

Initial training and access to the profession: teachers' demands¹

Formación inicial y acceso a la profesión: qué demandan los docentes

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Abstract

Initial teacher education programs are under great pressure because they are expected to train teachers who are highly prepared for the complexity that their professional practice requires. However, we know that the teaching profession is extremely complex, and its professional development must be progressive. In this sense, initial training is an essential element. For this reason, this paper analyzes the perceptions about initial teacher education and access to the profession of active teachers of compulsory education in schools in Spain. The research followed an *ex post facto* design. An *ad hoc* questionnaire has been designed with a robust validation in four phases, applied to 1148 teachers. The analyses include both descriptive (percentage and median) and nonparametric inferential statistics (U-Mann Whitney and H de Kruskal Wallis tests). Results show a negative evaluation of the current systems for both initial training and access to the profession. However, significant differences are also found. In initial teacher education these exist, on one hand, between teachers who work in Primary Education and those who work in Secondary Education and, on the other hand, in questions related to access to the profession, significant

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differences are observed depending on the type of center in which they teach. There is general agreement among teachers on the relevance of modifying both initial training and access to the profession. It has also been confirmed that the teaching profession is a heterogeneous group and, therefore, the measures cannot be the same for all.

Key words: preservice teacher education, access to the profession, teacher professional development, teacher training, basic education, preservice teacher curriculum, teacher education programs.

Resumen

Los programas de formación inicial del profesorado están sometidos a una gran presión dado que se les estima la función y la exigencia de formar a docentes altamente preparados para la complejidad que su ejercicio profesional requiere. Sin embargo, sabemos que la profesión docente tiene una enorme complejidad y su desarrollo profesional debe darse de forma progresiva. En este sentido, la formación inicial constituye un elemento esencial. Por ello, en este artículo se analizan las percepciones sobre la formación inicial y el acceso a la profesión de los docentes en activo de la Educación Obligatoria en España. La investigación ha seguido un diseño *ex post facto*. Se ha diseñado un cuestionario *ad hoc* que cuenta con una validación robusta en cuatro fases, con una muestra 1148 docentes. Los análisis incluyen tanto estadística descriptiva (porcentajes y mediana) como inferencial no paramétrica (mediante las pruebas U-Mann Whitney y H de Kruskal Wallis). Los resultados manifiestan una valoración negativa de los actuales sistemas tanto de formación inicial como de acceso a la profesión. Sin embargo, también se encuentran diferencias significativas relevantes en la formación inicial; estas existen, por un lado, entre de los docentes que ejercen en Educación Primaria y los que lo hacen en Educación Secundaria y, por otra parte, en las cuestiones relativas al acceso a la profesión se observan diferencias significativas en función de la titularidad del centro en la que ejercen la docencia. Se confirma un acuerdo generalizado entre los docentes en la pertinencia de modificar tanto la formación inicial como el acceso a la profesión. También se ha confirmado que la profesión docente es un colectivo heterogéneo y, por tanto, las medidas no pueden ser las mismas para todos.

Palabras clave: formación inicial docente, acceso a la profesión, desarrollo profesional docente, formación del profesorado, educación básica, planes de estudios, programas de formación docentes.

Introducción

Hattie (2003) reaffirmed that teachers are the most powerful element in the education system when it comes to student achievement. This was subsequently internationalized by the OECD (2005) and the McKinsey report (Barber and Mourshed, 2007). This recognition has brought about a two-edged movement: on one hand, that of promoting a great number of policies geared toward how to define the profession, and on the other, making ever greater demands on the teaching collective along with an unprecedented pressure on them professionally (Edling and Simmie, 2020; Lubienski and Brewer, 2019). We must not forget that while teachers are important, so are the ways schools are organized and managed (Bolívar and Pérez-García, 2019), the resources made available to them (Imbernón, 2019;) Tidball and Krasny, 2011) and the social consideration given to the profession (Fernández Enguita, 2019; Hargreaves, Elhawary, and Mahgoub, 2008) and many other aspects. In this context, teacher training constitutes an essential element. From an international perspective (Eurydice, 2018; OECD, 2019a) there are two main interventions on the matter of teachers: one is the recognition of permanent/ongoing/continuous/life-long training in the paradigm of Lifelong Learning and the other is the accent on initial training and the early years of their career. This latter aspect is the one discussed in this article. It is also in line with the United Nations Sustainable Development Goals for 2030, and specifically with Goal 4 as defined in the Incheon Declaration (UNESCO, 2015).

