# Attention to Diversity? Teachers' response in Preschool and Primary Education

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# Attention to diversity? Teachers' response in Preschool and Primary education

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Abstract: Although attention to diversity has been presented at school for decades, it has not always and everywhere been as the process of personalizing teaching practices for covering pupils' needs. Indeed, it was focused on providing pupils with special education needs (SEN) with learning opportunities. This paper describes the current situation of attention to diversity at schools through the analysis of Preschool and Primary teachers' opinions and beliefs about this matter in Madrid. 103 teachers answered a questionnaire composed of four dimensions based on different issues about inclusive education and attention to diversity and several sociodemographic variables. The results have been analysed applying cross-checking to these variables and the specific dimensions of the questionnaire. Most of the sample agreed on the importance of training in attention to diversity and they recognised their lack of it due to several reasons. However, they affirmed that they can manage the diversity in their classrooms, although they do not come to an agreement when they were asked about the inclusion of pupils with SEN in ordinary classrooms. Finally, implications for future research to advance on the knowledge of attention to diversity in the Spanish educational context are discussed.

**Keywords:** Attention to diversity, inclusive education, teacher training, special education needs, teachers' attitudes.

Resumen: Aunque el concepto de atención a la diversidad lleva presente en nuestras escuelas desde hace décadas, su finalidad se ha entendido como el proceso de proporcionar oportunidades de aprendizaje a alumnos con necesidades educativas especiales (NEE). Este estudio describe cómo se entiende actualmente la atención a la diversidad en los centros escolares mediante el análisis de las perspectivas docentes sobre este tema. Se cuenta con una muestra de 103 maestros de educación infantil y primaria de Madrid. Sus opiniones han sido recogidas mediante un cuestionario compuesto por cuatro dimensiones sobre diferentes aspectos de la atención a la diversidad, además de variables sociodemográficas que permiten describir la muestra con mayor rigor. La mayoría de la muestra reconoce la importancia de la formación en atención a la diversidad y reconocen sus limitaciones en cuanto a la misma. Sin embargo, afirman que conocen estrategias de inclusión educativa y que las aplican en el aula, aunque no llegan a un acuerdo cuando se les pregunta por la inclusión de alumnado NEE en aulas ordinarias. Finalmente, se discuten las implicaciones para futuras investigaciones sobre el trabajo en atención a la diversidad y su concepción en las aulas españolas.

**Palabras clave:** Atención a la diversidad, educación inclusiva, formación del profesorado, necesidades educativas especiales, actitudes del profesorado.

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#### 1. Introduction

United Nations (UN) carried out the *Convention on the Rights of Children* (CRC) in 1989, proclaiming that childhood must be cared for by society and these rights must be included in the Universal Declaration of Human Rights. This convention specified in articles 28 and 29 that State Parties have to recognise the right of education for every child, ensuring a compulsory education stage, free and available for all, which develops children's personalities and their mental and physical capabilities at their maximum (United Nations, 1989).

In 1975, the *UN Declaration of the Rights of Disabled Persons* declared that people with disabilities must be integrated into the whole mainstream of society (Smyth et al., 2014). However, the *Salamanca Statement and Framework for Special Needs Education* in 1994 established for the first time the concept of inclusive learning at school, which promoted personalized opportunities for learning for everybody, focusing on equity instead of on equality (Smyth et al., 2014; UNESCO, 2005). In 2006, the *Convention on the Rights of Persons with Disabilities* (CRPD) stated in article 24 "the right of persons with disabilities to education" (United Nations, 2006, p.14); consequently, schools had to guarantee general education taking into account their pupils' diversity for developing their abilities and their dignity in every aspect of their lives (United Nations, 2006).

Inclusive education provides meaningful and useful access to the general curriculum for students who need special support or individualized attention (Hagiwara et al., 2019). Thus, inclusive education is presented at school when pupils with disabilities are learning and participating in the general education context together with their chronological age classmates and at the same time as them (Amor et al., 2018 as cited in Hagiwara et al., 2019). This process of teaching individualization is closely linked with the concept of attention to diversity and its goal of teaching under the umbrella of equity. It aims to understand pupils' characteristics to adjust teaching practices for covering their needs. This concept has been associated with the comparison between pupils with disabilities and without them, for giving more resources to the first group in order to try to avoid school failure. Nevertheless, attention to diversity pursues to remove the possible barriers which do not help pupils to reach the educational goals and their right of quality education (Echeíta, 2005). Thus, attention to diversity involves students with low levels of motivation, without social abilities, with any kind of disability or impairment, migrant children whose native language differs from the language of their new country, etc. (Gentile, 2002, as cited in Echeíta, 2005).

Diversity should be understood as an educative value, because all pupils are different and they have several needs. Hence, the educative system should not classify students depending on their capabilities and provide them with specific resources for covering their needs. Schools and teachers must ensure the access to the general curriculum for everybody, taking into account all the different contexts and acting according to them. However, this educational model, based on diversity, is a recent one, and pupils with disabilities have been treated in different ways throughout history, ranging from exclusion, to segregation, integration, and inclusion (García Rubio, 2017).

The main purpose of this survey is to find out what educational model are following Preschool and Primary teachers in Spain when they deal with pupils with disabilities in class. Conclusions will be drawn through the analysis of their perceptions and beliefs about attention to diversity. This goal will be reached through the use of a questionnaire in which teachers will answer about their training in attention to diversity, the way in which they organise their teaching, what type of methodologies they include when they need to cover pupils' needs and their opinions about this field in different educational contexts.

To sum up, this paper is made up of three main sections. The first one contextualizes the concept of attention to diversity and analyses some studies related to the present one. The second section explains the research design and the process to obtain and analyse data. The last part is devoted to describing and interpreting the obtained results after analysing teachers' perceptions and beliefs, in order to draw some conclusions.

#### 2. Theoretical framework

The following section aims to contextualize the objective of this survey. For this reason, it is divided into two subsections: The first one provides information about attention to diversity in order to clarify the concept from the point of view of different authors; the second one is focused on the review of other surveys similar to the present one, detailing their conclusions, as frame of reference for comparing results.

#### 2.1. Attention to diversity: contextualization

The Spanish education system settles its main goal around the development of responsible citizens who will be able to participate in the society. The Organic Law 8/2013 on the Improvement of Education Quality (LOMCE), which modifies the previous one —Organic Law 2/2006 (LOE)—, specifies that these stages should be focused on social justice and the welfare

of every Spanish inhabitant (BOE, 2013). These principles are closely related to the topic of this survey: Attention to Diversity and its influence on Preschool and Primary education stages.

The Spanish educational legal framework is organised through the Royal Decree 126/2014 for the whole country and the Decree 89/2014, which specifies the curriculum for the autonomous community of Madrid. However, these documents do not specify attention to diversity statements and the needed measures for pupils with special education needs (SEN). For this reason, the Order1493/2015 must be checked to regulate the learning process of pupils with SEN. Nevertheless, the preambles of LOE and LOMCE include some goals to cater for attention to diversity at school, such as the article 71, which establishes the principles for teaching pupils with disabilities; the article 72, that distinguishes some measures to help students reach the aims proposed; or article 79 bis, which explains the procedures for schooling pupils with SEN and the attention they must receive (BOE, 2013).

