

# Contribution of the curricular Practicum to competences training of teachers of Early Childhood and Primary Education in Spain

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## RESUMEN

The objective of this paper is to analyse the contribution of professional internships to the initial training of future teachers of Early Childhood and Primary Education, from the perception of students towards the development of professional competences linked to those university degrees in Spain. The participating sample is made up of 932 subjects who finished their studies in three consecutive promotions (2017, 2018 and 2019), and who have completed external internships during three academic years. It is a quantitative, longitudinal study, with a questionnaire as an information collection instrument ( $\alpha = .919$ ). The results indicate that there is a moderate development of the competences during the internship period, and that the year of completion of the studies influences that development to a greater extent than the degree. It is also observed that the alternation between the scenarios involved in the practices (educational centre and faculty), is significantly linked to the development of professional skills, being higher, when there is more alternation.

**KEYWORDS:** higher education; skills; practice and theory relationship; practices tutor; practice centre.

## **Contribución del Practicum en la formación competencial del profesorado de Educación Infantil y Primaria en España**

### **RESUMEN**

El objetivo de este trabajo es analizar la contribución de las prácticas profesionales de la formación inicial de los futuros maestros de Educación Infantil y Primaria, desde la percepción de los estudiantes, hacia el desarrollo de competencias profesionales vinculadas a las titulaciones universitarias en España. La muestra participante está compuesta por 932 sujetos que finalizaron sus estudios en tres promociones consecutivas (2017, 2018 y 2019) y que han realizado prácticas externas durante tres cursos académicos. Es un estudio cuantitativo, longitudinal, con un cuestionario como instrumento de recogida de información ( $\alpha = .919$ ). Los resultados indican que existe un moderado desarrollo de las competencias durante el periodo de prácticas y que el año de finalización de los estudios influye en ese desarrollo en mayor medida que la titulación. También se observa que la alternancia entre los escenarios involucrados en las prácticas (centro educativo y facultad), está significativamente ligada al desarrollo de competencias profesionales, siendo mayor, cuanto mayor es la alternancia.

**PALABRAS CLAVE:** educación superior; competencias; relación práctica y teoría; tutor de prácticas; centro de prácticas.

### **Introduction**

The university reform derived from the Bologna process establishes a deep reorganization of the study plans of all the degrees of the Spanish university system. It was in the academic year 2010-11 when the new studies of Teaching for Early Childhood and Primary Education began in many universities. The commitment to an Europe of knowledge without educational borders that favours mobility and cooperation it was, at the same time, reaffirmed (López et al., 2016), focusing on competency development (Sánchez-Taraza & Ferrández-Berruenco, 2022) and following in the footsteps of other countries that carried out some type of educational reform with the aim of improving the quality of education (Kovač-Cerović, et al., 2015; Girvan et al., 2016; Vizek-Vidović & Domović, 2013). For the first time, the training is extended to four years, which is considered as a milestone in teachers training (Paredes-Labra et al., 2016), allowing a more extensive training that it also responded to a historical claim (Coiduras et al., 2014). With the new study plans, the subjects linked to the Practicum became to represent more than 25% of the curriculum of the degree, which makes the Practicum the subject with the greatest weight in the Teaching degree (Ruiz-Gallardo et al., 2012) at the same time it became the centre of attention and an essential part of the initial training programs as a fundamental component of becoming a teacher (Peguera et al., 2021), and turning it into an issue of concern in the process of convergence with Europe.

The reduction of the role of universities in teachers training and the growing involvement of the internship centres means that training in this latter context is an especially significant moment since it is the time when future teachers face complex situations of practice to which they must respond from their knowledge and skills. This will allow them, as Elliott (2015) and Rochina et al. (2020) affirms, to establish links between the theories of learning and the concrete practices of teaching and learning. For this reason, within the research in initial teacher training, the Practicum is undoubtedly one of the elements that arouse special interest given its importance as a key element of this training, becoming one of the basic principles to improve the initial training of teachers (Bretones, 2013; Vizek-Vidović & Domović, 2013). In this sense, its influence on the development of teaching competencies, as well as on the processes of construction of a professional identity and professional development are beyond any doubt. And this contributes to improve its image among the scientific community and it is considered as an excellent training context for the development of the necessary professional skills (Badia & Gómez, 2014; Cardoso et al., 2015; Kovač-Cerović et al., 2015; Rodicio-García & Iglesias-Cortizas, 2011; Rodríguez-Hidalgo et al., 2015; Vršnik et al., 2015; Valle et al., 2020).