As Caena (2014) states, initial teacher training is the first step in a teacher's career. It lays the foundations for a professional mentality that gives the teacher a set of basic tools to make classroom teaching meaningful. Darling-Hammond (2010) reminds us that this is the stage that shows new teachers the future day-to-day practice, offers them the chance to experiment in the reality of schools from within a "safe" environment, and fosters a culture of contrasting, discussion, reflection, and sharing of ideas and experiences. Initial training not only provides knowledge and experiences, but also allows for the construction of pedagogical criteria (Hargreaves and Fullan, 2015) suited to the specific needs and situations of each context. Initial teacher training is an intensive experience and is intellectually demanding, since it requires analyzing, questioning, and

revising ideas within the context of theory and practice (Esteban, 2016; López-Rupérez, 2014).

Nowadays, initial teacher training programs are under increasing pressure from being expected to produce teachers completely capable of addressing the needs of schools today as well as able to positively influence student achievement (Appel, 2020; Duffin, French and Patrick, 2012). Teacher training should be progressive (Darling-Hammond and Hyler, 2020; Imbernón, 2019). It should take into account the fact that those who join initial training programs do so bringing in a vast amount of prior knowledge regarding classrooms, schools, teachers, and instructional practices based on their own school experiences (Clark and Newberry, 2019; Landon-Hays, Peterson-Ahmad and Frazier, 2020).

Future teachers and currently practicing teachers alike insist on the need to better connect initial training with the reality of teaching, and thus, on increasing and improving the practical dimension of this period (Romera and Ruiz, 2017; Valle and Manso, 2011). The academic nature of initial training as well as of entry into the profession is one of the causes why teachers negatively assess this initiation period (Domínguez-Fernández and Prieto, 2019; Manso and Martín, 2014). However, there is no better moment than the university period to delve deeper in the conceptual bases (Alonso-Sainz and Thoilliez, 2019) that will later provide solid underpinnings for educational actions and practices.

This debate on the purpose of professional initiation is directly related to the contents that must be included in this period as well as their organization and their quantity. Eurydice (2018) identifies three broad contents: disciplinary, didactic, and psychopedagogical. The three models of initial training that arise from their organization and integration are *consecutive* (doing disciplinary training first, then didactic and psychopedagogical afterwards), *concurrent* (doing the disciplinary, didactic, and psychopedagogical training simultaneously), and *mixed* (choosing ways to become a teacher with concurrent and consecutive modalities alike).

Regardless of the model, the different initial training programs always include a practical dimension at schools. As Zabala (2011) points out, the practicums constitute the first real insertion into a school, making their potential undeniable. There are a multitude of approaches on how to organize and understand the practical dimension of initial training. Salazar and McCluskey's qualitative research (2017) confirms the

relevance that practicum experience at schools during initial training has on subsequent professional learning and on developing teacher identity. This becomes even more important considering the relationship between the future teachers' view of their professional identity and the development of educational competencies linked to socioeducational and methodological aspects (Pérez, Serrano, and Pontes, 2019). Furthermore, the practicums at schools constitute a vital space in the formative process that new teachers begin. Thus, in a recent study, Orland-Barak and Wang (2021) identify at least four approaches to school practicums depending on where the main emphasis is placed: (i) personal growth, (ii) situated learning, (iii) the basic practice, or (iv) the transformational critique of the practice. In Spain, a study by Gortazar and Zubillaga (2019) showed that 81% of the teachers surveyed said they disagreed with the statement "the relationship between university and schools is suitable to promoting a model of the teaching profession".

Given the complexity of integrating all the elements in initial training, countries such as Germany, Australia, Japan, and Chile have for decades been implementing new teacher induction programs (OECD, 2019b). And over the last decade, more than ten other European countries have done the same (Eurydice, 2018). This measure is directly related to entry into a profession whose relevance has relevant consequences and on which empirical evidence has existed for several decades (Barber and Mourshed, 2007; Hattie, 2003; Melgarejo, 2006). The Gortazar and Zubillaga (2019) report shows that 72% of the teachers "consider it necessary for there to be a paid transition phase to the teaching profession based on an insertion period at schools."

In Spain, the latest TALIS report (OECD, 2019a) also highlights the importance of initial training as the basis for teacher training and development. It also insists on the need to increase and improve training in regard to "training in general pedagogy", and quite specifically in the case of Secondary Education teachers; although 96% of the Primary Education teachers responded that they had received psycho-pedagogical training, the percentage drops to 85% in the case of Secondary Education teacher (putting the OECD average at 94% for this stage in education). However, it should also be noted that in Spain while there are great differences initial training between future teachers of Primary Education and Secondary Education, the main differences for entry into the profession and subsequent career development are between teachers

working in state schools and those at private or chartered schools. This was already made apparent in the teacher survey study by Martín (2010) and was refuted in Gortazar and Zubillaga (2019). Lastly, entry into the profession is heavily influenced by the type of contract and the status acquired by the teacher on one hand, and the autonomy of the schools in hiring new teachers on the other (Caena, 2014; Valle and Manso, 2018).