The concept of attention to diversity is based on the responsibility of every education system to ensure the fundamental right of education for all children. It must recognise students' necessities, avoiding the inequity, ensuring a flexible and open learning process and a quality education for everyone (Arenque & Barrio de la Puente, 2010). Also, these authors establish that a successful learning process is possible for every child if these statements are followed. Therefore, Arenque and Barrio de la Puente (2010) link attention to diversity with the application of an educational model which adapts to the pupils' context in order to provide them with personalized pedagogic help and with the adaptation of teaching practices for their capabilities, motivations and interests.

Likewise, Luque Parra (2009) supports these previous ideas when he establishes that education is an essential condition for the development of human capabilities, physic and psychic health and their autonomy. Hence, the only way for guaranteeing children's proper development should be done though the building of education systems which recognise people diversity, changing their objectives and adjusting equality and equity for everybody in every educational stage. These ideas are closely related to the ecology of education and its objective of adapting the teaching context to the needs of pupils with disabilities and without them.

Moreover, Echeíta (2005) provides a definition of attention to diversity which is connected to the ecology of education. Echeíta defines this concept as respectful attitudes and

comprehension of the plurality of each pupil. This is the only way for meeting the needs of all and for achieving the goals proposed for them. Thus, the main purpose of attention to diversity is to individualise the learning process at school. If teachers adapted their teaching, modifying objectives, contents, assessment criteria, etc., no pupil would lose opportunities for leaning. Consequently, attention to diversity could be considered as the way for working with equity and for compensating inequalities and disadvantages between students.

On the other hand, teachers could adapt their teaching if they knew pupils' cultural and linguistic context and their personal characteristics. In this way, they would be able to guide students and cover their needs (Achinstein & Athanases, 2005). Additionally, these authors highlight the importance of understanding the concept of "equity" and its relationship with attention to diversity. Teaching under the umbrella of equity ensures that everybody will be provided with the resources and the attention that he or she needs to support their learning process. Moreover, working towards equity involves the development of cultural competence. Hence, teachers could be aware of students' context, not only in relation with their situation at home or their capabilities and limitations, but also with their place of birth. This is the proper way to affirm diversity in classrooms and take advantage of it (Ladson-Billings, 2001, as cited in Achinstein & Athanases, 2005).

The education system which contributes to reduce social exclusion due to sociocultural disadvantages, or any kind of disability or impairment, could be categorised as one which works through inclusive education (Arenque & Barrio de la Puente, 2010). This educative model is based on the same principle of regular education: all children should learn together although they were born in other countries or they present different capabilities (Booth, 2000, as cited in Molina, 2015). However, some researchers have concluded that certain teaching practices based on the regular education model could promote discrimination and exclusion attitudes inside the classroom. Thus, teachers must be aware of pupils' context and their personal characteristics and act according to their needs to provide them with an appropriate education which reduces inequality and fosters learning opportunities and suitable evaluation processes (Foutoul & Fierro, 2011, as cited in Molina, 2015).

These previous ideas would be the reasons for the improvement of inclusive education at every educational stage considering the differences between inclusion and integration.

Although these concepts can be classified as partial synonyms, they have dissimilar meanings.

Both of them look for the incorporation of people with disabilities in the society; however, they present specific hints which could provoke misunderstandings or confusion (Molina, 2015). According to UNESCO (2005), "special education practices were moved into the mainstream through an approach known as integration" (UNESCO, 2005, p. 9). The problem of this "mainstream" is that instead of changing the whole educative mechanism, some adaptations were done to include pupils with disabilities in ordinary classrooms. These adaptations implement more barriers than solutions because schools are the ones which must reform themselves to provide students with positive responses to their diversity, understanding individual differences as opportunities of learning instead of problems that need to be fixed; thus, integration could not be the best option to cover all pupils' needs. Moreover, UNESCO affirms that inclusive education can be considered as a policy movement to provide a framework in which everybody has access to basic education without doing any adaptation and with good quality (UNESCO, 1994, as cited in UNESCO, 2005). Along these lines, it could be observed that integration is centred on helping students with disabilities. In contrast, inclusive education stands for giving personalized resources for everybody, building a space for attending to diversity (Molina, 2015).

Nonetheless, it is not unusual that teachers connect "diversity" with "special education needs". Thus, when they detect any kind of problem in their students, they develop an assistance model being guided by other specialists. However, these attitudes are not the proper ones for working on inclusive education. If teachers were following an inclusive perspective, diversity would not be understood as a problem which requires solutions, because the main aim of attention to diversity is to provide learning opportunities not only for students, but also for the whole education community (Cañadas Ávila, 2016).

Otherwise, teachers should recognise the importance of planning their teaching in order to fulfil pupils' needs and achieve the goals of inclusive education. However, when they schedule their practices, they create a specific and differentiated section for pupils with SEN called "attention to diversity". It is designed for giving answers to learning difficulties such as disabilities or impairments, gifted children, or migrant students whose native language differs from Spanish (Arjona Fernández, 2010). Nevertheless, this conception does not represent the real goal of attention to diversity.

According to Roselló Ramón (2010), a teaching plan should be considered as a reflection process for understanding the context of the class, because the more knowledge about students and their situation teachers have, the better teaching strategies could be implemented for creating learning opportunities for everybody. As a result, the design of lesson plans with different levels will have to disappear, the goal of attention to diversity will be achieved and the curriculum will change into an accessible and flexible document for all. Consequently, an exhaustive teaching plan helps teachers to attend the diversity and to reach the goal of inclusive education. Hence, syllabus design can be defined as the process for "the development of a teaching plan for a specific period of time and a concrete group of students" (Lara, Vidal, & Manjon, 2014, p. 161). It should incorporate diverse sections to ensure that pupils will reach the objectives proposed for them. Following an inclusive perspective, special education should be included in general education, developing an intervention plan guided by specialists —Therapeutic Pedagogy and Hearing and Speech Therapy— in order to give answers to pupils' difficulties (Álvarez Duran, 2009).

The previous ideas are connected to the Warnock Report (1978), which affirms that every school must be equipped with all the resources that pupils need for their development. This report was a turning point for attention to diversity at school, changing the concept of "pupils who need special education" to "schools which are not prepared for the diversity" (Cañadas Ávila, 2016). Consequently, teachers' methodology and scheduling ways should be modified to adapt themselves to inclusive education aims, such as planning through Universal Design for Learning (UDL) rules (Roselló Ramón, 2010), co-teaching methodology or differentiated curricula.

Another factor that influences on attention to diversity is related to teacher training in this field. The lack of this training could promote negative attitudes and stereotypes towards pupils with SEN and their inclusion at school. For this reason, proper and continuous attention to diversity training can help teachers to detect and change these perspectives for effective and affective teaching interventions (Sales, Sanchiz & Moliner, 2001). Therefore, training in inclusive education is essential for covering pupils' needs. However, according to the Organization of Economic Co-operation and Development (OECD) and the European Agency for Special Needs Education (EADSNE) (as cited in Cejudo, Diaz, Losada & Perez-Gonzalez, 2016), teachers present, in a general overview, low attention to diversity training for providing pupils with efficient teaching practices. Moreover, Cejudo et al., (2016) support this fact along

their survey, where they noticed that teachers believe that training in attention to diversity is crucial and they were aware of their limitations in this area of knowledge. Likewise, children could not receive a personalized and quality education, unless teachers were properly trained in attention to diversity. This is the only way for modifying stereotypes about inclusive education and obtaining capable teachers who are able to manage classrooms successfully (Forteza, 2011, as cited in Gonzalez-Gil & Martín, 2014). For this reason, training in attention to diversity should cover areas such as children rights education, intercultural diversity appreciation, gender perspective training, emotional education, etc. (Gonzalez-Gil & Martín, 2014).