This challenge involves the design and development of certain training experiences that allow teachers in initial training (Feliu et al., 2016, p. 3) "to be aware of the challenges they will face during their professional life, in addition to developing the necessary skills to solve them." From this perspective, the Practicum becomes a strategic period of the professional teacher development, which generates a complex reality determined by multiple variables (Kovač-Cerović et al., 2015) and that requires an adequate approximation between those variables in order not to compromise the quality of the processes themselves.

In this context, the organization of the processes that come together in the Practicum, is a key element for a quality initial teacher training, which highlights the responsibility of the university institutions and the need to deepen in "how supervised internships are organized, developed and evaluated" (Palazzo et al., 2016, p. 55).

Even though there are already many works that focus on the Practicum, research on the subject continues to be of special interest in the field of educational research, as evidenced by the number of consolidated and emerging journals that consider this subject as a priority. Likewise, there are many scientific events that focus their attention on the Practicum, or on research projects that address this moment of teacher's education. For this reason, it can be said that the organization, development and evaluation of the Practicum is a topic of growing interest both in the national and international context. At the same time, it is observed how the functionality of the learning promoted in this training period varies depending on those parameters and this justifies the performance of research that, deepening in this subject and with differentiated objects of study, establish guidelines aimed at improving the process.

It is difficult to delimit in a small space the high number of works that, in recent years, have the Practicum of teachers as object of study, and for this reason, it has been chosen to point out some defining features of the state of the question. In the first place, it is noteworthy that most of the studies focus on the development of professional skills, especially those related to practical training and, to a lesser extent, to training in

university contexts. An updated review on this topic can be found in Rodicio-García & Sarceda-Gorgoso (2018).

On the other hand, it is noted that many studies are focused on the students' perspective, and that it exists a common perception of the Practicum as a privileged situation for competence development, learning and professional development (Bretones, 2013, De Juanas et al., 2016; Rodicio-García & Sarceda-Gorgoso, 2018). In this line, Cantón et al. (2013), carried out an interesting study with novice teachers, in which they deepen in the contribution of the different subjects to their initial formation, confirming the Practicum as the subject that has contributed the most to their training.

Linked to these processes, these studies delve into more specific issues such as the assessment or tutorials and their influence on professional development. Regarding the assessment, Ricoy & Fernández-Rodríguez (2013) highlight the need to establish new procedures in the evaluation activity that go beyond traditional practices. In this same vein, Ruiz-Gallardo et al. (2012) show the links between the formative evaluation, shared among students, tutors and supervisors, and the positive perception of the students with regard to their learning. Regarding the role of tutorials in the understanding of internships, Mena et al. (2016), from the identification of three differentiated approaches (dialogue/diary, regular conferences and conferences/recall stimulation), conclude that each style favours different ways of accessing the understanding of the internship, at the same time that they are complementary to each other.

From another perspective, innovation in the Practicum and in the processes that it entails is a subject of particular interest in recent times, denouncing that, in excessive occasions, the internship continues to be based on traditional teaching models (Ausín et al., 2016). With the intention of overcoming this limitation, Cardoso et al. (2015) describe an innovation in teachers training, under the parameters of the integrated curriculum which addresses a subject taught in the Faculty and in conjunction with supervised teaching internships, with very satisfactory results. In this same vein, and from the consideration that "one of the most relevant factors in professional learning and in the shaping of academic identity is the opportunity for actors to assume responsibilities" (Lozano et al., 2014, p.160), new forms of practical experiences are observed, in which service-learning is shown as a great opportunity for innovations from the perspective of learning by doing (Álvarez et al. , 2017; Ortega-Tudela et al., 2015; Santos et al., 2017, among others).

These features that have been mentioned are also reflected in the international context, as it is verified by Jurčević-Lozančić (2015) in Croatia, by Kovač-Cerović, et al. (2015) in Serbia, by Leite & Hortas (2016) in Portugal, by Montecinos et al. (2015) in Chile, by Palazzo et al. (2016) in Brazil, by Stenberg et al. (2016) in Finland, by Van Schagen et al. (2017) in the United States, or by Vršnik et al. (2015) in Slovenia or Waine (2022) who carries out a comparative analysis between Germany, France and England. In other contexts, can be mentioned Montecinos et al. (2015) and Andrade (2023) in Chile, Palazzo et al. (2016) in Brazil, Van Schagen et al. (2017) and Pupik et al. (2023) in the United States, Barnes (2021) in Australia, among others. In these works, it is highlighted that there are aspects of the

organization of the Practicum -that are different depending on the multiple contexts- which require special attention and that have implications for the Practicum.