Method

This research has followed an *ex post fact* design for the main purpose of analyzing perceptions on initial teacher training and the teacher selection process for Basic Education at schools in Spain. This purpose has been further broken down into the following two specific objectives: (i) to characterize teacher perception on initial training and selection for entry into the profession; and (ii) to analyze the existing differences in said perceptions as a function of the ownership of the school, the educational stage, and the teacher's years of experience. From the second specific objective, the following three contrast hypotheses are derived: there are differences in teacher perceptions on initial training and selection for entry into the profession with respect to (i) ownership of the school (state-owned vs private/chartered); (ii) the educational stage (primary vs secondary); and (iii) the teacher's experience (years of work).

Sample

The study population are teacher currently working in Basic Education (primary and compulsory secondary education) at schools in Spain. The sample consists of 1148 subjects who voluntarily answered a questionnaire on perceptions. This sample is significant and complies with minimum sample sizes of the general population as well as by strata of ownership, educational stage, and Autonomous Community (Andalusia, Catalonia, Comunidad de Madrid, Comunidad Valenciana and the Basque Country) with a reliability of 99% and error of 1%. The sample consisted of 70% men and 30% women, although no significant differences were found between them, or between Autonomous Communities.

We considered two independent variables to check for differences in age: age itself and years of experience. Both are initially quantitative variables. Our findings showed that both variables behaved similarly, with a significant Pearson correlation of 0.01 ($r=.839$). Consequently, the study only shows the years of experience, which have been grouped into a 6-level scale cut off by homogenous percentiles. Note that the same sample does not exist, because of the different sample size for any particular year of experience. Therefore, the sample from each of these 6 levels corresponds to a percentage of the total (see Table I) that ranges from 14.4% to 19.6%.

TABLE I. Description of the sample

		How many years have you been working as a teacher?						Total % (N)
		0-5	6-12	13-16	17-21	22-29	30-42	
Primary Education	Public	1.7%	5.9%	5.7%	4.8%	5.1%	5.8%	29.1% (334)
	Private/ Charter	2.4%	2.3%	1.4%	2.3%	2.2%	1.2%	11.8% (135)
Secondary Education	Public	10.1%	8.7%	6.1%	7.3%	7.7%	7.2%	47.1% (541)
	Private/ Charter	3.0%	2.7%	1.2%	1.6%	2.1%	1.5%	12.0% (138)
Total % (N)		17.2% (198)	19.6% (225)	14.4% (165)	15.9% (183)	17.1% (196)	15.8% (181)	100% (1148)

Source: original work.

Regarding school ownership, because of the sample and of seeing that the behavior of private and charter school teachers was similar, it was decided to turn this variable into a dichotomy, leaving two groups: public and private/charter. With this first decision made, there are two variables regarding this first classification matter: where the teacher first started working and the ownership of the current school. In this regard it was important to find out the variability and movement from one ownership to another. It was seen that only a dozen subjects went from charter or private schools to public schools, and the rest of the changes were the

opposite way. Because of the low variability among systems, when we refer to school ownership we refer to the teachers who work at public schools or at charter/private schools, depending on the item “ownership of the school where you worked most recently.” Thus, 23.8% of the teachers sample are from the charter and private system (21.6% and 2.2% respectively) and 76.2% are from the public system. With respect to the educational stage they teach at, 59.1% are teachers of secondary education and 40.9% are primary education teachers.

Instrument

The instrument used is a questionnaire devised and validated in four phases (Garrido, Álvarez, and Alonso, 2015). The selection of items and design of dimensions were created ad hoc for the research. A 6-point Likert scale was chosen for the perception answers to avoid the average tendency by exclusively nominating the extreme values. Moreover, this scale allowed us to group the perceptions into slight agreement (1-2), medium agreement (3-4), and high agreement (5-6). The content was validated using an inter-rater reliability process of 12 experts in methodology and teacher training who assessed the pertinence of the categories and their items. 11 items with a value below the minimum content validity ratio of ($CVR < .56$) established by Lawshe (1975) were eliminated, split, or merged to ensure the unlikelihood of random agreement. We also obtained a high content validity ratio ($CVR = .91$). In order to analyze internal consistency, a pilot test was carried out with 63 teachers participating (with homogeneity in the number of teachers between the independent variables) that made it possible to identify several errors that were recorded to modify the final version. That final version was used to perform a statistical validation. To determine the reliability of the instruments, i.e., their internal consistency, after eliminating 6 items, Cronbach's alpha coefficient was used, the result being $\alpha = .856$. Construct validity was determined by carrying out sampling adjustment measures to verify the possibility of performing factor analysis. Therefore, Bartlett's test of sphericity was carried out, rejecting the null hypothesis of no correlation among variable, and the Kaiser-Meyer Olkin measure of sample adequacy, with a result of $> .80$; making the matrix suitable for factorization. All the items were also checked for a communality of

>.50. With these values taken into account, a main component analysis was used since our objective was the one-dimensionality of the items proposed, previously defined with the Item Response Theory, for each dimension in a single factor whose explained variance was greater than 60%. The instrument consisted of a total of 66 items.

