

# From Preschool to High School: Overview of Inclusive Education

## De infantil a secundaria: panorama de la educación inclusiva

<https://doi.org/10.4438/1988-592X-RE-2025-409-697>

**Javier Pinilla Arbex**

<https://orcid.org/0000-0001-8979-6567>

*Universidad Pontificia Comillas*

**Mercedes Villasana Terradillos**

*Universidad Pontificia Comillas*

### Abstract

Inclusive education is a key issue in Spain, present in current educational legislation such as the LOMLOE. This study comparatively analyses teachers' experiences in addressing diversity across early childhood, primary, and secondary education stages, with a sample of 2665 education professionals. A structured questionnaire was used, which included demographic data, knowledge questions about inclusive education, context analysis, and received teacher training. The findings indicate a significant gap between the perceived importance of inclusive education and its actual implementation. Also, although 74.1% of respondents reported having received training in inclusive education, a high percentage showed difficulties in identifying the concept of inclusion when faced with conceptual questions. Regarding educational stages, early childhood education specialists had a greater recognition of inclusive concepts compared to primary and secondary school teachers. In terms of the perception of the environment, early childhood educators and those not yet working in educational centres considered the development of inclusive education more necessary compared to primary and secondary school teachers. Finally, in terms of training, primary school teachers perceive themselves as being more trained than those in early childhood and secondary education, although all groups expressed a high need for continuous training to improve their inclusive practices. These results highlight the need to strengthen continuous teacher training programs, promoting the adaptation of resources and methodologies in classrooms to guarantee accessibility for all students. It is recommended to enhance this training through practical experiences and mentorships within school hours, led by experts in inclusive education, fostering a contextualized and personalized learning approach. However, its effectiveness also depends on structural and organizational changes within schools that facilitate the real implementation of inclusion.

**Keywords:** Educational inclusion; Teacher training; Inclusive practices; Diversity in education; School environment

### Resumen

La educación inclusiva es un tema central en España, presente en la legislación educativa vigente como es la LOMLOE. Este estudio analiza comparativamente las experiencias docentes en la atención a la diversidad en las etapas de educación infantil, primaria y secundaria, con una muestra de 2665 profesionales en educación. Para ello, se empleó un cuestionario estructurado con datos demográficos, preguntas de conocimientos sobre educación inclusiva, análisis del contexto y formación docente recibida. Los hallazgos indican una brecha significativa entre la importancia percibida de la educación inclusiva y su implementación real. Asimismo, aunque el 74,1% de los encuestados notificaron haber recibido formación en educación inclusiva, un porcentaje elevado mostró dificultades en identificar el concepto de inclusión ante preguntas conceptuales. En cuanto a las etapas educativas, los especialistas en educación infantil reconocieron mejor los conceptos sobre inclusión en comparación con el profesorado de primaria y secundaria. Respecto a la percepción del

entorno, los docentes de infantil y los que no trabajaban aún en centros educativos, consideraron más necesario el desarrollo de una educación inclusiva en comparación con los docentes de primaria y secundaria. Finalmente, en términos de formación, los docentes de primaria se perciben más formados que los de infantil y secundaria, aunque todos los grupos manifestaron una necesidad alta de formación continua para mejorar sus prácticas inclusivas. Estos resultados resaltan la necesidad de reforzar los programas de formación continua del profesorado favoreciendo la adecuación de recursos y metodologías en las aulas para asegurar la accesibilidad de todo el alumnado. Se recomienda reforzar esta formación de forma práctica con experiencias reales y mentorías dentro del horario escolar por parte de expertos en educación inclusiva potenciando una formación contextualizada y personalizada. No obstante, su efectividad también depende de cambios estructurales y organizativos en los centros que faciliten la aplicación real de la inclusión.

*Palabras clave:* Inclusión educativa; Formación docente; Prácticas inclusivas; Diversidad en educación; Entorno escolar

## Introduction

For decades, educational inclusion has become a central topic in academic and pedagogical discussions, advocating for an education that guarantees participation, development, and learning for all students, regardless of their abilities, socioeconomic or cultural origin, or educational needs (Ainscow et al., 2006; Echeita, 2006). Its relevance and concern in empirical and research contexts have increased up to the present day in the different educational stages (Solís & Real, 2023).

The importance of inclusive education in classrooms lies in its ability to promote a fairer and a more equitable society. In line with Shaeffer (2019), inclusive education is directly connected to a social model based on values of equity, cohesion, and solidarity. To be able to build inclusive societies, we should inexorably have inclusive schools, which would be not only necessary to prevent and stop social exclusion (Echeita, 2006) but also as a prerequisite for a democratic society (Soldevila-Pérez et al., 2025). Furthermore, the UN's Sustainable Development Goal 4, "Quality Education," aligns with this approach, emphasizing the importance of promoting an inclusive education as a foundation for the sustainable development of societies (UNESCO, 2017).

Inclusive education is consolidated as an irrefutable principle internationally thanks to the Salamanca Statement (UNESCO, 1994), which underscores the need to adapt the educational systems to cater to the diversity of students and lays the groundwork for developing educational systems that view diversity as a richness rather than an obstacle.

In Spain, inclusive education is backed by the legal framework. The Royal Legislative Decree 1/2013, of November 29, which approves the consolidated text of the General Law on the rights of persons with disabilities and their social inclusion, states in Article 16 that "inclusive education will be part of the comprehensive care process for people with disabilities". Similarly, the Organic Law 3/2020, of December 29, which modifies the Organic Law 2/2006, of May 3, on Education (LOM-LOE), significantly addresses inclusion and attention to diversity within the educational system. This law represents a paradigm shift that values the importance of analyzing context, barriers, and facilitators, as well as pedagogical and organizational practices within schools to achieve true inclusion in classrooms. It also introduces the concept of Universal Design.

However, despite legal support for inclusive education, the implementation of inclusive practices faces numerous challenges in real contexts (Boyle & Allen, 2023). Therefore, there is a constant need to review and adapt initial and ongoing teacher training, as well as pedagogical practices.

Among the challenges to implement inclusive education in classrooms, Ainscow et al. (2006)

identify resistance to change and lack of teacher training as significant obstacles. On the other hand, Florian and Linklater (2010) discuss how traditional pedagogical practices might limit the effective participation of all students. These difficulties highlight the importance of a profound transformation in educational policies and teacher preparation to foster a truly inclusive environment.

