profile of the participants.

Table 1. Participants' profile

Participant	Gender	Age	Years of teaching	Area of Knowledge
P1	Male	50	25	Didactics of Musical Expression
P2	Female	37	10	Didactics of Language and Literature
P3	Male	61	42	Developmental and Educational Psychology
P4	Female	43	19	Teaching and School Organisation
P5	Female	43	20	Didactics of Body Expression
P6	Female	41	6	Didactics of Experimental Science
P7	Female	47	10	Didactics of Social Science
P8	Male	45	18	Teaching and School Organisation
P9	Female	54	29	Teaching and School Organisation
P10	Male	68	43	Didactics of Social Science
P11	Male	47	24	Developmental Psychology
P12	Male	45	4	Didactics of Language and Literature
P13	Male	60	35	Research and Diagnostic Methods
P14	Female	50	29	Personality, Psychological Assessment and Treatment
P15	Female	48	22	Personality, Psychological Assessment and Treatment
P16	Female	35	13	Language and Literature Didactics
P17	Male	63	20	Theory and History of Education
P18	Female	38	13	Didactics of Experimental Science
P19	Female	37	15	Didactics of Experimental Science
P20	Male	42	10	Didactics of Musical Expression
P21	Female	35	4	Didactics of Experimental Science
P22	Male	43	31	Didactics of Social Science
P23	Male	51	10	Crystallography and Mineralogy

P24	Female	46	9	Teaching and School Organisation
P25	Female	43	18	Theory and History of Education

Data production and procedures

The first step was to contact the faculty members individually and respecting the students' order of preference and voting, by means of an introductory e-mail informing them of the project and requesting their participation. This was the way to confirm participation, although some preferred to give their telephone number and receive more detailed explanation by phone call.

In order to ensure that the data from this first phase of the study emerged through dialogue, a semi-structured, in-depth interview script was used on the four dimensions of inclusive pedagogy: beliefs, knowledge, designs and actions. These dimensions are based on studies that have been carried out at both pre-university (Florian 2014; Rouse 2009) and HE (Gale and Mills 2013) stages. Rouse (2009) noted that inclusion depended on what teachers 'know' (about theoretical, policy and legal issues), 'do' (moving from knowledge to action) and 'believe' (about their ability to teach all learners). To this, Florian (2014) proposed an inclusive pedagogy model focusing on what, how and why teachers decide to carry out an inclusive pedagogy (beliefs, knowledge and actions). Finally, Gale and Mills (2013) identified three dimensions guiding inclusive pedagogy: beliefs, designs and actions. Thus, considering the three dimensions of Rouse (2009) and Florian's (2014) model, we obtain a fourth dimension on designs proposed by Gale and Mills (2013).

This article presents the results on the dimension of designs and actions. Some questions included in the interview were the following: what kind of activities do you consider relevant to include in your teaching project? Why? Are there opportunities for different forms of expression, representation and involvement? Can each student choose

the option with which he/she will learn best? Can you give some examples of planned situations where this is possible? What kind of resources do you use with the aim of getting all your students to learn and participate? What is your role and that of your students in the lessons?

Data collection for the university stage began in early 2019 and ended in mid-2021. Between two and six individual meetings were held with each participants, although most ranged from two to three. Most interviews lasted between three and a half and six hours, although some lasted from seven to nine, even eleven hours.

Data analysis

All interviews were transcribed and subsequently analysed using qualitative analyses. Following Miles and Huberman (2014), an inductive system of categories and codes was created to make sense of the information collected. At the beginning, it was a broad and generic system focusing on the dimensions of faculty planning and actions. Subsequently, we explored those codes that best aligned with the learning ecology theory and new sub-codes were emerging and created for the different themes explored related to the activities, resources and relationships developed by inclusive faculty members according with their student teachers (Table 2).

Table 2. Category and code system

Category	Description	Code
Activities	Activities included in the planning and the reasons for these activities	Diverse, coherent with the teaching profession, dialogical, practical, experimental, cooperative, creative, free format, playful
Teaching resources	Resources that are used to enable all students to learn and participate.	Varied, personal, material, audiovisual, technological, environmental
Faculty member-student	Relationships that the faculty member	Consistent with the teaching duties, based on demand, responsibility,

relationship	establishes with their learners	dynamic, horizontal, friendly, close, affective, trust, motivation, good communication and feedback, group cohesion, puts the students at the centre of the teaching-learning process

Each of these codes was analysed to determine whether it could be broken down further or merged with other codes. This allowed us to organise and interpret the data collected using the category system. MAXQDA 2020 software enabled rigorous analysis of the data.