Procedure

The instrument, administered online, was sent by e-mail on two occasions to a previously created database of more than 15,000 schools in Spain with Primary and/or Compulsory Secondary Education, respecting the guidelines set by the ethics committee².

For our study we only used 33 items distributed in four blocks: (i) assessment of their own initial training; (ii) assessment of potential measures to improve the initial training period; (iii) assessment of their entry into the profession; and (iv) assessment of what entry into the profession should be like.

The independent variables taken into account in this work are the ownership of the school (public - private/chartered), educational stage (Primary Education - Secondary Education), and teaching experience (its ordinal transformation). Other factors analyzed for which no significant differences were found were whether the student had had another previous professional career, the selection processes by which he/she had entered the teaching profession, the type of initial training, and the main reason for becoming a teacher.

A non-parametric inferential analysis was performed since we worked with ordinal variables whose distribution does not meet the assumption of normality (Thoilliez, López-Martín, Expósito-Casas, and Navarro-Asencio, 2013). Thus, we used a Mann-Whitney U analysis to interpret significant differences between dichotomous variables and the Kruskal Wallis H test for categorical variables with more than two variables. With respect to the descriptive analysis, it was considered more pertinent to use the median and variance, and not having to take the ordinal variables as continuous in order to use averages. For dichotomous variables (stage

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and ownership, carried out with the Mann-Whitney U test) effect size was calculated using Rosenthal statistics ($r = Z/\sqrt{n}$), and for the years of experience (carried out with the Kruskal-Wallis H test), the epsilon

square value ($E_R^2 = \frac{H}{(n^2 - 1)(n + 1)}$), since the “n” is sufficiently large.

For “r”, following Cohen’s guidelines, we considered a small effect size for values less than .30, intermediate effect from .30 to .50, and strong effect greater than .50. All epsilon squared values were .00 and $r < .30$, except for two items that will be discussed in the results section.

Results

The results are presented per the four blocks stated in the section above and which are themselves grouped into two sections: initial training and entry into the profession.

Initial teacher training

With respect to the first block, Table II shows that teachers gave a low score to the contribution initial training had on their later professional activity: on the 11 items the medians range between values of 2 or 3. Of all of them, the scores that teachers give in relation to “tutoring and guidance”, “attention to comprehensive development”, “promotion, organization and participation in the school” and “educational innovation” are noticeably very low. In the case of “collaboration with families” and “attention to the ANEE” the score is even lower since nearly 70% of the teachers scored them between 1 and 2. At the other extreme, the most positive scores are the ones on “curricular content” and the “construction of a climate of respect, participation, and freedom”: they are the only items where the median is 3.

TABLE II. Assessment of aspects of their initial training.

Item		Percentages						Me	Var
		1	2	3	4	5	6		
Your initial training prepared you in...	curricular content	13.68	16.55	21.17	16.46	17.86	14.29	3	2.62
	lesson planning	25.44	24.65	21.60	15.33	9.67	3.31	2	2.01
	evaluation	24.48	29.01	22.56	14.11	6.97	2.87	2	1.78
	student tutoring and guidance	36.76	30.14	17.86	8.62	4.62	2.00	2	1.59
	attention to special needs students	44.60	27.09	13.59	7.23	5.05	2.44	2	1.71
	attention to the comprehensive development of students	35.98	26.66	18.64	11.41	5.31	2.00	2	1.71
	promotion, organization, and participation in the school	36.06	27.00	19.69	10.10	4.97	2.18	2	1.68
	building a climate of respect, participation, and freedom	27.96	22.04	19.08	13.59	11.59	5.75	3	2.40
	collaboration with families	41.46	26.31	16.11	9.49	4.09	2.53	2	1.70
	educational innovation	35.98	22.04	16.90	11.59	8.36	5.14	2	2.32

Source: original work.

Considering the significant differences (see Table III), we see that the independent variable “stage” is the one in which there are significant differences in all the items between the evaluation made by Primary and Secondary Education teachers. This does not occur with the other two independent variables (“years of experience” and “ownership”). Once again, the item on “curricular content” proves noteworthy in that it is the only one of the 11 items in which there is a significant difference between “stage”, but not between “years of experience” and “ownership”. The primary school teachers’ responses are mainly at the medium level, with only 23% of them considering that they were prepared in curricular content at a high level (5-6). However, among Secondary Education teachers, the results are polarized, with 38.4% of the responses at a high level (5-6) of preparation and 31.2% at a low level (1-2).

TABLE III. Significant differences in the evaluation of aspects on their initial training.