Several authors suggest that the debate on inclusion should focus on the barriers within the educational system when it comes to allow the presence, participation, learning, and outcomes of all students (Booth & Ainscow, 2011). Focusing on these barriers shifts the emphasis away from the personal characteristics of students and allows to concentrate on the context and social environment. Acknowledging that barriers are identifiable inherently implies the possibility of change: removing or modifying them. However, the first step would be precisely to develop the ability to detect these barriers, which, concerning teachers, requires training, as indicated by Gallego (2023) or Márquez and Moya (2024). Therefore, it is necessary to explore how teachers are trained to address the inclusion challenges at different educational stages and investigate to what extent teachers feel prepared and trained to support inclusion.

Addressing diversity involves offering a psycho-educational and social response through an inclusive and accessible pedagogical design for all. According to Pinilla-Arbex (2020), one of the advantages of this approach is that it focuses on the educational response the school is accountable to provide, rather than on the characteristics of the students. By focusing on this educational response, it is unavoidable to step back and ask what this response is determined by. To what extent does their mental representation of the situation, their perspective, determine their actions?

Booth and Ainscow (2011) point out that perspectives reveal implicit conceptions and theories about diversity, and that this representation determines what is considered, what is perceived (e.g., whether it might be perceived when a student is having some kind of difficulty), how it is interpreted (e.g., interpreting the need for specific support), and, consequently, how one acts upon it (e.g., offering support to him/her). This explanation highlights the importance of considering teachers' perceptions as a determining factor in promoting educational inclusion. Differences in teachers' conceptions about inclusion may influence practices and the creation of an inclusive educational environment (Serna & Serna, 2023).

Studies by Florian and Black-Hawkins (2011) or Forlin and Chambers (2011) have identified various attitudes and beliefs among teachers regarding inclusion, ranging from unconditional support to resistance to change. These attitudes may be linked to socio-emotional factors, training, and prior experiences (Albalá Genol et al., 2023).

Therefore, it would be necessary to consider teachers' conceptions as a determining factor in promoting educational inclusion. It is essential to analyze how teachers and future educators perceive inclusive education, identifying attitudes, beliefs, and barriers.

Based on the above, this study aims to: 1) Explore how diversity is addressed in classrooms in terms of measures and schooling types; 2) Investigate to what extent teachers feel prepared and trained to promote inclusion; 3) Analyze teachers' perceptions and attitudes towards inclusion.

## Method

This study adopts a non-experimental, descriptive-comparative design aimed at analyzing teachers' perceptions regarding inclusive education, considering their understanding, implementation, and

training in this area. It is a cross-sectional study, thus allowing for the examination of the teachers' current situation at a specific moment in time (Ato et al., 2013).

## Sample

The study was conducted with a sample of 2,665 education professionals (graduates or diploma holders in early childhood and/or primary education, or specialists with a master's degree in teacher training), including 574 men ( $33.61 \pm 7.9$  years old) and 2,091 women ( $33.31 \pm 7.3$  years old). Regarding the educational stage in which participants work, Table I shows the frequency of cases by each stage:

**TABLE I.** Educational stage in which the participants work.

<i>Educational stage in which the participant works</i>	<b>N</b>	<b>Percentage</b>
Not working	1018	38.6%
Early Childhood Education	308	11.7%
Primary Education	888	33.7%
Early Childhood and Primary Education	169	6.4%
Secondary Education	179	6.8%
Primary and Secondary Education	46	1.7%
Early Childhood, Primary and Secondary Education	29	1.1%
Early Childhood and Secondary Education	1	0.03%
Does not know (DK)/No answer (NA)	27	1%
Total	2665	100%

Source: Compiled by the author

According to Freedman (2009), the sampling type was convenience sampling due to the limitations of randomly accessing the specific population profile targeted by the study and based on the availability of the participating subjects.

## Instruments

For the development of the study, a customized questionnaire was managed, divided into three parts. In the first part, after presenting and accepting the informed consent to participate in the study, demographic data were collected (age, gender, place of origin, previous studies, teaching experience, and training received on inclusive education).

Subsequently, eight questions were formulated. The first two were yes/no questions aimed at assessing whether participants were able to differentiate when a measure aligns with the principles of inclusion or not. According to Oh-Young and Filler (2015) and Echeita (2006), one characteristic of inclusive education is the joint participation of all students in the same classroom. Based on this, two statements were created in order to identify whether teachers recognized such feature of inclusive education. The two statements were as follows:

- I believe that having a linked classroom for those students joining late the education system is an inclusive measure.
- The schooling of students with Special Educational Needs (SEN) in a special classroom but within regular schools is an inclusive measure.

Following the characteristics of inclusive education described by the authors, the correct answer to both questions would be "No," since the condition of joint participation among all students

is not met.

After these statements, six Likert scale questions were posed, ranging from 1 (not at all) to 5 (totally), following Boone and Boone's guidelines (2012). These questions, as well as the previous statements, were agreed upon by two experts in inclusive education with over 10,000 hours of teaching experience each, achieving a 100% agreement on the relevance of the questions regarding inclusion. The formulation of the items was based on previous studies on inclusive education, ensuring alignment with the scientific literature:

- 1. To what degree do you feel trained in inclusive education? (Forlin, 2010; Sharma et al., 2006).
- 2. To what degree do you consider that the school environment you work in or in which you have had internships promotes inclusion? (Booth & Ainscow, 2011).
- 3. Do you consider inclusive education to be necessary? (Avramidis & Norwich, 2002; De Boer et al., 2010).
- 4. Do you consider your environment to be prepared to promote inclusive education? (Carter & Hughes, 2006; Florian & Black-Hawkins, 2011).
- 5. To what extent do you believe that the schooling of special education students should take place in regular schools? (Hornby, 2015; UNESCO, 1994).
- 6. Do you consider it necessary to carry out training sessions on inclusive education? (Forlin & Chambers, 2011; Sharma & Sokal, 2015).

## Procedure

The survey was administered via an online questionnaire (Google Forms) at several Spanish universities to groups of students participating in master's degree or degree education programs between 2019 and 2022. However, the students were required to have at least one prior qualification that enabled them to practice in the education field.