Trying to strike the right balance between national and international standards of teacher training (Vizek-Vidović & Domović, 2013), the Spanish university system recognizes the different universities the power to specify the design of their specific training proposal within a common framework in a national level, which results in different approaches and developments, both in terms of duration and the periods in which the Practicum is organized, as it happens in other European countries (Kovač-Cerović et al., 2015). This reality not only justifies studies that must delve into different approaches, but also emphasizes their need to obtain a vision that is best adapted to the specific situation and, therefore, to advance in the construction of a contextualized knowledge.

Currently, changes are occurring in training systems derived from a worldwide confinement, produced by the Covid 19 pandemic. This has caused teaching systems to become virtualized and teaching-learning processes to go from one face-to-face teaching to online teaching with everything that entails (Aguilera-Hermida, 2020; Alan, 2021; Aliyyah, 2023; Bakaniene et al., 2023; Garzón, 2021; Kapsia et al., 2020; Mishra et al., 2020; Nikolopoulou, 2022; Qazia et al., 2020; Tzavara et al., 2023; Zhou et al., 2020).

Therefore, it is necessary to be prepared to take on practical online teaching that enables the acquisition of the professional skills necessary to face contingencies, such as the pandemic, which focus on technology and, therefore, on training in ICT of future teachers (Darling-Hammond et al., 2023a). It is more necessary than ever to meet the teaching demands derived from new realities to achieve effective professional development that responds to parameters of equity and inclusion (Martin & Mulvihill, 2023).

Taking these references as a starting point, this work has a twofold objective: to identify the competencies acquired by students during practical training, in the opinion of the protagonists themselves, and to analyse to what extent the different ways of organizing the Practicum have an influence on the acquisition of these competencies.

## **Method**

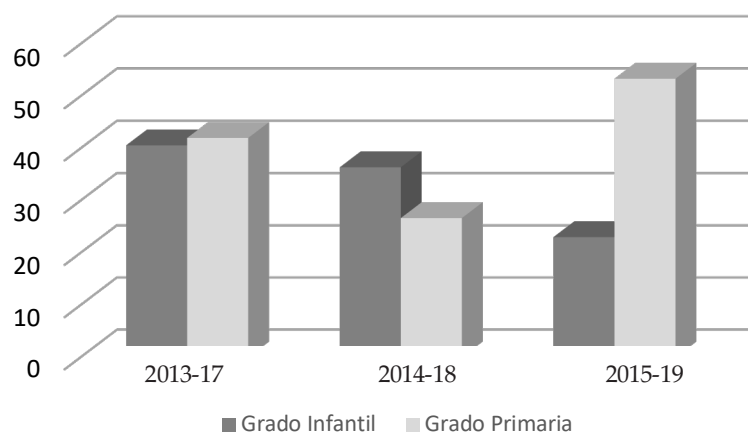
This is a quantitative, descriptive and longitudinal study, with a questionnaire as an instrument for collecting information.

### **Population and Sample Size**

The sample (Figure 1) is composed of 932 students who belong to three different and consecutive classes: 2013-17 (n = 385), 2014-18 (n = 293) and 2015-19 (n = 254). 48.9% are undergraduate students in Early Childhood Education and 51.1% are students of the Degree in Primary Education, from the Faculty of Teacher Training of the University of Santiago de Compostela (Spain).

**Figure 1**

*Participants*



The 81.8% of the students are women and the rest are men (18.2%), as it is usual in these degrees. The age ranges from 19 to 21 years. The majority of students have completed internships in public schools (57.8%), 26.5% in subsidized private schools, and 12.8% in non-subsidized private schools. The professional vocation of the students is high (28.9%) or very high (62.1%) and the satisfaction with the contribution of the internship to their training as teachers is very high, considering it "very satisfactory" (48.8%), "quite satisfactory" (23%) or "satisfactory" (17.4%).

### Procedure and Statistical Analysis

This research work began in the 2011-12 academic year, when the first class of the new teaching degrees that were adapted to the European Higher Education Area, began their supervised internships. In this study, we have worked simultaneously and longitudinally with three cohorts of students (in line with studies made by Peguera et al., 2021), following them throughout the three years in which they did supervised internships which correspond to the 2nd, 3rd and 4th year of the degree.