Item		Stage		Years Experience			Ownership	
		Mann-Whitney U	p	Kruskal-Wallis H	gl.	p	Mann-Whitney U	p
Your initial training prepared you in...	curricular content	144614.0	.007*	7.592	5	.180	153854.0	.585
	lesson planning	120807.0	.000*	8.013	5	.156	136054.5	.000*
	evaluation	143233.5	.003*	12.971	5	.024*	149206.0	.154
	student tutoring and guidance	136443.0	.000*	6.542	5	.257	140875.5	.002*
	attention to special needs students	114869.0	.000*	18.153	5	.003*	140724.5	.002*
	attention to the comprehensive development of students	117554.0	.000*	7.279	5	.201	137594.5	.000*
	promotion, organization, and participation in the school	122023.0	.000*	4.777	5	.444	143274.5	.010*
	building a climate of respect, participation, and freedom	133981.0	.000*	11.008	5	.051	143550.0	.013*
	collaboration with families	132725.5	.000*	19.217	5	.002*	146719.0	.053
	educational innovation	148484.5	.044*	75.274	5	.000*	141979.5	.005*

* p < .05
Source: original work.

In relation to the second block of questions regarding teachers' scores assessing potential measures to improve the initial training period (see Tables IV and V), teachers consider that aspects referring both to entry into initial training and to its content should be modified for both Primary and Secondary Education.

TABLE IV. Assessment of measures on initial training.

Item	Percentages						Me	Var
	1	2	3	4	5	6		
Access to degrees in Education should be much more demanding than it is at present	5.05	6.10	15.24	13.50	19.77	40.33	5	2.33
Primary school teachers should master the curricular content of all the subjects they teach	1.66	4.70	13.85	16.81	23.78	39.20	5	1.73
The most important thing for a primary school teacher is their didactic-pedagogical training	1.57	5.49	14.98	24.30	28.48	25.17	5	1.57
The most important thing for a secondary school teacher is his/her mastery of his/her subject matter	5.14	10.63	22.04	31.79	20.82	9.58	4	1.66
Secondary school teachers need more didactic-pedagogical tools	1.57	1.83	7.32	10.98	26.31	52.00	6	1.32
In initial teacher training for secondary school teachers, both pedagogical content and curricular content should be taught at the same time	2.53	2.79	9.23	14.29	27.96	43.21	5	1.59
Teachers need initial training with more weight on theoretical matters	9.84	17.68	23.61	26.83	12.72	9.32	3	2.00
The practicums are much more useful than theoretical training	0.70	2.09	10.45	17.16	24.65	44.95	5	1.34

Source: original work.

The statement the teachers agreed most with is that “Secondary school teachers need more didactic-pedagogical tools” (almost 80% of them score their agreement as 5 and 6 out of 6 and the median is 6). This fact is reinforced by not finding significant differences in the responses according to the stage ($p=.738$), years of experience ($p=.520$), or school ownership ($p=.050$). This datum on Secondary Education teachers should be seen together with data on the other item related to secondary teachers: When asked if “the most important thing for a secondary school teacher is his/her mastery of his/her subject matter”, the values tend to be intermediate, which means that, although there is an explicit recognition of disciplinary knowledge, it is not what they consider to be the most important. In this case, we did find significant differences ($p=.001$) regarding the educational stage in which they teach. Low-scoring responses behave very differently: only 11.9% of Secondary Education teachers do not agree with the statement that the most important thing is the content whereas 21.3% of Primary Education students responded that way as well. The other item teachers disagreed

most with (and the only one in which more disagree than agree) is that “teachers need initial training with more emphasis on theoretical subjects”, which reinforces the idea mentioned above. To conclude with regard to Secondary Education teachers, when asked whether “in the initial teacher training of Secondary Education teachers, pedagogical content and curricular content should be studied at the same time”, most teachers (more than 70% with high values of 5-6) agree with this statement. However, significant differences were found depending on the educational stage ($p=.002$); 12.1% of Secondary Education teachers do not agree with this system (low level 1-2) while in Primary Education this same figure drops to 1.7%. There are also differences by years of experience ($p=.038$), with the group of novice teachers (0-5 years) showing less agreement with the model.

Regarding the three items on future Primary Education teachers, there is a high degree of agreement on all of them (with a median of 5). Teachers agree that “Primary teachers should master the curricular contents of all the subjects they teach” and that “the most important thing for a Primary teacher is his or her didactic-pedagogical training”. In this second item, there are significant differences depending on the stage in which they work ($p=.003$). Primary Education teachers outscore Secondary Education teachers by more than 10 percentage points in their high degree of agreement (5-6) and in their years of experience ($p=.015$), where more experienced teachers give less value to this training. Furthermore, around 75% of teachers agree that “entrance requirements into teaching degree programs should be much more demanding than at present”; in this case, there was no significant difference in terms of the educational stage ($p=.108$).