## Data Analysis

For the data analysis, descriptive variables (mean, standard deviation, and frequencies) of the personal data questionnaires were first analyzed. After checking the normality of the data using the Shapiro-Wilk test, to establish differences between the values obtained in different items, a T-student test (Field, 2013) was conducted for comparisons between two groups (gender), establishing a significance level of  $p < 0.05$ . Additionally, an ANOVA test was used to compare the results between the groups according to the educational stage they worked in. The eta squared ( $\eta^2$ ) was also calculated to estimate the effect size and assess the magnitude of the differences found. Subsequently, the Tukey test was used in post-hoc comparisons in order to determine the specific differences between groups. The questionnaire questions were designed to evaluate different independent aspects of inclusive education, not forming a single construct. For this reason, it was deemed inappropriate to evaluate reliability using internal consistency coefficients such as Cronbach's Alpha (Celina & Campo-Arias, 2005).

With a view to avoid Type II errors and evaluate the adequacy of the sample, a power analysis (Cohen, 1988) was conducted, setting the effect size at 0.8 and the significance level at  $p < 0.05$ ; the obtained power value was 1.0. The correlation analysis was carried out using Pearson's correlation. SPSS 24.0 was used for the statistical analyses.

## Results

Table II reflects the most common situations experienced by teachers regarding addressing diversity in classrooms.

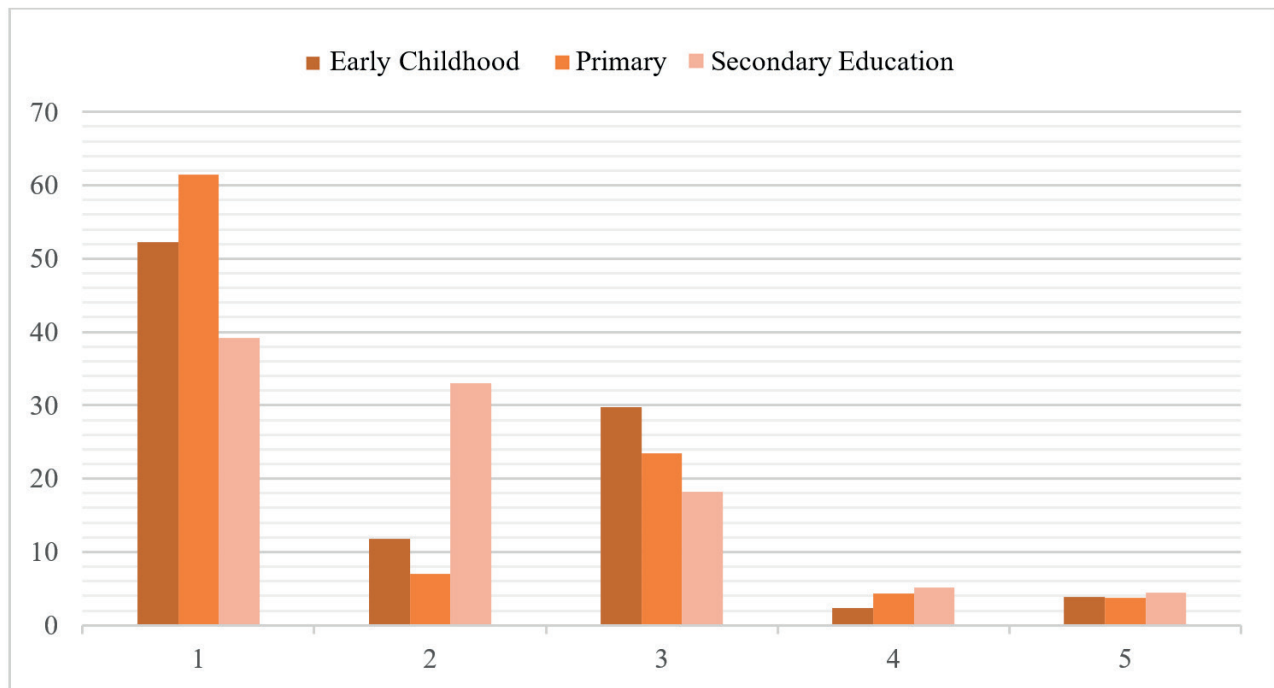
**TABLE II.** Most common ways of addressing diversity in classrooms.

Situation	N	Percentage
1. Students enrolled in regular classrooms but who leave occasionally for support.	1513	56.8%
2. Students with diversity participating 100% of the time in their classroom-group activities.	252	9.4%
3. Students enrolled in regular classrooms who receive support within the classroom.	519	19.4%
4. Students enrolled in special education.	146	5.5%
5. Students enrolled in regular schools but in special classrooms.	108	4.1%
Does not know (DK)/No answer (NA)	127	4.8%
Total	2665	100%

Source: Compiled by the author

Figure I shows a comparison of the percentages of the types of situations experienced based on the educational stage: early childhood, primary, and secondary. Each situation indicated by a number corresponds to the type of situation listed in table II.

**FIGURE I.** Most common ways of addressing diversity according to educational stage.



Source: Compiled by the author

Regarding the training received throughout their university education, 671 (25%) respondents indicated that they did not receive specific training in inclusive education, whereas 1,986 participants (74.1%) reported having received such training. Furthermore, when presented with the following statements, where participants had to respond “yes” or “no”:



- I believe that having a linked classroom for those students joining late the education system is an inclusive measure.
- The schooling of students with SEN in a special classroom but within regular schools is an inclusive measure.

It was found that, in the first statement, 1,775 participants (66.2%) responded that the linked classroom is an inclusive measure, even though the literature on inclusive education indicates that segregation in separate classrooms does not align with a genuine inclusive model (Ainscow et al., 2006). Similarly, in the second statement, 1,070 participants (39.9%) indicated that enrollment in special classrooms within regular schools is an inclusive measure, which also deviates from the principles of full inclusion (Echeita, 2006).

Regarding the questions posed in the questionnaire, table III shows the values obtained for each question as well as the comparison by gender.