#### 2.2. State of the art

The assessment of teachers' attitudes towards attention to diversity at school has been lately considered as a subject of interest in education research. For instance, Sales, Moliner and Sanchiz (2001) developed a study about teachers' attitudes towards attention to diversity in which they designed a questionnaire following dimensions such as "actitudes y dinámica de aula", "estrategias para la atención a la diversidad" or "necesidades formativas para atender a la diversidad". This instrument showed a Cronbach's alpha of 0.82. Some years later, Azorín (2017) carried out a literature review in which she evaluated 24 questionnaires by teachers and their reliability to measure this matter from 2002 to 2014. Azorín (2017) found five categories which were presented in each instrument, apart from the sociodemographic variables that help to describe de sample:

- 1. medidas de atención a la diversidad,
- 2. actitudes hacia la atención a la diversidad,
- 3. opiniones sobre la educación inclusiva,
- 4. formación en materia de atención a la diversidad,
- 5. prácticas educativas y sociales, y
- 6. voces de las familias. (Azorín, 2017, p.1047).

These variables could help to analyze teachers' responses regarding attention to diversity in a deeper way, and to classify them for drawing more reliable conclusions about this topic. Consequently, Azorin's (2017) categories can be considered as a reliable guide to design a new instrument for obtaining data about this topic.

Bravo (2013) developed a scale for the measurement of teachers' opinions about inclusive education in Cartago, Costa Rica. This instrument was divided into three sub-scales: "Fundamentos, Condiciones y Actuaciones". The sample was composed by 614 primary teachers whose major academic training was only their teaching degree (61%), and their working experience was between 9 to 30 years. They presented favourable opinions towards inclusive education. However, they felt partially disagree when they were asked for the inclusion of students with SEN in ordinary classrooms. In contrast, the sample agreed on the fact that inclusive education helps to develop an inclusive society. Also, 56% of the sample thought that inclusive education provides more advantages than disadvantages. On the other hand, teachers pointed out that they did not have enough resources, materials, and training to ensure quality education for pupils with SEN. Finally, the sample was aware of the necessity of inclusive practices for guaranteeing attention to diversity, the reduction of the number of students in each classroom and the collaboration between teachers and specialists in this field to cover pupils' needs.

Nogales (2012) carried out a research trying to find out whether teachers' knowledge about attention to diversity could be related to their attitudes and practices on inclusive education. For this purpose, this author employed a questionnaire completed by 61 primary teachers aged between 31 to 60 years old. The sample's working experience ranged from less than 10 years to more than 25. Moreover, 21.3% of the sample recognised that they did not receive training in attention to diversity, although they admitted its importance for the development of inclusive practices and for covering pupils' needs (80.33%). Also, they agreed on the lack of training in attention to diversity they received when they studied their teaching degrees. Even though teachers knew their training limitations in this matter, 91.8% of the sample affirmed that they create personalized materials for students with SEN, and 50.82% stated that they work together with teachers specialized in SEN. On the other hand, 65.57% of the sample believed that the management team should involve themselves greater for developing inclusive attitudes and practices at school.

Sales et al., (2001), Nogales (2012) and Bravo (2013) discovered that teachers acknowledged their limitations about training in attention to diversity. For this reason, Cejudo et al. (2016) analysed the importance of the aspects which define this dimension and why teachers need to master this field. Their survey sample was composed by 181 teachers aged between 24 to 65 years old, 52 were Preschool teachers and 129 Primary teachers. Data were

gathered through the "Escala de Necesidades Formativas sobre Atención a la Diversidad" (ENFAD), which comprises two subscales related to the importance and the necessity of this type of training. As the previous studies established, Cejudo et al. (2016) confirmed that teachers are worried about their academic training in attention to diversity, emphasising this lack of training when they have to deal with the management of pupils with behavioural problems. Additionally, the sample agreed on the need of training in attention to pupils with disabilities or impairments rather than cultural diversity. Finally, Primary teachers recognised more needed training in attention to diversity than Preschool teachers.

To sum up, Sales et al. (2001) and Azorín (2017) provided the theoretical basis for the design of questionnaires which evaluate attention to diversity and inclusive education statements. Both surveys highlighted the measurement of teachers' training and their perceptions in this field because of its importance for changing the current situation about inclusive education at school. On the other hand, Bravo (2013), Nogales (2012) and Cejudo et al. (2016) pointed out that the participants in their samples felt worried about their training in attention to diversity. They recognised that if they would have more knowledge about this matter, they felt more comfortable facing these situations. Additionally, Cejudo et al. (2016) identified that teachers link attention to diversity to pupils with SEN. Thus, unfortunately, there is a long road ahead for modifying teachers' perceptions about inclusive education and attention to diversity.

To conclude, attention to diversity is related to providing every pupil, with disabilities and without them, with the needed support. This is a process that should be understood as the adaptation of the schools to the pupils' needs to guarantee a personalized education for developing children's capabilities at their maximum. However, if the educative community still confuses inclusion with integration, attention to diversity cannot be reached. Indeed, it would be understood as a way of pupils' classification depending on their capabilities, which is not the aim of attention to diversity. This last idea has been used as the basis for this survey: to comprehend teachers' responses regarding attention to diversity and inclusive education from different educative perspectives, such as their training or their teaching strategies in class.

#### 3. Research design

Once the theoretical framework has been established, the research design will be explained, presenting the objectives and the hypotheses in which this survey is substantiated, the design of the instrument (a questionnaire) and the procedure to obtain data.

### 3.1. Objectives and hypotheses

This survey aims to shed light on Preschool and Primary teachers' opinions and beliefs about attention to diversity at school. This goal will be reached following a quantitative methodology, based on a "descriptive study of populations through survey research with probability sampling" (Montero & León, 2007, p.850). For that, we will apply a questionnaire and use an ex post facto approach, since this study pursues the goal of describing a particular population of teachers without previous hypotheses about this topic (Montero & Leon, 2007). Nevertheless, the following research questions will lead this study and will be the focus of discussion:

- Could there be significative differences in teachers' responses to attention to diversity and inclusive education depending on their sociodemographic characteristics (genre, age, working experience, etc.) and their teaching training?
- 2. What type of opinions about attention to diversity can be found among Preschool and Primary teachers? Could Preschool teachers be more aware of inclusive education than Primary teachers or vice versa?

The results obtained after the analysis of the teachers' responses on this matter, along with the subsequent discussion, could help to understand in a deeper way teachers' perspective when they face attention to diversity in the classroom. Also, these outcomes could elucidate, following Echeíta (2005), that education policy which surrounds inclusive education not only depends on the administrations, but also on teaching practices in class and teachers' beliefs on this topic.

#### 3.2. Methodology

As it has been mentioned, the aim of the present survey required the design of a questionnaire based, on the one hand, on several sociodemographic variables to describe the sample and, on the other, on four educational dimensions in relation with attention to diversity: teacher training in attention to diversity, characteristics of teaching planning, applied methodology in class, and opinions and beliefs about attention to diversity following the previous surveys of Sales et al. (2001) and Azorín (2017).