TABLE V. Significant differences in the scoring of measures on initial training

Item	Stage		Years Experience			Ownership	
	Mann-Whitney U	p	Kruskal-Wallis H	gl.	p	Mann-Whitney U	p
Access to degrees in Education should be much more demanding than it is at present	150704.0	.108	5.731	5	.333	139139.0	.001*
Primary school teachers should master the curricular content of all the subjects they teach	154795.5	.403	4.642	5	.461	154114.5	.609
The most important thing for a primary school teacher is their didactic-pedagogical training	143484.0	.003*	14.150	5	.015*	151691.0	.337
The most important thing for a secondary school teacher is his/her mastery of his/her subject matter	141443.0	.001*	1.331	5	.932	156584.5	.968
Secondary school teachers need more didactic-pedagogical tools	157536.5	.738	4.208	5	.520	146908.5	.050
In initial teacher training for secondary school teachers, both pedagogical content and curricular content should be taught at the same time	143217.0	.002*	11.790	5	.038*	143581.0	.011*
Teachers need initial training with more weight on theoretical matters	146017.0	.015*	11.837	5	.037*	140861.0	.003*
The practicums are much more useful than theoretical training	147633.5	.026*	21.914	5	.001*	142561.5	.006*

* $p < .05$

Source: original work.

The last item consulted relates to practices, and is the one on which teachers show the greatest agreement. Almost 90% of them consider that “practicums are much more useful than theoretical training”. Furthermore, there are no significant differences ($p \geq .05$) between teachers in terms of any of the three independent variables.

Selection to enter the profession

In relation to the third block (see Table VI), teachers consider that the main aspect that was taken into account in their selection processes was “curricular knowledge” (median of 5). The second highest score (median

of 4) went to “personal aptitudes to be a teacher”. And from there, most teachers (with more than 50% of them giving it a score of 1, 2, or 3) consider that the rest of the items were not particularly relevant.

TABLE VI. Assessment of aspects included in the access to the profession

Item		Percentages						Me	Var
		1	2	3	4	5	6		
I believe that in my selection/hiring process they valued...	the adequacy of my curricular knowledge of the subjects I would teach	8.19	8.36	14.20	17.33	25.35	26.57	5	2.48
	my skills at putting together didactic programs	17.94	15.51	18.38	17.42	20.56	10.19	3	2.64
	my knowledge of different types of educational methodologies and innovations	20.56	17.25	20.12	17.86	16.99	7.23	3	2.48
	my skills with regard to tutoring and/or guiding students	30.31	20.56	18.38	13.33	9.76	7.67	2	2.57
	my skills with regard to giving guidance and support to families	36.50	22.91	15.59	10.80	9.15	5.05	2	2.35
	my possibilities of attending to the comprehensive development of the students	24.91	18.12	16.64	13.50	14.72	12.11	3	2.98
	my knowledge of educational policies and legislation	29.09	18.73	17.25	14.11	13.07	7.75	3	2.69
	my personal aptitudes to be a teacher	15.59	12.11	12.46	13.68	19.86	26.31	4	3.25
	my commitment to the school's ideology	39.11	13.15	10.19	10.89	11.41	15.24	2	3.62
	my linguistic competence in English	55.05	9.58	9.67	6.01	6.97	12.72	1	3.40

Source: original work.

Beyond the results of the sample overall, the significant differences are also relevant (see Table VII) given that they are found ($p < .05$) in all the items, both in terms of the educational stage at which they teach (except in one item) as well as the type of school. It should be noted that, in this dimension, for ownership, the sample effect size on “my personal aptitudes to be a teacher” is intermediate ($r = .39$) whereas on “my commitment to the ideology of the school” is strong ($r = .53$).

TABLE VII. Significant differences in the assessment of aspects of entry into the profession.

Item	Stage		Years Experience			Ownership		
	Mann-Whitney U	p	Kruskal-Wallis H	gl.	p	Mann-Whitney U	P	
I believe that in my selection/hiring process they valued...	the adequacy of my curricular knowledge of the subjects I would teach	125566.0	.000*	21.429	5	.001*	139597.0	.001*
	my skills at putting together didactic programs	127518.5	.000*	12.160	5	.033*	118686.0	.000*
	my knowledge of different types of educational methodologies and innovations	118926.5	.000*	10.146	5	.071	146063.5	.046*
	my skills with regard to tutoring and/or guiding students	112401.5	.000*	9.908	5	.078	111050.5	.000*
	my skills with regard to giving guidance and support to families	114727.5	.000*	9.191	5	.102	109331.0	.000*
	my possibilities of attending to the comprehensive development of the students	108065.5	.000*	9.895	5	.078	104466.5	.000*
	my knowledge of educational policies and legislation	133216.5	.000*	25.512	5	.000*	107607.0	.000*
	my personal aptitudes to be a teacher	141040.5	.001*	3.675	5	.597	85816.5	.000*
	my commitment to the school's ideology	126459.0	.000*	6.724	5	.242	61277.0	.000*
	my linguistic competence in English	151857.5	.143	91.553	5	.000*	119160.0	.000*

* $p < .05$

Source: original work.