**TABLE III.** Differences between women and men on considerations regarding inclusive education.

Questions	Men N = 571	Women N = 1853
1. To what degree do you feel trained in inclusive education?	2.68 ± 0.9*	2.83 ± 0.9*
2. To what degree do you consider that the school environment you work in or in which you have had internships promotes inclusion?	3.21 ± 0.9	3.05 ± 0.9
3. Do you consider inclusive education to be necessary?	4.73 ± 0.6	4.79 ± 0.5
4. Do you consider your environment to be prepared to promote inclusive education?	2.95 ± 0.9	2.9 ± 0.9
5. To what extent do you believe that the schooling of special education students should take place in regular schools?	3.91 ± 1.0	3.93 ± 0.9
6. Do you consider it necessary to carry out training sessions on inclusive education?	4.85 ± 0.4	4.91 ± 0.3

\*  $p < 0.05$ . Compiled by the author

These data demonstrate how teachers consider both inclusive education and the need for training in this context to be highly relevant, showing very high values (close to 5.0) with a small standard deviation, indicating almost unanimous agreement. However, the data also reveal a gap between needs and reality, as the perceived extent to which inclusion is promoted in the school environment and the degree of teacher preparation are considered at medium or low levels (around 3 or below). Regarding gender, only minor significant differences were observed, except for item 1, where women felt more trained in inclusive education.

In the comparison of results by items, items 3 and 6 were significantly higher ( $p < 0.05$ ) compared to items 1 and 2, both for men and women, confirming the gap between needs and reality.

The response to these questions was also cross-checked based on the educational stage in which the teachers worked. The ANOVA test identified significant differences between groups for questions 1, 2, 3, and 6. Table IV shows the values extracted from the ANOVA test along with the calculation of the effect size.

**TABLE IV.** ANOVA results according to the educational stage.

Questions	Degrees of Freedom	F	p	Partial $\eta^2$
1.	7.26	17.11	< 0.001	0.043
2.	7.26	6.47	< 0.001	0.017
3.	7.26	4.99	< 0.001	0.013
6.	6.22	2.69	< 0.05	0.007

\*  $p < 0.05$ . Source: Compiled by the author

In the comparison of samples carried out independently, differences were found in the results of secondary school teachers compared to some of the other groups analyzed. Table V shows this comparison. Participants who worked in different educational stages were excluded from this analysis to prevent potential biases.

**TABLE V.** Differences in considerations regarding inclusive education between educational stages.

Questions	Does not work (NT) N = 1014	Early childhood (I) N = 308	Primary (P) N = 887	Secondary (S) N = 178	Sig.
1.	2.62 ± 0.9	2.77 ± 0.8	2.91 ± 0.9	2.74 ± 1.0	NT < I, P, S S < P
2.	2.95 ± 0.9	3.13 ± 1.0	3.2 ± 0.9	3.08 ± 1.0	NT < I, P, S
3.	4.84 ± 0.44	4.83 ± 0.4	4.71 ± 0.6	4.71 ± 0.6	NT, I > P, S
4.	2.90 ± 0.9	2.88 ± 0.9	2.95 ± 0.9	2.82 ± 1.0	P, NT > S
5.	4.0 ± 1.0	3.89 ± 1.0	3.88 ± 0.9	3.82 ± 1.1	NT, I, P > S
6.	4.9 ± 0.3	4.95 ± 0.2	4.87 ± 0.4	4.84 ± 0.4	P < NT, S < I

\*  $p < 0.05$ . Source: Compiled by the author

These results reinforce the gap between the importance that teachers give to inclusive education and what they actually observe. Among the different analyses, aspects to be highlighted include that teachers not working in schools feel less qualified to develop inclusive strategies than working teachers, regardless of the stage. Similarly, teachers who are not working perceive their internship environments as less inclusive than teachers who work in their own schools. It is also observed that primary and secondary teachers consider inclusive education slightly less important than early childhood teachers or those not working. However, the values obtained in any of the cases are very high, and the difference between groups is small.

In item 5, it is noted that as teachers progress through the stages, there is a decreasing trend in considering that students schooled at special education centers should be enrolled in regular classrooms. Lastly, table VI shows the correlation between the responses to the questions.



**TABLE VI.** Significant correlations ( $p < 0.05$ ) between responses to questions.

Questions	1	2	3	4	5	6
Age			- 0.11			-0.1
1. To what degree do you feel trained in inclusive education?		0.32	0.08	0.23		
2. To what degree do you consider that the school environment you work in or in which you have had internships promotes inclusion?	0.32			0.47		-0.1
3. Do you consider inclusive education to be necessary?	0.08			0.13	0.32	0.31
4. Do you consider your environment to be prepared to promote inclusive education?	0.23	0.47	0.13		0.08	
5. To what extent do you believe that the schooling of special education students should take place in regular schools?			0.32	0.08		0.19
6. Do you consider it necessary to carry out training sessions on inclusive education?		-0.1	0.31		0.19	

Source: Compiled by the author.

The correlations presented between items 2 and 4, as well as between items 3 and 6, and between 3 and 5, are as expected given the content of the questions, therefore providing validity and consistency to the study (Reynolds et al., 2021). Notably, there is a positive and significant correlation between how teachers perceive their training and the extent to which they believe their environment promotes inclusion (items 2 and 4). Concerning the age variable, the correlation between different items was explored, and a significant ( $p < 0.05$ ) and inverse correlation was found between the age and the perception of the need for inclusive education ( $Rho = -0.111$ ), as well as with training in inclusive education ( $Rho = -0.1$ ). However, the size of the correlation was small.

## Discussion

The results obtained reveal a particular preference in Spain for enrolling all students in regular schools. Only 5.4% of the sample indicated that the most common schooling situation for addressing diversity that they observed in classrooms was in special education classrooms, aligning with the study of Sandoval et al. (2022). A report from the Spanish Government (MEFP, 2021) for the 2020-2021 academic year indicated that 9.3% of students in compulsory education presented specific educational support needs (ACNEAE), and out of these, 2.8% of the total student population had SEN. In this same report, 82.9% were enrolled in regular education. These data reflect the interest of the authorities in facilitating the attention to diversity through regular classrooms, an aspect promoted by the Salamanca Statement (UNESCO, 1994), as well as by the current law, the LOE-LOMLOE. However, as Graham et al. (2020) indicate, enrolling students in regular classrooms does not guarantee the provision of an inclusive educational attention. Thus, an important question to explore is: how are students with SEN attended within regular classrooms?