These authors carried out several studies focused on the analysis and the design of questionnaires which measure teachers' responses to attention to diversity regarding different educative aspects. Moreover, they agreed on the importance of knowing teachers'

strategies and conceptions about inclusive education to understand the school reality. Consequently, reliable questionnaires based on this matter could help to implement new educational research lines, which could allow to build up better learning spaces for everyone (Azorín, 2017).

Educational researches have three main purposes: settling new theories, creating efficient pedagogies and investigating a phenomenon which affects educative contexts (Nemoto & Beglar, 2014). Following the latter idea, Fernández Nuñez (2007) explained that questionnaires help to obtain information when the researcher wants to understand a social phenomenon, its causes, and people's opinion about it (Martinez, 2002, as cited in Fernández Nuñez, 2007). Also, this author clarified that questionnaires must include sociodemographic questions in order to describe the sample and to deeply analyse participants' perspectives about the issue.

A questionnaire can be designed creating open or closed questions. Closed questions include delimitated answers ranging from dichotomic alternatives to multiple choice options. This kind of tools requires less effort than open questions, because the participants do not need to write their thoughts (Fernández Nuñez, 2007). For these reasons, the designed instrument for this survey is composed by closed questions, that combines dichotomic alternatives with multiple choice options.

Following Nemoto and Beglar (2014), the starting point for designing a quantitative tool must be focused on the comprehension of the target goal and the research on academic literature which supports the topic. In this case, the main aim of this study deals with teachers' opinions about attention to diversity and their subsequent analysis. The provided literature in the theoretical framework anticipates the results that could be found along this survey. This relationship between the survey's construct and the academic literature links the hypotheses and the items that must appear in the questionnaire (Nemoto & Beglar, 2014).

The questionnaire for this study is composed of 7 sociodemographic variables and 21 items divided into the four mentioned dimensions. These items could be answered through a 6-point Likert scale. "Likert scale is made up of a limited range of possible responses on a continuum such as *Disagree/Agree.*" (Nemoto & Beglar, 2014, p.5). It can be defined as an additive system, organised in an ordinal way which provides the participants' total score in a specific dimension or in the whole questionnaire. This final score can be used as a tool for interpreting the sample's beliefs about the target goal (Fabila, Minami & Izquierdo, 2013). Furthermore,

the number of categories in these scales should range from 2 to 7 alternatives, being recommended even numbers because neutral alternatives could disappear; thus, the participants will need to choose between favourable or unfavourable positions (Hernández, Fernández & Baptista, 2007, as cited in Fabila et al., 2013). For reaching the survey's goal, teachers must take a clear stance about attention to diversity and inclusive education. Then, even number scales are the proper ones for this purpose. On the other hand, four points scales are recommended for young participants or people who present difficulties for differentiate between more than two categories. However, 6 or 7-point Likert scales are the best options for individuals who have higher educational levels (Hernández, Fernández & Baptista, 2007; Nemoto & Beglar, 2014). This survey is based on the analysis of teachers' opinions; consequently, the participants have, at least, a university degree. For this reason, 6-point Likert scales will be found along the questionnaire, in which the possible responses range between "Totally disagree/Totally agree" and "Never/Always".

Furthermore, chosen scales and the design of the items will determine the instrument's validity and reliability. Also, they could help to control possible sampling bias and to improve the questionnaire for ensuring better results in following studies (Matín Arribas, 2004). Tool level of reliability measures how accurate the questionnaire is for evaluating the sample's opinions. There are several statistical methods for this purpose, but, in this case, Cronbach' alfa reliability was chosen. Scores of this method goes between 0 and 1, considering proper internal consistence ranging from 0.7 to 0.95 (Martín Arribas, 2004; Tavakol & Dennick, 2011). Lower values "could appear due to a low number of questions, poor inter-relatedness between items or heterogeneous constructs" (Tavakol & Dennick, 2011, p.54). In this case, the provided questionnaire got a Conbach's alfa value of .561. This fact could be explained because of the use of heterogeneous dimensions or because each dimension does not have enough number of test items. In our case, the dimension that obtained a lower Cronbach's alfa value was "Applied methodology in class", which decreased the reliability of the whole survey. Therefore, we must proceed with caution analysing the results from this dimension and it will be taken as a limitation for further research.

Finally, it has to be mentioned that the design of this questionnaire is not the main purpose of the survey. It was created for collecting data which helps to analyse teachers' perceptions, opinions, and beliefs about attention to diversity.

#### 3.3. Procedure

Once the questionnaire was ready, an e-mail cover letter was sent to the management team of 120 schools in the autonomous community of Madrid asking for their participation in this survey through an online questionnaire. Those schools were randomly selected, trying to keep a balance between public, charter and private schools. The questionnaire link could be found on the cover letter, together with a complete explanation about the aim and traits of the survey. After a month, we got some answers, most of them public schools.

The teachers' answers were firstly collected into a spreadsheet, from which a database was designed using SPSS statistics software<sup>1</sup> for subsequent analysis. The database design took into account the different types of variables and their categorization in order to obtain reliable results.

#### 4. Results and discussion

This section will be divided into three parts: after the sample description, the second one will be focused on the explanation of the dependent variables using descriptive statistics. After that, inferential statistics will be applied in order to provide answers for the research questions, comparing results with the academic literature on this topic.

#### 4.1. Sample description

This study aims to analyse teachers' view about attention to diversity and how they organise their teaching practise for covering pupils' needs at school. For this purpose, 103 teachers from Madrid answered a questionnaire in which these topics were included. The research sample is composed by 91 women (88.3%) and 12 men (11.7%). This remarkable difference between male and female participation can be explained because of the number of teachers working at state, charter and private schools in Spain, and specifically in Madrid. Along the academic year 2017/2018, in the autonomous community of Madrid, from a total of 51,712 teachers, 44,022 were female teachers (85.1%) and 7,690 male teachers (14.9%) (Ministerio de Educación y Formación Profesional, 2019). Consequently, the sample of this survey represents the teachers' population regarding genre distribution in this community.

<sup>&</sup>lt;sup>1</sup> https://www.ibm.com/es-es/analytics/spss-statistics-software

Moreover, the majority of the participants are between 31 and 40 years old (n= 31; 30.1%), followed by the "41-50 years old" group (n= 28; 27.2%). Also, 22 participants are younger or equal to 30 years old, and another 22 teachers are older than 51 years old (Figure 1).

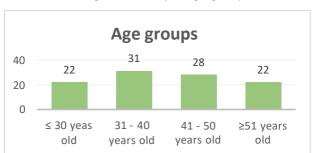


Figure 1. Sample age groups

The participants were divided into two university degrees in relation with their education: Preschool Education and Primary Education. However, the academic training of some of these teachers is wider than these degrees. For analysing the participants' complete academic training, they had answered some questions related to their teaching specialization and whether they had other university studies apart from their teaching degree. Preschool teachers comprise the 32% of the sample (n=33) and 70 participants work as Primary Education teachers (68%). Among them, 19 teachers are specialist in both educational stages, because they hold both teaching degrees.

Furthermore, the sample can be studied crossing age groups and academic training variables. Following this criterion, 64.1% of the teachers do not have more university studies apart from their educational degree. In contrast, the youngest age group (n=22) shows the highest percentage in terms of university training (14 out of 22; 63.6%). Additionally, more than half of the sample, which goes between 31-40 years old and 41-50 years old, do not have more academic training rather than their teaching degrees (Table 1).