Turning to the statements on how the selection process for entry into the profession should be (see Tables VIII and IX), teachers clearly disagree with the suitability of the “current system of teacher selection/hiring” in public schools (competitive examinations). Indeed, only 12% of them strongly agree with the statement. A comparison of independent variables shows significant differences for this item depending on the ownership of the school ($p=.014$), given that teachers who work at private/charter schools give a worse score to entry into the public system. Significant differences are also found according to age ($p=.000$), with a tendency in which the less teaching experience, the worse the competitive examination system is valued. No significant differences were found by

educational stage ($p=.293$). Continuing with entry into teaching at public schools, we find a high distribution of teacher responses regarding the statement that “public schools should have greater autonomy to hire their teaching staff”, with roughly 20% of teachers strongly agreeing and the same percentage strongly disagreeing. An analysis of the significant differences by ownership ($p=.000$) shows that 39.9% of public school teachers have a low level of agreement (1-2) with the statement, while 47.5% of teachers in private/charter schools have a high level of agreement (5-6). Similarly, with respect to the stage ($p=.000$) 45% of Primary Education teachers agree (levels 5-6) with greater autonomy in hiring, while 36.3% of Secondary Education teachers do not agree (levels 1-2) with it.

TABLE VIII. Assessment of measures on entry into the profession.

Item	Percentages						Me	Var
	1	2	3	4	5	6		
The current system for selecting teachers to enter the teaching profession in public schools (competitive examinations) is adequate	25.20	25.72	19.79	17.09	8.11	4.10	2	2.04
Public schools should have greater autonomy in hiring their teaching staff	20.52	11.18	16.33	15.02	17.29	19.65	4	3.23
The current system for selecting teachers to enter the teaching profession in private and charter schools is adequate	34.25	19.59	23.04	11.21	8.38	3.53	2	2.09
The Education Administrations should define common criteria for selecting teachers to enter public and chartered schools	5.34	4.99	11.47	13.40	20.84	43.96	5	2.25
In teacher selection systems, more importance should be given to knowledge of the subject matter to be taught than to didactic-pedagogical training	23.93	26.29	24.72	14.76	6.29	4.02	2	1.86

Source: original work.

In their assessment of the “current system for selecting teachers to enter the teaching profession in private and charter schools”, teachers do not consider it to be suitable: nearly 35% consider it very unsuitable. As in the previous item, significant differences are found according to both the

educational stage ($p=.000$), with a worse score from Secondary Education teachers, and ownership ($p=.000$), where there is a difference of more than 20 percentage points from that low score of 1 (21.8% of those who work in private/charter schools compared to 42.2% in public schools). In addition, teachers are in majority agreement (more than 80% gave scores from 4 to 6) with defining “common criteria for teacher selection and entry into public and charter schools”; This statement is qualified by the significant differences found according to both the educational stage ($p=.013$) and ownership ($p=.000$), where Secondary Education teachers and public school teachers are more in agreement with standardizing criteria. Finally, teachers were asked about the contents of these selection and hiring systems, and most of them disagreed (almost 80% gave a score of 1 to 3) that “more importance should be given to knowledge of the subject matter to be taught than to didactic-pedagogical training”. In this case, no significant differences were found in terms of the ownership of the school ($p=.071$), although differences were found according to the stage ($p=.000$), where the lower scores (from 1 to 3) fall from 83% of Primary Education teachers to 69% of Secondary Education teachers.

TABLE IX. Significant differences in the assessment of measures on entry into the profession.

Item	Stage		Age			Ownership	
	Mann-Whitney U	p	Kruskal-Wallis H	gl.	p	Mann-Whitney U	P
The current system for selecting teachers to enter the teaching profession in public schools (competitive examinations) is adequate	153220.0	.293	35.593	5	.000*	143380.5	.014*
Public schools should have greater autonomy in hiring their teaching staff	128685.5	.000*	8.231	5	.144	120543.0	.000*
The current system for selecting teachers to enter the teaching profession in private and charter schools is adequate	135526.5	.000*	3.420	5	.636	105597.0	.000*
The Education Administrations should define common criteria for selecting teachers to enter public and chartered schools	144650.0	.013*	9.526	5	.090	126703.0	.000*
In teacher selection systems, more importance should be given to knowledge of the subject matter to be taught than to didactic-pedagogical training	125343.0	.000*	1.688	5	.890	146146.0	.071

* $p < .05$

Source: original work.

Conclusions

For more than a decade there have been reports in Spain in which in-service teachers insist that their initial training could have been much improved (Gortazar and Zubillaga, 2019; Martín, 2010; Valle and Manso, 2018). The research presented here confirms the low scores teachers give to their initial training and the process of entry into the profession. It also offers important new insights into the interpretation and understanding of these data.