In classrooms, the most common measure for addressing different learning needs is to provide support and reinforcement for students outside the classroom (56.4%), followed by offering support within the classroom (19.4%). However, only 9.4% of the sample indicated that, in their context, diversity is addressed 100% of the time through activities developed for the whole classroom-group. In the study by Pascual et al. (2019), early childhood teachers reported that the most frequently used measures were support in regular groups (24.6%), specialized support (17.9%), and support outside regular groups (17.7%). According to these authors, in primary education, the most common measure

was also to provide support in regular groups (23.1%), followed by support outside regular groups (22.2%) and specialized support (20.2%). The percentages of students receiving support within the regular classroom in this study are similar to those reported by Pascual et al. (2019). However, there is a large difference in the results regarding the percentage of students receiving support and reinforcement outside the classroom. In our study, both in early childhood and primary education, this was the most common measure observed by teachers. In primary education, there is also an increase in the provision of support outside the classroom compared to early childhood (Early Childhood = 52.3%; Primary = 61.5%), which is also noted in the study by Pascual et al. (2019). As Sánchez et al. (2017) suggest, primary education seems to have a less inclusive vision than early childhood education.

A notable finding is that as students progress through educational stages, there is an increase in the number of students enrolled in special education classrooms (2.3% in early childhood, 4.3% in primary, and 5.1% in secondary). However, in secondary education, there is a significant reduction in the number of students leaving the classroom to receive support, a decrease in the support provided within the classroom, and a noticeable increase in the attention of the students with diversity participating 100% of the time in their classroom-group activities. This shift may be justified by the flow of students with SEN to special education schools or different curricular diversification programs, as presented by Martínez-Pastor (2024). It is also worth mentioning Navarro's (2015) study, where teachers indicated that there was a higher need for teachers with inclusive education training in early childhood and primary education (25%) compared to secondary education (12.5%). Similarly, Navarro (2015) also found that more early childhood and primary school teachers (37.5%) considered that schools were not prepared to provide an inclusive response compared to secondary teachers (25%). These findings may be linked to lower diversity in secondary classrooms due to curricular diversification situation, as previously mentioned. In contrast, studies like the one of Pascale et al. (2019) suggest that secondary education is one of the stages that needs more training and where teachers feel less prepared (Márquez & Moya, 2024). This may be due to the greater complexity of the curriculum and to an increased need for specialization in subjects.

The data from this study also indicate that, despite both the regulatory framework and interest in achieving the normalization of diversity in classrooms, there is still a perception of a more integrative rather than inclusive model in the classrooms. This model is more based on the use of support and reinforcement measures than on the use of strategies that address diversity through the general classroom dynamics, such as through Universal Design for Learning (DUA; Alba, 2018). However, as Schreffler et al. (2019) indicate, the impact of using UDL in the classroom is still under development, and the empirical literature on this is still limited. It must be mentioned that among the studies analyzed regarding the measures used to address diversity in the classroom, as far as authors know, none of them explicitly included UDL as a measure to address diversity, making it difficult to gain insight into UDL's role in today's schools. Although UDL was not explicitly mentioned in the present study, one of its principles—including attention to diversity from within the classroom-group without support measures that separate students—was included among the items. Only 9.4% reported that this was the predominant type of attention observed in their context. While being a low percentage, it could reflect positively teachers' growing interest in gradually implementing such actions to address diversity in the classroom.

However, while the data from the study provide insight into how diversity is perceived to be addressed in Spanish classrooms, it is important to note that these data are based on teachers' perceptions rather than direct observations, which could be a limitation of the study (Cohen et al., 2018).

Regarding the training received, despite the regulatory framework promoting inclusion, it is surprising to find that a high percentage of respondents (25%) consider they did not receive specific training in inclusive education during their studies, as well as the high percentage of respondents who

did not correctly answer the conceptual questions (66.2% in question 1 and 39.9% in question 2). These results highlight a discrepancy between the reported training and the proper assimilation of the concept of inclusion, identifying as inclusive measures that, according to scientific literature, correspond rather to an integrative model (Ainscow et al., 2006). This divergence could be explained by the variability in the training received and the depth with which the principles of inclusive education are addressed in curricula.

Regarding perceptions on training, teachers who were not currently working considered themselves slightly less trained than active teachers. Following Martín-Ondarza et al.'s (2022) study, the Contact Theory could partially explain these differences, as this theory suggests that direct interaction with diversity can reduce prejudice and increase knowledge about inclusion. However, for this to occur, teachers with experience should have had positive inclusion experiences to strengthen this theory, which was not evaluated in the present study. On the contrary, teachers who were not working, as well as those in early childhood education, considered inclusive education to be slightly more important than teachers in primary and secondary education. This could be due to the fact that early childhood education often involves universal enrollment, including students with SEN, as well as to a greater heterogeneity among students as a result of the different developmental stages and birth dates; differences that tend to reduce as students advance through educational stages. Additionally, early childhood teachers were the ones that most emphasized the importance of training in inclusive education. According to Segura-Pérez et al. (2024), this greater concern may indicate higher levels of training.

The lack of training in inclusive education is highlighted by authors such as González-Gil et al. (2016) or Rodríguez (2019) in various educational contexts and geographical locations. In line with the aforementioned results, Llorent and López-Azuaga (2012) indicated that a low level of training in inclusive education motivated the preference for integrative models, raising the importance of continuing to promote basic inclusive education training in university degrees, as well as in continuous teacher training (Durán & Giné, 2012). These facts could justify why surveyed teachers observe more integrative measures than inclusive ones in their classrooms. However, it is also important to highlight that the regulatory framework for verifying official university degrees that qualify teachers to work in early childhood education, primary education, or secondary education (regulated by the Orders ECI/3854/2007, ECI/3857/2007, and ECI/3858/2007) does not specifically refer to inclusive education content. Only in the "Educational Guidance" specialty "inclusive education and diversity management" is listed as a specific subject. This fact could explain why teachers do not consider themselves adequately trained in inclusive education (item 1) nor believe that their environment is prepared nor is implementing inclusive practices (items 4 and 2).

On a positive note, through items 3 and 6, teachers expressed a high sensitivity to the need of developing an inclusive school and the importance of teacher training. This positive attitude was also reported by authors such as Solís and Real (2023) in the context of secondary education or Hernández-Amorós et al. (2017) in the context of primary school teachers. This gap between training needs and attitudes towards inclusion could explain the heterogeneity of results obtained in item 5. Although most teachers considered that students enrolled in special education should be enrolled in regular schools, the response was not unanimous nor as high as in other items (items 3 and 6). Among the different educational levels, secondary teachers were the least likely to consider that special education students should be enrolled in regular schools. This may be due to the organizational and curricular structure of the stage, as well as the training and attitudes of the teachers (Albalá Genol et al., 2023; Solís & Real, 2023). However, the debate about which school model to adopt is extensive in the literature, and it considers not only the educational model but also the current reality of classrooms in terms of resources, teacher training, and the presence of real barriers or facilitators (Parra, 2011).