OTHER ACADEMIC TRAINING Master PD Other 2nd Master + Master Total No Master + 2nd + PD degrees ED other ED degrees ≤ 30 y/o 7 22 2 0 1 1 1 31 - 40 y/o 22 5 2 0 2 0 0 0 31 AGE **GROUP** 41 - 50 y/o 23 2 1 1 0 0 0 28 1 + 51 y/o 13 0 2 5 0 2 0 0 22 **Total** 66 13 8 7 4 2 2 1 103

**Table 1.** Teachers' university training.

Note: PD= Pedagogic degree; ED= Educational degree.

If the teaching specialization criterion is considered for describing the participants of this survey (Table 2), similar results to in the previous table can be observed, because 42.7% of the sample do not have a specialization. Additionally, and in an overall view, the most experienced teachers are the ones who did not specialised themselves in any subject when they finished their degrees. Moreover, "English" is the most common specialization (19.4%). This figure contrasts with the one related to special education areas, which show less impact in the sample (n=12).

**Table 2.** Teaching specialization following an age group criterion.

			TEACHING SPECIALIZATION									
		No	TP	HST	English	PE	Music	Preschool	Primary	French	TP- HST	Total
	≤ 30 y/o	5	4	0	9	1	1	1	1	0	0	22
AGE	31 - 40 y/o	15	0	2	4	0	4	2	3	0	1	31
GROUP	41 - 50 y/o	13	1	0	4	2	3	4	1	0	0	28
	+ 51 y/o	11	4	0	3	0	0	2	0	2	0	22
	Total	44	9	2	20	3	8	9	5	2	1	103

*Note:* TP= Therapeutic pedagogy; HST= Hearing and speech therapy; PE= Physical Education; TP-HST= Therapeutic pedagogy and Hearing and speech therapy.

On the other hand, the participants were asked for their working experience as teachers. They could choose between 8 intervals, which ranged from 5 to 5 years. The most repeated one was "1-5 yeas" (n=25), although most of the teachers in this sample are between 31 to 40 years old. It would have been expected that the sample working experience was longer than one to five years, but 7 teachers out of 31 (22.5%), between 31 to 40 years old, have been working as teachers just for this short period of time (Table 3). Anyway, the figures distribution is coherent in general terms, as it increases as the participants' age does.

**Table 3**. Participants' working experience crossing with Age group variable.

			YEARS OF WORKING EXPERIENCE							
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	Total
	≤ 30 y/o	18	4	0	0	0	0	0	0	22
AGE	31 - 40 y/o	7	8	15	0	1	0	0	0	31
GROUP	41 - 50 y/o	0	2	6	13	5	2	0	0	28
	+ 51 y/o	0	0	0	3	3	9	6	1	22
	Total	25	14	21	16	9	11	6	1	103

Finally, although the questionnaire was sent to state, charter, and private schools in a similar proportion, we received more answers from teachers who work at the first type of centre (Table 4). For this reason, the sample is not representative and the variable "type of school" has not been used for inferential analysis.

**Table 4.** Participants' school types

SCH	OOL CENTRES	Frequency	Percentage
	State school	94	91.3
TVDEC	Charter school	7	6.8
TYPES	Private school	2	1.9
	Total	103	100.0

### 4.2. Dependent variables

Participants were given a battery of questions divided into four dimensions in order to know their conceptions about different educational aspects that ranged from their academic training to their view of attention to diversity and special education needs. These dimensions are the following: "Training in attention to diversity", "Characteristics of teachers' teaching planning", "Applied methodology in class to cater attention to diversity", and "Teachers' view of attention to diversity".

## 4.2.1. Training in attention to diversity

Teachers were asked about some aspects in relation with their training in attention to diversity and how they have felt when they had to face pupils who presented difficulties (Table 5).

**Table 5.** Descriptive statistics for *Training in attention to diversity* 

	<i>y</i>			-/	
	N	Min	Max	Mean	Std.
		IVIIII	IVIUX	ivican	Dev.
1. The academic training that I received in special	103	0	5	3,68	1,214
education needs at university was enough.					
2. The school I work at does not provide me with	103	0	5	2,02	1,421
training in attention to diversity.					
3. I have had pupils with special education needs I	103	1	5	3,40	1,106
could not help due to lack of training.					
4. I believe my knowledge of attention to diversity	103	0	5	4,08	,997
was greater, I could handle pupils' needs better.					
5. I need more training in attention to diversity to	103	0	5	3,61	,910
meet my pupils' needs.					
	ı				

The participants agreed on Item 1, related to the lack of training in attention to diversity while they were studying their teaching degree, placing their opinions between "partially disagree" and "disagree" —being "totally disagree" the maximum (5 points) and "totally agree" the minimum (0 points). This statement could be linked to their beliefs about how they act when they have pupils with special education needs in class. They feel that if they had more knowledge about this topic, they would be able to cover pupils' needs better, and they were not felling lost with some students' educational interventions along their working experience (Items 3 and 4).

Moreover, the sample self-assessed their knowledge in attention to diversity in Item 5 and agreed on their limitations in relation with this issue. This participants' conclusion could be connected to their feelings about the insufficient training in attention to diversity provided by the schools where they work at —taking "totally agree" as the minimum (0 points) for interpreting both statements. Furthermore, in Item 2, teachers were asked if the schools where they work at arrange training courses in attention to diversity. However, taking "totally disagree" as the maximum (5 points), the sample confirms that they do not feel comfortable with the implication of the school management in this field.

## 4.2.2. Characteristics of teachers' teaching planning

The participants fulfilled some questions to analyse how they organise their teaching practice in different moments along the academic course (Table 6). They classified their answers using

a frequency scale which ranges from "never" to "always", where never corresponds to the minimum (0 points) and always to the maximum (5 points).

Most of them stated that they always schedule their teaching practice along different stages of the course, with some exceptions, who established that they usually (not always) do these tasks. Moreover, they answered that they include specific measures for attention to diversity in their teaching schedule and they adapt themselves and their lesson plans to the pupils' needs while they come out (Item 10). It is noteworthy that most of them schedule their teaching at all moments, that is, at the beginning of the academic year, at the beginning of every teaching unit and weekly (Items 6, 7 and 8). This can be interpreted as a good teaching practice, as they adapt their lessons and materials as their pupils' needs come up (Items 10 and 11). However, it might also be a sign of lack of expertise, related to the results in the previous dimension, where teachers said that they are aware of their knowledge limitations in attention to diversity, but they try to adapt themselves to the context, including new resources when they observe new pupils' needs. Indeed, being a question of lack of expertise or not, this proves that attending to diversity means a huge workload, as designing a specific section in your syllabus for attention to diversity (Item 9) does not mean that you can do it in advance without constant changes to adapt lessons to your pupils' specific needs.

<b>Table 6.</b> Descriptive statistics for characte	ristics c	of teache	ers' plan	ning	
	N	Min	Max	Mean	Std.
	IN	IVIIII	IVIAX	ivicali	Dev.
6. I schedule my teaching syllabus at the beginning of	103	0	5	4,61	,972
the academic year.					
7. I schedule my teaching at the beginning of every	103	1	5	4,60	,844
didactic unit.					
8. I schedule my teaching weekly.	103	1	5	4,67	,759
9. I design a specific section in my syllabus for	103	0	5	4,06	1,349
attention to diversity.					
10. I reorganise my teaching, adapting me to the	103	2	5	4,54	,697
context while observing my pupils' needs.					
11. I schedule daily specific activities for my pupils	103	1	5	4,08	1,064
with special education needs who are not able to					
follow the rhythm class.					