Ethical issues in research

Each participant was able to sign an informed consent form to learn about the aims and procedures of the study, their rights as participants and how their privacy would be respected. The names of the students were anonymised when sharing with faculty members, in the interviews, the feedback that their students had provided when they decided to consider them as inclusive faculty members.

All interviews were audio-recorded, transcribed omitting the real name of each participant (P1-P25) and returned by email. The latter step was done in order for each faculty member to "sign off their narrative", adding, replacing or deleting any information they considered appropriate in the text.

The Spanish Ministry of Science and Innovation and the Doctoral Commission of the University where the doctoral thesis is undertaken approved the ethical issues.

Findings

The results of this study emerge from wider research on inclusive pedagogy at different educational stages. In this paper, the results arise from the planning and action dimension of inclusive pedagogy at the HE stage (Rouse 2009; Florian 2014; Gale and Mills 2013) and are organised within the framework of learning ecologies (Barron 2006; Jackson 2013). It shows the activities carried out by inclusive faculty members

according to the students, the resources they use to support the learning of all learners, and the relationships they establish with their students.

A variety of activities to welcome all students

The activities that the faculty members designed were very varied. The reason for planning diverse activities was to ensure that all their students not only felt welcome and valued, but also learned, participated and succeeded in their subjects.

The faculty members also created activities that were coherent and suitable to the profession that their students were going to develop in the future. They recognised that if they did not offer activities from initial training that build on prior knowledge, enquiry, enjoyment and respect for different ways of learning, it would be difficult for their students to become teachers who are sensitive to diversity and trained to develop good and inclusive practices.

> *P6: If I tell them that children have to enquire in the classroom, then I do activities where my student teachers enquire. I try to be coherent with what I say and do so that they have a reference. If they don't experience it, it will be very difficult for them to extrapolate what they learn at the university to reality.*

Specifically, five types of activities emerged from the analysis: 1) dialogic, 2) practical, experimental and experiential, 3) cooperative and teamwork, 4) creative and free format, and 5) playful.

All faculty members carried out dialogical activities based on discussion and interaction among students. In their opinion, they kept students active and engaged in class, encouraged critical thinking, helped students learn to listen to and respect the ideas of others and, at the same time, to get to know themselves better.

Other activities that almost all the faculty members carried out were based on experience, experimentation and practice. For these faculty members it was essential to

promote a discovery learning, work in other spaces outside the faculty, through action and the body, as well as with the support of other professionals. In this way, they used to perform relaxing and artistic expression techniques, trips, and training with organisations and visits to different institutions (associations, hospital classrooms and farm schools). This contact with reality helped students to be aware of how to work in these environments and apply teaching resources that they themselves had previously designed in the subject. The creation of resources was common, as they saw the effect of the material in real classrooms. In other cases, they conducted scientific experiments or interactive museums in the classroom where all the teams enquired and, at the same time, benefited from the ideas and the work of their classmates.

> *P7: We do an activity called "our children's museum", where the little things we have kept from our childhood are exhibited in different rooms. It's a very emotional moment when everyone sees what everyone has kept and they recognise each other's object and their own at the same time. This is how I start with the Heritage subject.*

Cooperative activities were used by a large number of participants, since they assumed that teamwork maximised learning opportunities. Although they did not rule out individual activities at certain times, these were always fused by sharing in pairs and small groups. In fact, in order to create a relaxed atmosphere in the classroom, they tried to promote different and random groups. They also asked their learners to take on roles in class dynamics (secretary, spokesperson, animator...) and applied cooperative learning techniques.

> *P4: For example, I do a jigsaw where each member of a team has to deal with a part of a topic that is being discussed. Afterwards, they have to group themselves into expert groups to share what they are learning and then they go*

back to their "home" group to pool what they have learned in each expert group.

Creative and open-format activities were implemented by half of the faculty members. Usually, the participants gave their students a brief itinerary about the steps to follow in the task, although the format was always free (text, audio, video, photography, podcast, mural, digital, role play, etc.). Likewise, when they proposed small tasks or research teams, they also let them choose the topic to be addressed. In this sense, each student felt more motivated and more comfortable while learning. All this was achieved through open and flexible tasks. For example, they proposed their students to make a diary, an educational story, simulating a meeting with professionals, tackling an educational issue or creating a scientific experiment.