In the results on initial formation, what can be seen is a double tension: on one hand, between the distribution, integration, and relevance of the contents of initial training programs and, on the other hand, between Primary and Secondary Education teachers as a result of the differentiated models in which they are trained (concurrent and consecutive, respectively).

With regard to the content of initial training programs, the results point to a first consideration regarding the weight of the theoretical and the practical. Teachers gave a very positive assessment of the module of practicum teaching at schools during their initial training. This holds especially true compared with the rest of the contents (of a theoretical nature) of the initial training they were asked to score. The data point to the important role that professional practicums should play in this first stage for teachers. However, their integration with the rest of the training modules is known not to be easy (Orland-Barak and Wang, 2021).

The greatest contribution of the research on the initial training block lies (within the theoretical content) in the relationship between training in disciplinary content (mastery of the content to be transmitted) and in didactic and psycho-pedagogical content. Although all the aspects consulted receive some negative evaluations, training in disciplinary content is the one that teachers score the highest stands out, which indicates that the university prepares them especially well in this aspect. This is in line with the historical purpose of the university, although it clashes with the growing social and professional demands towards this institution. As some authors point out (Alonso-Sainz and Thoilliez, 2020; Esteban, 2016) initial training in universities has to help reinforce the teachers' strong and solid passion for knowledge. However, this itself does not necessarily contradict (Valle and Manso, 2018) the fact that, in addition, student teachers must begin to acquire the competencies

of their profession. It is essential for initial teacher training to ensure a high degree of mastery of both disciplinary and didactic and psycho-pedagogical content. Even so, the results of the research seem to indicate (when teachers are asked about what is “most important”) that teachers (also those of Secondary Education) consider didactic and psycho-pedagogical training to be more necessary than disciplinary training.

This assertion induces discussing the results in light of the concurrent and consecutive models (and their consequences), which are so different for Primary and Secondary Education teachers, respectively, in Spain. The concurrent model emphasizes didactic and psycho-pedagogical training, while the consecutive model emphasizes training in the discipline. The results obtained show that teachers are in favor of there not being such great differences in the training received by those who teach at one stage or another. The majority of teachers (including those in Secondary Education) support concurrent initial training models that integrate training in disciplinary, didactic, and psycho-pedagogical content.

In regard to the selection and hiring processes for entering the profession, as in the case of initial training, teachers consider that only “curricular content” was clearly taken into account in their own selection. This fact is related to the same discussions that have been held about initial training. Furthermore, these results may also explain why, in general terms, teachers disagree with the current system of competitive examinations, as well as with the hiring procedures in private and charter schools, and, on the contrary, they agree with harmonizing the selection processes between public and charter schools. As we saw in the introduction, in Spain entry into the profession is determined by the ownership of the school where the teacher will work. Accordingly, it is consistent to have found repeated differences in this block between teachers who work at public schools and those at private and charter schools.

The main limitations of our study were, on one hand, related to sampling, given that, on the recommendation of the Ethics Committee, the instrument could not be disseminated through social media (or other similar channels) but only by email to the schools and, on the other hand, related to the statistical analyses, since non-parametric tests had to be performed because the ordinal variables did not comply with normality. An attempt was made to construct an index through factor analysis with factor loadings and indicators, but no consistent model was found.

Based on the results, a number of prospective measures should be noted given that teachers highlighted a need to improve how to get started in the profession. All the recommendations in this regard require, first of all, an intensive relationship between the educational administration authorities, universities, and schools. In relation to initial training, it is essential to work on achieving correct integration of theory and practice, as well as disciplinary, didactic, and psycho-pedagogical contents. This debate needs to take place within the framework of initial training models: we know that initial training is essential for configuring a professional identity and the fact of opting for one model over another conditions these differences. It would be opportune to be able to consider mixed models of initial training for both stages. Indeed, this recommendation would align nicely with international trends (Eurydice, 2018; OECD, 2019a). In addition to the models, we must bear in mind that the qualifications for Primary Education teachers and Secondary Education teachers are not the same (requiring a bachelor's degree and master's degree respectively) and this also has enormous implications for the configuration of the profession (Bolívar and Pérez-García, 2019; Imbernón, 2019). For example, those who work in public schools will belong to different groups of civil servants, which means their working conditions will be different even though their professional practice is very similar. In this sense, teachers recognize that the current system of competitive examinations is inadequate. Moreover, it seems appropriate to generate some kind of mechanism by which the education administration authorities can dictate some specification regarding teachers at charter schools, if only because their salaries are paid by the public treasury. All of this points to the recommendation to implement an induction system for hiring new teachers. The recently approved LOMLOE includes in its seventh additional provision the obligation to make a normative proposal that regulates teacher training. This is a historic opportunity to address a long-standing debate in Spain in which there is a broad consensus among civil society, the educational community, and political parties.

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