### 4.2.3. Applied methodology in class to cater attention to diversity

This dimension is composed of four variables which were focused on the resources and techniques that teachers use to work with pupils with special education needs (Table 7). The participants could choose all the options that they considered, from only one to the four of them. The results were codified by categorising the selected options with "yes" and the unselected ones with "no" (being "yes" 1 and "no" 0).

The more remarkable results are related to the use of textbooks for teaching pupils with special education needs, being the less chosen option (Item 13). This fact could be considered as a conflictive one due to the obtained results in the dimension of training in attention to diversity. Following the provided answers in Table 7, teachers feel prepared for designing specific materials and for teaching all pupils' academic levels at the same time. However, if teachers' reflections about this dimension were compared with the ones in the first dimension, contradicted statements would be established because of their assumed lack of training in this matter, especially regarding Item 15.

Table 7. Descriptive statistics for teachers' methodology to cover pupils' needs							
	N	Std.					
		Min	Max	Mean	Dev.		
12. I design extra material for pupils with special	103	0	1	,83	,382		
education needs.							
13. I follow the textbook that they use which is	103	0	1	,25	,437		
adapted for their level.							
14. I try to find common points for pupils without	103	0	1	,65	,479		
difficulties and those with special needs.							
15. I know teaching strategies for including pupils	103	0	1	,64	,482		
with special needs in the regular class pace.							

### 4.2.4. Teachers' view of attention to diversity

In this case, six variables were created for measuring participants' view about attention to diversity. The most notable characteristic of this dimension is the diverse teachers' opinions about how they interpret inclusive education depending on the situation (Table 8).

They are between "agree" and "strongly agree" regarding the importance of inclusive education for ensuring social integration for people with disabilities (Item 16). Moreover,

participants feel similar agreement on the necessity of the implication of the whole teaching staff for guaranteeing a quality education for every pupil, with special education needs and without them (Item 18). Another point of arrangement is observed in Item 20, where they were asked about the importance of the families' involvement in working on inclusive education at school, which they consider as essential.

Nevertheless, contrasting opinions with these previous ideas are found when teachers expressed their beliefs about who and how pupils with SEN should be taught and cared for (Item 19). Being 0 "strongly agree" and 5 "strongly disagree", the sample is between partially agree and partially disagree on giving the responsibility of including pupils with SEN at school to teachers with this specialization and to the management team (Item 17). Additionally, similar results in Item 21 can be observed about their conceptions of how teachers without SEN specialization should work in class with these students. Therefore, data in Table 8 shows that, although most teachers consider inclusive education as essential and as a duty of all the teaching staff, they exhibit certain doubts about who are the ones responsible for this task when they are given the option of considering that SEN teachers should carried out this job.

Table 8. Descriptive statistics for attention to diversity teachers' view						
	N	Min	Max	Mean	Std. Dev.	
16. Inclusive education fosters social integration for	103	0	5	4,18	1,082	
pupils with disabilities.						
17. Special education needs teachers and the	103	0	5	2,82	1,384	
management team are the ones who should include						
pupils with special needs in ordinary school.						
18. The whole teaching staff and the management team	103	1	5	4,43	,836	
should include pupils with special education needs in						
ordinary schools.						
19. Pupils with special education needs should be	103	0	5	2,29	1,625	
taught and cared for by special education teachers all						
the time.						
20. Families should work together with the school in	103	2	5	4,60	,647	
order to facilitate the inclusion of pupils with special						
education needs in school.						

21. Teachers should work with students without difficulties and pupils with special education needs at the same time and in the same way.

103 0 5 3,07 1,635

To finish this section, after analysing the teachers' responses to the questionnaire from descriptive statistics, we can conclude that the participants in this survey coincide on recognising a lack of training in attention to diversity. This fact may lead to a constant reprogramming of their teaching to adapt lessons and materials to their pupils' needs. Most of them declared that they tend to design especial activities for their students, instead of overusing the textbook, despite their feeling of shortage of training in this field. Finally, they display hesitation when asked about the responsibility of attending pupils with SEN.

#### 4.3. Statistical inference

Attention to diversity could be considered as the basis for ensuring a quality learning processes at every educational stage. The administrations, together with school projects, the management teams and teachers are responsible for achieving this objective. For this reason, Preschool and Primary teachers' perspectives about this topic have an essential importance if we want to know what is happening in the classrooms regarding inclusive education. Some conclusions are drawn from the questionnaire responses so far. However, applying inferential statistics will help to answer the research questions established at the beginning of this survey, which are:

- Could there be significative differences in teachers' responses to attention to diversity and inclusive education depending on their sociodemographic characteristics (genre, age, working experience, etc.) and their teaching training?
- 2. What type of opinions about attention to diversity can be found among Preschool and Primary teachers? Could Preschool teachers be more aware of inclusive education than Primary teachers or vice versa?

Although the research sample is larger than 30 participants, the Chi-square test produced fewer values than 5 in every variable. Therefore, goodness-of-fit test Kolmogorov-Smirnov was used to determine if the sample was normally distributed along the questionnaire dimensions. In this case, the four dimensions scored p < .05. Consequently, the sample is not normally distributed, and non- parametric statistical tests must be used. This analysis will be carried out through the Kruskal-Wallis H test for comparing more than two gropus or

subsamples and through the Man-Whitney *U* test for comparing only two groups or independent samples.

### 4.3.1. Attention to diversity conceptions depending on the teachers' genre

The first hypothesis is settled on genre and its relationship with the conception of attention to diversity. The research sample is composed by 91 females and 12 males. The Kruskal-Wallis H tests did not show significative results in any dimension; however, the dimension "Teachers' view of attention to diversity" scored p < .01 (an asymptotic distribution value of .083). After that, the genre variable was crossed with this dimension using the Man-Whitney U test, which confirms that there were range differences in Items 17 (p=.013), 19 (p=.004) and 20 (p=.049). Item 17 maintains that teachers specialized in special education and the management team are the ones who should include pupils with SEN in ordinary classrooms. Male teachers showed dissimilar opinions because of the dispersion of the data in the average range in this variable (AR=71.54), while female teachers' answers got an AR=49.42. Moreover, Item 19 argues that pupils with SEN should be taught by teachers specialized in SEN. Similar results are obtained if we compare them with the previous item. Male teachers got an AR=74.75, while female teachers demonstrated larger agreement on this topic (AR=49.00). Finally, Item 20 specifies that families should work together with the school to facilitate the inclusion of pupils with SEN. In this case, male teachers are the ones with the lowest AR. Bravo (2013) pointed out similar results, because her sample showed that teachers partially disagreed when they were asked about the inclusion of pupils with SEN in ordinary classrooms. Consequently, the H<sub>1</sub> is accepted for the dimension "Teachers' view of attention to diversity", which specifies that there are differences between males and females when they cater to attention to diversity, specifically for the variables in relation with the treatment of pupils with SEN at school.