When analyzing correlations between different variables, even though there was some sort

of negative correlation between the age and the extent to what teachers considered themselves to be trained in inclusion or the degree to which they considered training in educational inclusion to be necessary, this correlation was very small, not being possible to generalize by saying that those variables depend on the age (Cohen, 2013).

Existing correlation between items 4 and 2, as well as between items 3 and 6, and 3 and 5, provide internal consistency to the items of the questionnaire and strengthen its reliability, being items for which such correlation could be expected (Reynolds et al., 2021).

Similarly, it is worth mentioning the positive relationship found between the degree to which the teacher feels sufficiently trained in inclusive education and the degree to which he/she considers that his/her working environment promotes the inclusion or the degree to which the environment is ready for favoring inclusive education. In line with the study of Fernández-Batanero (2013), or the one carried out by Reina et al. (2016) in the field of Physical Education, the self-efficacy of teachers and their skill development are very important so that teachers promote inclusion in the classroom. In this sense, feeling trained and with enough readiness may be a key element to consider that the environment is ready for the inclusion. This correlation reveals the importance of the didactic competence as a facilitator in the learning process and in developing inclusive contexts. Beyond existing barriers and available resources in the environment, considered to be very relevant, the teachers' knowledge of strategies to promote inclusion is considered to be, by different authors, as one of the most important facilitators towards the inclusion (Reyes-Parra et al., 2020; Hurtado et al., 2019; Ricoy, 2018). However, as pointed out by Valdés (2022), the leadership towards the inclusion is not a matter that falls solely on the teacher, but rather on the inclusion culture of the schools and their educational project of the center.

## Conclusion

Through this study, it has been tried to provide a comprehensive and updated view of the most frequent ways to address diversity in classrooms, the extent to which teachers feel trained in inclusive education, and their perceptions and attitudes toward inclusion.

Among the strengths of the study, to be highlighted are the broad sample and the diversity of educational stages represented, providing a comprehensive view of the state of inclusive education in Spain. Additionally, the use of a detailed questionnaire, based on concerns raised in the literature, allowed to capture important nuances in teachers' perceptions regarding the reality of inclusive education in classrooms, highlighting both advances and areas in need of improvement.

As limitations of the study, the reliance on self-reported data could introduce biases in the responses. The lack of direct observations in classrooms limits the empirical verification of the practices described by participants. Additionally, although the sample was large, it does not guarantee an equitable representation of all autonomous communities, which could limit the generalizability of the results across the entire national territory. On the other hand, even though the design of the questionnaire aimed to be accessible and concise in order to avoid participant fatigue, further development of each item evaluated by means of subscales could provide greater depth to the results and strengthen the psychometric properties of the questionnaire.

As a proposal for future studies, it would be recommended to incorporate direct classroom observations to assess how diversity is addressed in real contexts. Likewise, it is also important to



continue investigating the effectiveness of teacher training programs in inclusive education, both initial and ongoing, as well as their real impact on daily educational practices. Also, it is recommended to carry out longitudinal studies that analyze the evolution of teachers' attitudes and competencies in regards to inclusion over time. Moreover, the implementation and evaluation of specific pedagogical strategies, such as the Universal Design for Learning (UDL), could offer valuable findings into how to improve effective inclusion in classrooms.

From a practical standpoint, it is recommended to continue strengthening and promoting teacher training programs in inclusive education in a practical way and in contact with real situations. In some cases, training does not always need to be outside school hours; it can take place through mentorships and guidance by experts in inclusive education, helping teachers to adopt measures that increasingly promote inclusion. However, such training must be accompanied by organizational changes within schools that facilitate the application of these measures in the classroom.

## References

- Ainscow, M., Booth, T., & Dyson, A. (2006). Inclusion and the standards agenda: negotiating policy pressures in England. *International Journal of Inclusive Education*, 10(4-5), 295-308. DOI: 10.1080/13603110500430633
- Alba Pastor, C. (2018). *El Diseño Universal para el Aprendizaje: Educación para todos y prácticas de enseñanza inclusivas*. Ediciones Morata.
- Albalá Genol, M. Á., Etchezahar, E. D., Ungaretti, J., & Gómez Yepes, T. (2023). Actitudes del profesorado hacia la inclusión educativa: factores socioemocionales y formativos implicados. En Á. Martos Martínez, M. del M. Simón Márquez, J. J. Gázquez Linares, P. Molina Moreno, & S. Fernández Gea (Eds.), *Innovación docente e investigación en educación: Nuevas tendencias para el cambio en la enseñanza superior* (pp. 993-1000). Dykinson. <http://hdl.handle.net/11336/247129>
- Ato, M., López-García, J. J., & Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *Anales de Psicología*, 29(3), 1038–1059. <https://doi.org/10.6018/analesps.29.3.178511>
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-147. <https://doi.org/10.1080/08856250210129056>
- Boone, H. N., & Boone, D. A. (2012). *Analyzing Likert data*. *Journal of Extension*, 50(2), 1-5. 10.34068/joe.50.02.48
- Booth, T., & Ainscow, M. (2011). *Index for inclusion: Developing learning and participation in schools* (3rd ed.). Centre for Studies on Inclusive Education (CSIE).
- Boyle, C., & Allen, K. A. (2023). Understanding the Issues in Inclusive Education: Working Towards Equitable and Accessible Education for All Students. In: Boyle, C., Allen, KA. (eds) *Research for Inclusive Quality Education. Sustainable Development Goals Series*. Springer, Singapore. [https://doi.org/10.1007/978-981-16-5908-9\\_1](https://doi.org/10.1007/978-981-16-5908-9_1)
- Carter, E. W., & Hughes, C. (2006). Including high school students with severe disabilities in general education classes: Perspectives of general and special educators, paraprofessionals, and administrators. *Research and Practice for Persons with Severe Disabilities*, 31(2), 174-185.