The instrument used to collect information has been the "Questionnaire for the Evaluation of the Experience of Students in the Practicum (QEESP)", prepared ad hoc and formed by 5 dimensions, which are answered on a Likert scale with 5 categories, as it is usual in this type of studies (Bandjur & Maksimović, 2013, Cantón et al., 2013, Feliu et al., 2016, Jurčević-Lozančić, 2015 Palazzo et al., 2016, among others). This paper analyses the dimension of competencies (general, specific and transversal) acquired during the internship.

The instrument has been discussed with experts, as in previous studies (Navaridas et al., 2016), who reviewed the items according to their relevance, discarding those that did not fulfil the condition of contributing to the knowledge of each of the dimensions that were considered. Subsequently, we proceeded to develop the database with the information obtained to determine its reliability and validity (Rodicio-García &

Sarceda-Gorgoso, 2015). The reliability for the whole questionnaire, Cronbach's alpha statistic, is  $\alpha=.940$ ; and for the items related to competences and satisfaction, the object of this work, is  $\alpha=.919$ . These values demonstrate a very good internal consistency.

For the administration of the questionnaires, we collaborated with the Faculty of Teacher Training that was involved in the Practicum. The students were informed that the questionnaires would be treated only and exclusively for the purpose of this investigation and that they were anonymous. Likewise, they were informed that there were no correct and incorrect answers, and that they did not have consequences on the grades of the modules they attended. Once the students have understood what their participation was about and for what the information they provided was going to be used, they proceeded to fill in an informed consent that has been positive in 100% of the students who were present at the time of its implementation.

Descriptive and inferential statistics have been combined: reliability statistics (Cronbach's  $\alpha$ ), Student's t test for independent samples, analysis of variance (ANOVA) of one factor and multivariate analysis (MANOVA). Intra-group comparisons have been made, studying the responses of each cohort of students identified by the year of completion of the studies; and inter-groups comparing the opinions given by the three cohorts studied. All this considering the degree: Degree in Early Childhood Education (ECE) and Degree in Primary Education (PE). The treatment and analysis of the data has been carried out through the statistical program SPSS 22.0 for Windows.

## Results

Students perceive that they develop the competencies of their degree moderately, with mean scores around 3 out of 5 points (see Table 1). The lowest means are observed in the Degree in Early Childhood Education, in the transversal competences T1 (instrumental knowledge of foreign languages) and T3 (instrumental knowledge of ICT); with scores of 2.74 and 2.91 respectively.

**Table 1**

*Mean scores and standard deviation of the sample*

Competences	ECE		PE	
	M	SD	M	SD
G1. Know the objectives, curricular contents and evaluation criteria	3,38	,942	3,42	1,014
G2. Address learning situations of languages in multicultural and multilingual contexts effectively	3,10	1,039	3,03	1,127
G3. Design and regulate learning spaces in contexts of diversity (educational needs, gender equality, equity and respect for human rights)	3,61	1,164	3,50	1,121
G4. Promote coexistence in the classroom and beyond and address the peaceful resolution of conflicts	3,88	1,128	3,89	1,085
G5. Know the organization of schools and the diversity of actions that comprise its functioning	3,51	1,089	3,62	1,094
G6. Perform tutoring and guidance functions with	3,47	1,176	3,32	1,261

Competences	ECE		PE	
	M	SD	M	SD
students and families				
G7. Accept that the teaching profession has to be perfected and adapted to scientific, pedagogical and social changes throughout life	3,68	1,125	3,67	1,073
G8. Reflect on classroom practices to innovate and improve teaching activity	3,64	1,035	3,60	1,132
G9. Know the educational implications of ICT	3,00	1,090	3,09	1,283
G10. Understand the function, possibilities and limits of education in current society	3,40	,983	3,46	1,016
G11. Know models of quality improvement with application to educational centres	3,09	1,025	3,12	1,165
S1. Acquire a practical knowledge of the classroom and its management	3,94	1,158	3,95	1,024
S2. Know and apply the processes of interaction and communication in the classroom	3,87	1,046	3,82	,967
S3. Control and monitor the educational process	3,60	1,054	3,58	1,051
S4. Relate theory and practice with the reality of the classroom and the centre	3,63	1,163	3,71	1,148
S5. Participate in the teaching activity and learn how to act from practice	3,92	1,225	3,68	1,229
S6. Participate in improvement suggestions	3,33	1,082	3,25	1,160
S7. Regulate processes of interaction and communication between students	3,64	1,050	3,50	1,149
S8. Know ways of collaboration between different sectors of the educational community and social environment	3,27	1,079	3,34	1,132
T1. Instrumental knowledge of foreign languages	2,74	1,173	3,11	1,210
T2. Instrumental knowledge of the Galician language	3,25	1,211	3,43	1,205
T3. Instrumental knowledge of ICT	2,91	1,091	3,20	1,158
T4. Information competence	3,21	1,058	3,34	1,052

Nota. G: General competences; S: Specific Competences; T: Transversal Competences.