### 4.3.2. Teachers' age influences their understanding of attention to diversity

The Kruskal-Wallis H test was applied in order to verify if the age could be a defining variable for the understanding of attention to diversity in the four dimensions. Nevertheless, H test produced no statistically significant difference between the tested groups except for the dimension "Characteristics of their teaching planning", with p < .01 (p= .059). The " $\leq$  30 years old" group shows significative average range differences (ARD) when results were compared with the other groups'. The age group " $\leq$  30 years old" produced an ARD= 44.99, while the others were between values 51 and 55. Moreover, the Kruskal-Wallis H test was used to specify significative differences between the "age group" variable and the items which define this

dimension. These differences were found in Items 6 (p=.001) and 7 (p=.042). The first one aimed to know if teachers organise their teaching at the beginning of the academic year. The latter was related to the frequency in which they schedule each didactic unit. Both cases confirm that the youngest teachers have the fewest ARD, thus, they schedule their teaching practices more than the rest of the groups. Arjona Fernández (2010) pointed out that teaching planning is essential for covering pupils' needs. Also, Roselló Ramón (2010) established that this teaching practice should be considered as a reflection process for understanding the context of the class in order to implement personalized teaching strategies. It can be possible that younger teachers are more aware of these issues because of their university degrees are more up-to-date regarding teaching training. Also, as it was specified in Table 1, the youngest group has more teaching training than teachers who are aged between 31 to more than 51. It is possible that this extra training can interfere in the way in which they organise their teaching and they can feel more aware about the importance of scheduling their practices in class. Consequently, the H1 could be assumed if we focused on the dimension "Characteristics of their teaching planning".

**4.3.3.** Working experience provides teachers with different conceptions of attention to diversity It could be understood that the more experienced teachers are, the better and earlier pupils' needs will be detected and covered. Thus, it was expected that teachers who have been working from 10 to more than 30 years presented dissimilar results in the four dimensions than less experienced teachers. However, the eight groups created for classifying their working experience scored similar ARD values. Also, the Kruskal-Wallis H test produced p > .05 for asymptotic distributions in the four dimensions. Hence the H<sub>0</sub> must be assumed, considering that, according to our sample, the working experience is not a factor affecting conceptions of attention to diversity.

# 4.3.4. The higher the teachers' educational level, the better conception of attention to diversity

Diverse authors such as Sales et al. (2001), Bravo (2013) or Azorín (2017) agreed on the importance of training in attention to diversity for catering pupils' needs. For this reason, the  $H_1$  of this section is related to the teachers' educational level. The Kruskal-Wallis test verified that there were significative differences between the variable "academic training" and the dimensions "Attention to diversity training", with p < .05, and "Teachers' view of attention to diversity", with p < .01.

The Kruskal Wallis test was used again for specifying which items of both dimensions provided the significative values. The first one provided significance levels in all items (Table 9), and teachers who had both education degrees (Preschool and Primary) showed the fewer ARD values. Also, Item 4, which is based on teachers' self-evaluation about their performance with pupils with SEN, scores p=.038. Additionally, the group of teachers with a higher ARD corresponds with the ones who studied a pedagogic degree. This can be explained because they are more prepared in this field and they provide several opinions about this dimension. Moreover, Item 5 is based on self-evaluation regarding training in attention to diversity (p=.032), and the ones who agreed the most on this statement were teachers who had studied both teaching degrees (ARD=36.00). In this case, teachers with pedagogic degrees had the highest ARD again (ARD=68.13), which could be explained using the same argument as in the previous case.

**Table 9.** Kruskal-Wallis *H* test for the variable "Other academic training" and the dimension "Attention to diversity training"

	Item 1	Item 2	Item 3	Item 4	Item 5
Chi-square	13.839	15.280	15.732	14.841	15.356
Gl	7	7	7	7	7
Asymptotic distribution	.054	.033	.028	.038	.032

In contrast, the dimension "Teachers' view of attention to diversity" only produced significative results for p < .01 in Item 16 (p=.055), which specifies that inclusive education fosters social integration for pupils with SEN.

Finally, the H<sub>1</sub> can be accepted because teachers who only hold their teaching degree (Preschool or Primary, without any other extra training) present higher ARD values than those with a wider training. Additionally, teachers with both education degrees (Preschool and Primary) are the ones who stand out in this dimension.

# 4.3.5. Teaching specialization influences the way in which teachers comprehend attention to diversity

Following a similar proposal to the previous hypothesis, the more knowledge about attention to diversity teachers have, the more personalized teaching they will ensure. Thus, it is supposed that teachers specialized in TP or HST will demonstrate different results than

teachers specialized in Music or English. Firstly, the Kruskal-Wallis *H* test confirmed that the variable "teaching specialization" correlates significantly with the dimension "Training in attention to diversity" (p=.015). Even though the three other dimensions do not correlate, they offered remarkable results which will be highlighted along this section.

When the Kruskal-Wallis H test was applied to this dimension crossed with the variable "teaching specialization", Item 1, and Item 3 produced significative differences for p < .01. TP teachers were the ones with a fewer ARD (ARD=16.39) when they were asked about their received training about attention to diversity. This fact makes sense because they are the responsible for teaching pupils with SEN at ordinary schools. On the other hand, Music teachers agreed on their necessity of increasing their training in attention to diversity (ARD=38.88), followed by French teachers (ARD=34.75) and English teachers (ARD=29.85).

Although the dimension "Teachers' view of attention to diversity" does not present significative differences, there are some statements which are worth analysing. For example, PE teachers are the ones who have a wider view about attention to diversity. It could be explained because this educative field has been traditionally more aware of physical disabilities, having to include in their teachers' training strategies to cater to every student's needs. On the other hand, foreign language specialists have shown the highest ARD in every dimension. Hence, it can be considered that teachers received training depending on their specialization, thus, inclusive education facts seem to disappear from some academic curricula. In the case of foreign language teachers, attention to diversity means a double effort: not only they must know how to teach in an inclusive way, but also they must do it using a language different from the students' mother tongue. This entails not only overcoming content comprehension problems, but also communication difficulties.

After having explained the obtained results, the H<sub>1</sub> can be assumed because TP teachers are more aware of attention to diversity practices than other teachers.

# 4.3.6. Could Preschool teachers be more aware of inclusive education than Primary teachers or vice versa?

Finally, the pupils' educational stage (Preschool or Primary) could influence teachers' perceptions of attention to diversity. For this reason, the Kruskal-Wallis *H* test was used for discovering if these possible differences came out in the research sample. In this case, there

were significative differences in the dimension "Teachers' view of attention to diversity" (p=0.37). Thus, the Man-Whitney test was applied to verify where the differences were. Item 18 scored p=.058 and Preschool teachers considered, in a higher degree than Primary teachers, that families are key factors for working under the umbrella of inclusion.

On the other hand, Cejudo et al. (2016) pointed out that Primary teachers recognised more needed training in attention to diversity than Preschool teachers. Although the dimension "Attention to diversity training" did not score p < .05 values, the Man-Whitney U test was applied to verify Cejudo et al.'s conclusions. However, Preschool and Primary teachers in the present sample show similar perceptions about their training in attention to diversity, being agree on the lack of it along their university stage. Therefore, the H0 must be assumed, because both types of teachers produced similar results when they were asked for their perspectives in attention to diversity.

#### 5. Conclusions

This study examined Preschool and Primary teachers' responses to attention to diversity along different educational contexts through a questionnaire designed for this purpose in order to analyse the current situation of attention to diversity at schools.