<https://doi.org/10.1177/154079690603100209>

- Celina, H., & Campo-Arias, A. (2005). Aproximación al uso del coeficiente alfa de Cronbach. *Revista colombiana de psiquiatría*, 34(4), 572-580.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge. <https://doi.org/10.4324/9780203771587>
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th ed.). Routledge.
- De Boer, A., Pijl, S. J., & Minnaert, A. (2010). Regular primary schoolteachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, 15(3), 331-353. <https://doi.org/10.1080/13603110903030089>
- Durán, D., & Giné, C. (2012). La formación permanente del profesorado para avanzar hacia la educación inclusiva. *Edetania: estudios y propuestas socio-educativas*, 41, 31-44.
- Echeita, G. (2006). *Educación para la inclusión o educación sin exclusiones*. Editorial Narcea.
- Fernández-Batanero, J. M. (2013). Competencias docentes y educación inclusiva. *Revista electrónica de investigación educativa*, 15(2), 82-99.
- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics* (4th ed.). Sage Publications.
- Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British Educational Research Journal*, 37(5), 813-828. <https://doi.org/10.1080/01411926.2010.501096>
- Florian, L., & Linklater, H. (2010). Preparing teachers for inclusive education: using inclusive pedagogy to enhance teaching and learning for all. *Cambridge Journal of Education*, 40(4), 369-386. DOI: 10.1080/0305764X.2010.526588
- Forlin, C. (2010). *Teacher education for inclusion: Changing paradigms and innovative approaches*. Routledge.
- Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39(1), 17-32. <https://doi.org/10.1080/1359866X.2010.540850>
- Freedman, D. A. (2009). *Statistical models: Theory and practice (revised edition)*. Cambridge University Press.
- Gallego, M. (2023). Formación docente para la educación inclusiva en instituciones públicas del Quindío. *Siglo Cero*, 54(4), 11-27. <https://dx.doi.org/10.14201/scero.31473>
- González-Gil, F., Martín--Pastor, E., Poy, R., & Jenaro, C. (2016). Percepciones del profesorado sobre la inclusión: estudio preliminar. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 19(3), 11-24. <https://doi.org/10.6018/reifop.19.3.219321>
- Graham, L. J., Medhurst, M., Malaquias, C., Tancredi, H., de Bruin, C., GillettSwan, J., Poed, S., Spandagou, I., Carrington, S., & Cologon, K. (2020). Beyond Salamanca: a citation analysis of the CRPD/GC4 relative to the Salamanca Statement in inclusive and special education research. *International Journal of Inclusive Education*, 27(2), 123-145. <https://doi.org/10.1080/13603116.2020.1831627>
- Hernández-Amorós, M. J., Urrea-Solano, M. E., Alós, L. G., San Martín, N. G. L., López, R. S., & Fernández, J. M. G. (2017). Actitudes de los maestros en formación sobre la diversidad e inclusión educativa. *International Journal of Developmental and Educational Psychology*, 4(1), 45-54. <https://doi.org/10.17060/ijodaep.2017.n1.v4.1026>
- Hornby, G. (2015). Inclusive special education: Development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education*, 42(3), 234-256. <https://doi.org/10.1111/1467-8578.12101>
- Hurtado, Y. M., Mendoza, R. S., & Viejó, A. B. (2019). Los desafíos de la formación docente inclusiva: Perspectivas desde el contexto latinoamericano. *Revista Internacional de apoyo a la inclusión, logopedia, sociedad y multiculturalidad*, 5(2), 98-110. DOI: <https://dx.doi.org/10.17561/>



riai.v5.n2.9

- Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación (LOE-LOMLOE). *Boletín Oficial del Estado*, 340, de 30 de diciembre de 2020, páginas 122868 a 122953.
- Llorent, V. J., & López-Azuaga, R. (2012). Demandas de la Formación del Profesorado. El desarrollo de la educación inclusiva en la Educación Secundaria Obligatoria. *REIFOP. Revista electrónica interuniversitaria de formación del profesorado*, 15(3), 27-34.
- Márquez, C., & Moya, L. (2024). *La formación inicial docente para la educación inclusiva*. Fundación Eguía Careaga. SIIS – Servicio de Información e Investigación Social
- Martín-Ondarza, P., Redondo-Corcobado, P., & Gálvez, B. (2022). El potencial del Aprendizaje-Servicio en la reducción de prejuicios de los futuros educadores: una intervención educativa de contacto directo intergrupar. *Foro de Educación*, 20(1), 214-239. DOI: 10.14516/FDE.956
- Martínez-Pastor, P. (2024). Medidas para la mejora de la Enseñanza Secundaria en España. *Cabás. Revista Internacional Sobre Patrimonio Histórico-Educativo*, 18, 107–131. <https://doi.org/10.35072/CABAS.2017.35.35.001>
- MEFP (2021). *Estadística de las enseñanzas no universitarias. alumnado con necesidad específica de apoyo educativo curso 2020-2021*. Ministerio de Educación y Formación Profesional. Recuperado de <https://www.educacionyfp.gob.es/dam/jcr:ae456755-1f2e-48be-94d4-4e13a-b204e8b/notaresumen21.pdf>
- Navarro, M. J. (2015). Análisis de la inclusión educativa desde la perspectiva del profesorado de educación infantil, primaria, secundaria y bachillerato en el contexto educativo español. *Investigación y postgrado*, 30(1), 33-55.
- Oh-Young, C., & Filler J. (2015). A meta-analysis of the effects of placement on academic and social skill outcome measures of students with disabilities. *Research in Developmental Disabilities*, 47:80-92. doi: 10.1016/j.ridd.2015.08.014.
- Orden ECI/3854/2007, de 27 de diciembre, por la que se establecen los requisitos para la verificación de los títulos universitarios oficiales que habiliten para el ejercicio de la profesión de Maestro en Educación Infantil. *Boletín Oficial del Estado*, 312, de 29 de diciembre de 2007, pp. 53735 a 53738. [https://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2007-22446](https://www.boe.es/diario_boe/txt.php?id=BOE-A-2007-22446)
- Orden ECI/3857/2007, de 27 de diciembre, por la que se establecen los requisitos para la verificación de los títulos universitarios oficiales que habiliten para el ejercicio de la profesión de Maestro en Educación Primaria. las enseñanzas mínimas para el segundo ciclo de Educación Infantil. *Boletín Oficial del Estado*, 312, de 29 de diciembre de 2007, pp. 53747 a 53750. <https://www.boe.es/buscar/doc.php?id=BOE-A-2007-22449>
- Orden ECI/3858/2007, de 27 de diciembre, por la que se establecen los requisitos para la la verificación de los títulos universitarios oficiales que habiliten para el ejercicio de las profesiones de Profesor de Educación Secundaria Obligatoria y Bachillerato, Formación Profesional y Enseñanzas de Idiomas. *Boletín Oficial del Estado*, 312, de 29 de diciembre de 2007, pp. 53751 a 53753. <https://www.boe.es/buscar/doc.php?id=BOE-A-2007-22450>
- Parra, C. (2011). Educación inclusiva: un modelo de diversidad humana. *Educación y desarrollo social*, 5(1), 139-150. <https://doi.org/10.18359/reds.897>
- Pascale, L., Fernández-Martínez, M. M., & Carrión Martínez, J. J. (2019). Elementos de una organización educativa inclusiva para la respuesta a alumnado con necesidades educativas especiales de educación secundaria en Italia. La situación en un instituto profesional. *Psychology, Society & Education*, 1(11), 27-37. <http://hdl.handle.net/10835/6932>
- Pascual, M. Á., García, M. S., & Vázquez-Cano, E. (2019). Atención a la diversidad e inclusión en España. *Sinéctica*, 53, 1-17. [https://doi.org/10.31391/s2007-7033\(2019\)0053-011](https://doi.org/10.31391/s2007-7033(2019)0053-011)