P6: They can choose to make a teaching proposal about the experiments in any way they want, as well as look for the experiments they prefer. They have freedom because I give them that opportunity to pick up; this allows them to do it in their own way.

Lastly, playful activities were also mentioned by half of the faculty members. They used games or dynamics to break the ice on the first days of class, in order to foster a friendly atmosphere, knowledge and cohesion among all the members of the group. Following this, they offered dramatic, simulation and role-playing games to empathise with the character to be played and to get closer to the professional reality. In other cases, they also explained that they used board games, brought to the classroom some games they had created themselves to review the syllabus and even suggested the students themselves to design games.

Multiple teaching resources that faculty members use to involve everyone

Along with the activities, the resources reported by the faculty members were highly varied. Five types of teaching resources emerged from the analysis: 1) personal, 2) material, 3) audiovisual, 4) technological, and 5) environmental.

All faculty members selected the personal resource as the most enriching and relevant to their students' learning. Although the people they named were diverse, all participants agreed that faculty members were the best resource. They mentioned the importance of giving examples, synthesising and outlining ideas, providing flexible mentoring, emotional support, monitoring, empathy, listening, self-confidence, using humour, irony and personal experiences in lessons.

After the faculty members, the students were another one of the most used and valued human resources. From the natural support generated among peers, the figure of the student mentor, former students and students with relevant academic backgrounds, other resources also appeared.-Among there were ~~such as~~ other education professionals (e.g., in-service teachers) and workers from other educational contexts (associations, teacher training centres, adult education centres, hospital classrooms, etc.) who came to class to give workshops and share their experience. Furthermore, the disability support office was a highly valued resource, which offered useful guidelines for making reasonable adjustments in the assessment.

> *P2: Well, the disability office supported me a lot. In the daily classroom, the ones who helped me the most were my students, because I have exchanged enough information to be able to plan and adapt the sessions to their needs.*

Another resource frequently highlighted by all faculty members was the materials. The participants used fungible, recycled and real resources related to the educational stage their students would teach in the near future (costumes, stories, books, pupils' materials, etc.), in order for the latter to get more in touch with reality. They also

used the traditional blackboard and digital slideshows, which were also provided by the print shop in printed format. The texts, taken from press reports, excerpts, books and articles were carefully selected to ensure that the students read them. Other materials used were an agenda with the organisation of the sessions, the faculty's diary, the students' individual and group diaries, or previous years' tasks conducted by former students to show them as examples.

> *P10: Each week, a group was in charge of doing the class diary. I would tell them to take notes on what they had planned to work on, what was being said and the comments. Then they would exchange notes and send me a report of the group, which I would improve a little. This class diary was becoming our "subject notes".*

The third resource used by all faculty members in their classes was audio-visuals. They often showed images, songs and videos to avoid monotony in their classes and to clarify concepts. They recorded the videos in some cases and, in other cases, the videos were collected from the web. They also encouraged student participation in the radio of the university and recorded the virtual classes to allow their students to replay them as many times as they needed. To guarantee the accessibility of the material, the participants always tried to have the videos with subtitles. PowerPoint slideshows were also prevalent, which they sent to their students before the classes. They took great care with the style of the material (animations, images, font sizes, colours...), and each academic year it was improved and updated.

The fourth resource that slightly over half of the participants used was technology. It was clear to them that technological resources were essential to increase student engagement and participation, as well as to transfer knowledge to society. In general, they used the e-learning platform to maintain regular contact with their

students, to create glossaries and working groups, to give feedback on activities and to upload additional material. Other participants used Google Classroom and a Google Drive account to share content, advertisements, tasks and diaries.

Moreover, they agreed that mobile phones had to be present in the classroom, as they made it easier to send links at particular times, recording videos, filling in questionnaires, QR code scanning and receiving e-mails. In addition, their students could interact with apps such as Padlet, Kahoot! and Socrative, which the faculty members used to check their attendance, explore previous ideas, refresh contents and assess on an ongoing basis.

> *P18: I also like Socrative a lot. I use it a great deal every time I have finished a topic or something I think is relevant for them. I like it because it helps me to explore what they knew and what they know when a part of the subject has been completed.*

Likewise, the participants also used social networks such as blogs, YouTube, Twitter, Instagram, iVox and SoundCloud. These were used in specific activities such as the production of videos and final edits on an educational case enquired, the abstract of an article or an opinion about a topic. Some of these faculty members also pointed out the programming of robots to help their students empathise and learn to code them from an inclusive approach.