After having analysed the results and compared them with similar previous studies, our findings suggest that specific training in this field and extra training, apart from their university degrees, are key factors to cater attention to diversity in class. However, most teachers of our sample only hold their degrees in Preschool and Primary Education, being aware about this reality, and recognising their limitations and the lack of training in attention to diversity along their university degrees. On the other hand, youngest teachers are the ones who hold extra degrees or qualification to complement their education degree. This group of teachers seems to be more conscious on attention to diversity trends, specially de ones who had studied pedagogic degrees.

Moreover, each teaching specialisation implies a different conception of attention to diversity. Although, the majority of the sample does not have teaching specialization, and a higher percentage of teachers who specialized themselves in any subject was in English as a foreign language, TP teachers displayed the most positive results about this matter, which makes sense due to their functions in ordinary schools. In contrast, foreign language teachers are the ones who have obtained the worst results in every dimension of the questionnaire. It

could be explained because their academic training was focused on teaching a foreign language, and due to the double effort they should do in order to teach a language which differs from the pupils' native one, together with attending pupils' needs at the same time. This problem could be intensified in bilingual contexts, where teachers have to adapt the content and the language for pupils with special education needs without extra training in this field. These findings could demonstrate that teacher training in attention to diversity depends on the established academic curricula for each specialization. However, this field should be compulsory in every teaching area to guarantee quality education for every child.

Another worthy remarkable aspect is related to the teaching practice organization. Teachers recognise that they constantly reprogram their schedule to adapt their teaching to their students' needs. This fact can be positive because they are observing their pupils regularly or because, due to their lack of training in attention to diversity, they try new formulas for covering pupils' needs. This idea, could be linked with teachers' responses when they were asked about the use of textbooks to teach pupils with SEN. They stated that they tend to design special activities for them rather than to use these standardized materials.

Additionally, teachers' genre could affect attention to diversity regarding the dimension "Teachers' view of attention to diversity", being male teachers less conscious than female teachers. Nevertheless, female teachers and male teachers agree on their lack of training in this matter, and they act in a similar way when they schedule their teaching or when they apply different methodologies in order to attend pupils' needs. However, these aspects obtained different results when they were crossed with the variables "Teachers' age" and "Working experience". Youngest teachers are the ones who are most aware of the importance of including attention to diversity sections in their teaching plans. On the contrary, according to our sample, the years of working experience has no influence on attention to diversity.

Finally, there seems to be no significative differences between Preschool and Primary teachers' conceptions and management of attention to diversity following the results provided by our sample.

Lastly, the limitations and future implications of this survey must be acknowledged. First, the sample's size is not representative for the teachers' population in the autonomous community of Madrid. Along the academic year 2017/2018, 51,712 teachers were working at public schools and our sample is made up of 103 teachers. Secondly, socio-educational

research should be approached through several techniques, being the most common ones questionnaires, interviews and observation (Rodríguez Gómez & Valldeoriola Roquet, 2009). However, due to time limitations we only collected data from a questionnaire and a pilot test could not be done. Finally, although the questionnaire was designed trying to reduce social desirability bias, the topic of this survey invites to answer in an ethical way instead of providing real opinions. After that, future research could be carried out introducing the three techniques for collecting data, including not only teachers, but also the management team and children in order to provide with a wider view of attention to diversity from different contexts and experiences. Ultimately, the questionnaire must be improved and tested before collecting the data for the next survey in order to ensure its reliability.

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### Annexes

### **CUESTIONARIO**

# ✓ Datos sociodemográficos

<ol> <li>Indique su sexo:</li> </ol>
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- o Hombre
- o Mujer
- 2. Indique el rango de edad al que pertenece
  - o De 20 a 30 años
  - o De 31 a 40 años
  - o De 41 a 50 años
  - o De 51 a 60 años
  - o Más de 60 años
- 3. Indique su titulación universitaria:
  - o Maestro/a de Educación Infantil
  - o Maestro/a de Educación Primaria
- 4. Especifique su especialidad si procede:

5. Indique, si las tuviese, otras titulaciones superiores después de haber obtenido su título universitari	o
(cursos de especialización, máster o similar):	

6.	Indique el	número	de años	de	experiencia	laboral	docent	e:

## √ Formación recibida

7. Indique su grado de acuerdo o desacuerdo en las siguientes afirmaciones

	Muy en desacuerdo	En desacuerdo	Indeciso	Parcialment e de acuerdo	De acuerdo	Muy de acuerdo
La formación que recibí en la universidad acerca de cómo trabajar con alumnos que presentan necesidades educativas especiales fue suficiente.						
El centro en el que trabajo me proporciona cursos o seminarios para ampliar mi formación en atención a la diversidad.						
A lo largo de mi experiencia como docente, me he encontrado con casos de alumnado con necesidades educativas especiales que no he sabido gestionar adecuadamente por falta de formación.						
Creo que si tuviese un mayor conocimiento sobre necesidades educativas especiales podría atender mucho mejor a la diversidad dentro del aula.						
Considero que me hace falta formación en el ámbito de la atención a la diversidad para cubrir las necesidades de mis alumnos por completo.						

## ✓ Forma de programar

8. Indique con qué frecuencia realiza las siguientes actividades docentes:

6. Indique con que necuencia realiza las signientes actividades docentes.							
	Nunca	Casi nunca	En alguna ocasión	A menudo	Casi siempre	Siempre	
Realizo la programación anual al principio de curso.							
Programo mi actividad docente al principio y de cada unidad didáctica o tema nuevo.							
Programo mi actividad docente semanalmente.							
Incluyo un apartado específico de atención a la diversidad en mi programación anual.							
Voy adaptando mi actividad docente según voy observando las necesidades de mis alumnos.							
Programo actividades específicas diarias para mis alumnos de necesidades educativas especiales que no pueden seguir el ritmo general de la clase.							

# ✓ Metodologías

- 9. Seleccione todas las opciones que representen su forma de actuar cuando tiene alumnos con necesidades educativas especiales en el aula
  - Elaboro material extra para que trabajen dentro del aula.
  - Me guío por libro de texto que corresponda a su nivel curricular.
  - Intento programar para que el temario de los niños con desfase curricular y los niños que no presentan dificultades coincida en algún punto.
  - Conozco estrategias educativas para incluir a los alumnos con necesidades educativas especiales en el ritmo normal de la clase.

# $\checkmark$ Opiniones sobre la atención a la diversidad

10. Indique su grado de acuerdo o desacuerdo con las siguientes afirmaciones:

10. Indique su grado de acuerdo o desacuerdo con las siguientes afirmaciones:						
	Muy en desacuerdo	En desacuerdo	Indeciso	Parcialment e de acuerdo	De acuerdo	Muy de acuerdo
Trabajar la inclusión educativa en las aulas favorece la integración social de alumnos con discapacidad.						
Los maestros y maestras especialistas en necesidades educativas junto con el equipo directivo son los responsables de integrar a los alumnos ACNEAE en centros ordinarios.						
Todo el equipo docente junto con el equipo directivo son los responsables de integrar a los alumnos ACNEAE en centros ordinarios.						
El alumnado con necesidades educativas especiales debería ser atendido a tiempo completo por maestros y maestras especializados.						
Las familias deben trabajar en conjunto con el colegio para favorecer la inclusión del alumnado con necesidades educativas especiales en el centro escolar.						
Los maestros y maestras deberían atender al mismo tiempo y de igual manera las necesidades de los alumnos con dificultades y las de los						