- Pinilla-Arbex, J. (2020). *Diseño universal para el aprendizaje*. Editorial Inclusión.
- Real Decreto Legislativo 1/2013, de 29 de noviembre, por el que se aprueba el Texto Refundido de la Ley General de derechos de las personas con discapacidad y de su inclusión social. *Boletín Oficial del Estado*, 289, de 3 de diciembre de 2013. <https://www.boe.es/buscar/act.php?id=BOE-A-2013-12632>
- Reina, R., Hemmelmayer, O., & Sierra-Marroquín, B. (2016). Autoeficacia de profesores de educación física para la inclusión de alumnos con discapacidad y su relación con la formación y el contacto previo. *Psychology, society & education*, 8(2), 93-103. <https://doi.org/10.25115/psy.e.v8i2.455>
- Reyes-Parra, P. A., Moreno, A. N., Amaya, A., & Avendaño, M. (2020). Educación inclusiva: Una revisión sistemática de investigaciones en estudiantes, docentes, familias e instituciones y sus implicaciones para la orientación educativa. *Revista Española de Orientación y Psicopedagogía*, 31(3), 86-108. <https://doi.org/10.5944/reop.vol.31.num.3.2020.29263>
- Reynolds, C. R., Altmann, R. A., & Allen, D. N. (2021). Item Analysis: Methods for Fitting the Right Items to the Right Test. *En Mastering Modern Psychological Testing*. Springer, Cham. [https://doi.org/10.1007/978-3-030-59455-8\\_7](https://doi.org/10.1007/978-3-030-59455-8_7)
- Ricoy, A. (2018). Formación docente y su relación con los contextos inclusivos. *Revista Internacional de Apoyo a la Inclusión, Logopedia, Sociedad y Multiculturalidad*, 4(2), 160-171. <https://doi.org/10.17561/riai.v4.n2.9>
- Rodríguez, H. J. (2019). La Formación inicial del profesorado para la inclusión. Un urgente desafío que es necesario atender. *Publicaciones*, 49(3), 211–225. <https://doi.org/10.30827/publicaciones.v49i3.11410>
- Sánchez, P. A., Frutos, A. E., & García, C. M. C. (2017). El impacto del contexto escolar en la inclusión educativa. *Revista de Educación Inclusiva*, 10(2), 195-210.
- Sandoval, M., Álvarez-Rementería, M., & Darretxe, L. (2022). La evolución de la escolarización del alumnado en Educación Especial en España: a 25 años de la Declaración de Salamanca. *Aula abierta*, 51(4), 385-394. <https://doi.org/10.17811/rifie.51.4.2022.385-394>
- Schreffler, J., Vasquez, E., Chini, J., & James, W. (2019). Universal Design for Learning in postsecondary STEM education for students with disabilities: A systematic literature review. *International Journal of STEM Education*, 6, 8, 1-10. DOI: 10.1186/s40594-019-0161-8
- Segura-Pérez, Á., Acosta-Escareño, G., Escorcía-Mora, C. T., & Tárraga-Mínguez, R. (2024). Percepciones del profesorado sobre el papel de los sistemas aumentativos y alternativos de comunicación. *Educação e Pesquisa*, 50, e276115. <https://doi.org/10.1590/S1678-4634202450276115es>
- Serna, A. J., & Serna, E. (2023). Una mirada a la educación inclusiva desde las concepciones de los docentes de educación inicial y educación primaria. *Cuaderno de Pedagogía Universitaria*, 20(39), 145-157. <https://doi.org/10.29197/cpu.v20i39.493>
- Shaeffer, S. (2019). Inclusive Education: A Prerequisite for Equity and Social Justice. *Asia Pacific Education Review*, 20(2), 181-192.
- Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-service teachers' attitudes, concerns and sentiments about inclusive education: An international comparison of the novice pre-service teachers. *International Journal of Special Education*, 21(2), 80-93.
- Sharma, U., & Sokal, L. (2015). The impact of a teacher education course on pre-service teachers' beliefs about inclusion: an international comparison. *Journal of Research in Special Educational Needs*, 15(4), 276-284. <https://doi.org/10.1111/1471-3802.12043>
- Soldevila-Pérez J., Farré-Riera L., & Simó-Gil N. (2025). Repensar la escuela inclusiva y democrática con las voces del alumnado. Dos estudios de caso. *Revista Complutense de Educación*, 36(1), 33-42. <https://doi.org/10.5209/rced.90409>

- Solís, P., & Real, S. (2023). Actitudes hacia la inclusión de estudiantes con discapacidad en profesorado de Secundaria. *Profesorado, Revista De Currículum Y Formación Del Profesorado*, 27(2), 267–286. <https://doi.org/10.30827/profesorado.v27i2.21321>
- UNESCO. (1994). *The Salamanca Statement and Framework for Action on Special Needs Education*. UNESCO.
- UNESCO (2017). *Desglosar el Objetivo de Desarrollo Sostenible 4: Educación 2030, guía*. UNESCO.
- Valdés, R. (2022). Liderazgo escolar inclusivo: una revisión de estudios empíricos. *Zona Próxima*, 36, 4-27. <https://doi.org/10.14482/zp.36.371.9>

**Address information:** Javier Pinilla Arbex. Universidad Pontificia Comillas. E-mail: [pinilla@comillas.edu](mailto:pinilla@comillas.edu)