Lastly, the fifth resource used by half of the faculty members was the natural world and the environment. The participants tried to ensure that their students learned in a welcoming context and in other places, beyond the walls of the faculty. Thus, they carried out activities in a nearby park, in the halls or in the faculty courtyard. In addition, in view of their students learning in a meaningful way the contents of the subject, they went on practical field trips and visits to school gardens, farm schools,

educational institutions (where they experienced interactive groups), museums and city surroundings.

Faculty member-student relationships to build an inclusive learning environment

As with activities and resources, the way of dealing with each student was coherent with how they wanted their own learners to relate to each other in their professional future as teachers.

Very few of the participants defined themselves as hard-working, referring to the effort they required from the students and the responsibility they felt in their job. However, almost all faculty members felt that one of their duties was to be a facilitator of learning processes. For this purpose, they moved around the classroom all the time to support the teams, sit with them, encourage them, motivate them, make them think and stimulate discussion. The faculty members also used these times to get to know each student better.

> *P5: I ask them how they are doing with the tasks, what queries they have, what difficulties they find... It is an autonomous work per group, but obviously mentored and overseen by me.*

Another half of the participants realised that they played a horizontal role, as they were merely one more element in the classroom. In fact, the rules of the game often changed and, in some classes, students took on the role of faculty members and taught them. Thus, they contributed their opinion in the debates, participated in the same activities, showed their doubts and designed dynamics together with their students.

A few of the faculty members pointed out that they built the subject with their students, i.e., they did not take it as closed from the beginning and asked what and how

they wanted to learn, readjusted the planning, adapted it to their interests and applied the improvement proposals given by their students.

P4: I show them my concern because they are an important part of this teaching-learning process and I take them into account. So, I ask them how they like to learn, what they want to learn...

Furthermore, most of the faculty members expressed that they established close relationships with their students. The participants gained their authority, created bonds of trust, a humane and respectful manner characterised by good communication, careful listening, flexibility, kindness, sincerity, humility and empathy. They were worried about the emotional well-being, feedback, group cohesion and learning of their students.

In brief, this teaching role encouraged students to assume an active and participatory role at the centre of the teaching-learning process, becoming reflective and proactive leaders of their own learning. Their duties included continuous enquiry, decision-making, responsibility and group cooperation.

P5: Let's see, my students are not sitting looking at the platform or at the faculty member; the classroom is alive. They are doing tasks, getting up, picking up materials, going out to the library to get something they might need...

Discussion

Obviously, faculty members can become a barrier to student learning and participation (Lorenzo-Lledó et al. 2020; Svendy 2020); however, studies similar to the present investigation, where participants were selected by their own student teachers, reject such idea and can help other faculty members to rethink their profession and transform their practices.

Firstly, our study reveals that future teachers cannot teach inclusivity if faculty members are not inclusive and act as a model of their own student teachers. For these

reasons, the participants often provided highly diverse and student-centred activities, resources and relationships that enable everyone to learn, feel valued and succeed in their classes (Cunningham 2013; González and Colmero 2021; Jackson 2013; Martin et al. 2020). This leads us to think that it would be desirable for universities to acknowledge this good teaching work. One way could be for these same inclusive faculty members to give awareness-raising and training programmes based on cooperative action research in which they not only make their practices visible, but also mentor those of their colleagues.

Secondly, these faculty members designed active and eminently practical activities from a constructivist and teamwork perspective (Tombak and Altun 2016), away from a transmission approach and with the aim of achieving empowerment and lifelong learning (Bong and Chen 2021; Weedon and Ridell 2016). In general, these were activities that their students could easily take as examples and apply in their future profession as teachers. As is proposed in other studies, these were activities based on simulation, problem-based learning, project-based learning and case studies, among others (Altemueller and Lindquist 2017; Author 2020; Nkhoma et al. 2017), as well as participatory and peer-assessment activities (Sagy 2019). However, in addition to these activities, the participants often used dialogue to get to know their students and regularly adapt to their demands, as well as prioritised activities that promoted learning-by-doing in contexts closer to their professional development (schools, associations, etc.). These activities teach us lessons about the need to create projects and initiatives focused on improving teaching and weaving networks between school and university.

Moreover, the participants provided opportunities for each individual to decide how to showcase their learning through multiple delivery formats. This is supported by recent studies on UDL, as the inclusive faculty members respected and cared that each

person felt free to express what they had learned and to build their own learning itinerary according to the way they are, think, feel and act (Estévez et al. 2021; Looi 2001; Rodrigo and Tabuenca 2020).

Regarding the resources used by the participants, we observed that there is an urgency for faculty members to use a wide range of resources to accommodate the diversity of the classroom. Faculty members emphasised human resources through peer support (Martin et al. 2020) and other community agents, although technological resources are also essential for group engagement (Seale et al. 2020). In addition, material, audio-visual and natural resources were particularly valued. However, from their voices, it is clear that the faculty members are the best resource (their way of interacting and being with the students), which leads to the use and effectiveness of the other resources. It would be recommendable to carry out times of self-reflection on practice about how much the faculty's involvement and the variety of resources used can influence the learning of their students.

Lastly, the relationships that the faculty members established with their students were in keeping with their teachings on how to interact inclusively. In other words, they had the same affective connections that they wanted their student teachers to have with their future students. Therefore, the participants treated their students under a pedagogy of care and trust, being clear about their roles, but always being supportive and facilitating the teaching-learning process as someone else in the classroom.

The results of our study match those of Aguirre et al. (2020), Kezar and Maxey (2014), Quinlan (2016) and Sandoval et al. (2020), given that these professionals were respectful, positive, affective, caring and personally connected to everyone. The faculty members also usually took care to find ways to motivate their students (Clément and Dukes 2017), and such ways were based on the premise of using experiential learning.

Therefore, they let their students make decisions by suggesting what and how they wanted to learn, gave continuous feedback on their activities and tried to create a relaxed, fun and mutually supportive climate. These relationships between faculty members and students show that faculty members must rethink their duties and go beyond the simple transmission of learning content. They must consequently respect their students, take care of their relationships, listen to them, appreciate their opinions, act as role models and let them do their work, so that they can fully develop the skills they need to be good teachers.

Limitations and future research

Due to the pandemic situation, some of the last meetings with the participants were exclusively online. It was also a very time-consuming process, as it required frequent rescheduling to adapt the process to their needs and personal situations. The interviews were also very long. This meant that we had a large amount of information. Although it was challenging to analyse the data, the research results are very rich and useful, firstly, because they come from faculty members selected by their own student teachers, and, secondly, because they resulted in practical strategies that can help to improve the quality of initial teacher education in inclusive education.

Another limitation is that it would be necessary to explore and understand the perspectives of faculty members from other faculties of education both nationally and internationally, as well as to make a comparative study to explore where there is common ground and what is new in each of them.

In future research, it would be interesting to carry out classroom observations, as the pandemic made it impossible to access the classrooms.

Nevertheless, we believe that these unique faculty narratives speak from experience and from the recommendations of their student teachers. For this reason,

despite the limitations mentioned above, our study could help other colleagues to develop inclusive practices in other university contexts.

Conclusions

The learning ecologies approach has taught us that it is necessary to change initial teacher training and to improve educational practices with new learning formats and alternative settings to the physical classroom (open, democratic and flexible). This means thinking about learning environments and getting them in line with the needs of all learners and the challenges of being a citizen and a faculty member in the 21st century society.

This study can also shed light on the fact that being an inclusive faculty member involves being coherent and encouraging and developing in the student teachers the same skills that they want them to be able to develop in their future students (curiosity for knowledge, autonomy, empathy, respect, solidarity and mastering new technologies). It gives us lessons on the need to join theory and practice, research and action, knowledge and emotions, and school and university, if we want quality teacher training.

To sum up, in order to diversify teaching, inclusive faculty members according to the students carry out an active, reflective, cooperative and personalised pedagogy with multiple activities, resources and relationships that come from the area of Education, but can be equally handy for faculty members in other areas of knowledge.

The most important ideas and new insights could take from this study are the following: 1) The activities, resources and relationships shown in this study provide an answer to what, how and why to teach student teachers from an inclusive perspective; 2) the three elements described should not be taken as a recipe book, but as mirrors in which faculty members can look at themselves to find and rethink the activities,

resources and relationships that are most appropriate for each student group; 3) These three elements are interrelated in the teaching-learning process and are conditioned by the human and professional factor of faculty; 4) How faculty members who have been identified as inclusive by their students teach can inspire and serve as a model for future teachers so that they can teach from an inclusive perspective in their classrooms.

Hopefully, these narratives will help university classes to be meaningful, people who decide to study at university will feel very well-trained and both faculty members and students will be able to go on lifelong learning (Han and Ellis 2020; Sangrà et al. 2019).

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