To analyse how the degree (ECE and PE) and the year of completion of the studies (2017, 2018 and 2019) influence the acquisition of competences, a multivariate analysis (MANOVA) was carried out, taking as dependent variables the competences and as factors the fixed or independent variables, the degree and the year of completion. The analysis of homogeneity of the variances by means of the Levene's test ( $p < .05$ ), indicates that this equality exists giving validity to the subsequent analyses. Attending to the degree (Table 2), the students of Early Childhood Education are those that develop more the competences related to "tutoring and guidance functions with students and families" (G6). Regarding the specific competences, "the contribution of the Early Childhood schools to participate in the teaching activity" (S5) and to "regulate processes of interaction and communication between students" (S7) stand out. The transversal competences affected by the degree, are T1 and T3, that is to say, it is the Primary Education centres that contribute the most to the "instrumental knowledge of foreign languages" and the "instrumental knowledge of ICT."



**Table 2**

*Significant competences by degree*

Competence	F	f.d.	Sig.
G6. Perform tutoring and guidance functions with students and families	5,0571	1	.033
S5. Participate in the teaching activity and learn how to act from practice	10,401	1	.001
S7. Regulate processes of interaction and communication between students	4,983	1	.026
T1. Instrumental knowledge of foreign languages	18,732	1	.000
T3. Instrumental knowledge of ICT	13,757	1	.000

*Nota.* Level of significance: 95%.

If the cohort object of study, identified by the year of finalization, is considered the results reveal that there are differences between the three years studied, in most of the general and specific competences, and not in the transversal ones; although the post hoc HSD tests of Tukey leave some of them out (see Table 3).

There are four general competencies that present significant differences between the first two promotions, the one ending in 2014 and 2015. In the first one, they develop more "know the objectives, curricular content and evaluation criteria" (G1), "reflect on classroom practices to innovate and improve teaching activity" (G8), "know the educational implications of ICT" (G9) and "understand the function, possibilities and limits of education in current society" (G10).

**Table 3**

*Significant competences according to the year of completion*

Competence	F	f.d.	Sig.	HSD Tukey
G1. Know the objectives, curricular contents and evaluation criteria	5,006	2	.007	.010* .043**
G4. Promote coexistence in the classroom and beyond and address the peaceful resolution of conflicts	3,237	2	.040	-
G5. Know the organization of schools and the diversity of actions that comprise its functioning	3,671	2	.026	-
G7. Accept that the teaching profession has to be perfected and adapted to scientific, pedagogical and social changes throughout life	5,352	2	.005	-
G8. Reflect on classroom practices to innovate and improve teaching activity	3,258	2	.039	.037*
G9. Know the educational implications of ICT	4,708	2	.009	.015*
G10. Understand the function, possibilities and limits of education in current society	3,974	2	.019	.011*
S1. Acquire a practical knowledge of the classroom and its management	7,585	2	.001	.000* .003**

Competence	F	f.d.	Sig.	HSD Tukey
S2. Know and apply the processes of interaction and communication in the classroom	6,742	2	.001	.008* .002**
S4. Relate theory and practice with the reality of the classroom and the centre	4,360	2	.013	-

*Nota.* Level of significance: 95%. \*Difference between the first and the second year. \*\*Difference between the first and the last year.

It occurs something similar with the specific competences, both the "practical knowledge of the classroom" (S1) and the "knowledge and application of the processes of interaction and communication in the classroom" (S2), are two competences that were better developed in 2014 than in the years 2015 and 2016.

The interaction between the degree and the year of completion of the studies is significantly associated with the acquisition of some competences. The results of the multiple comparisons show statistically significant differences in three general and three specific competences (see Table 4). As was the case in the previous analysis, it is in 2014 when there is a greater acquisition of the generic competencies "address learning situations of languages in multicultural and multilingual contexts effectively" (G2), and "know the organization of schools and the diversity of actions that comprise its functioning" (G5).

Specific competences, "acquire a practical knowledge of the classroom and its management" (S1); "know and apply the processes of interaction and communication in the classroom" (S2); and "relate theory and practice to the reality of the classroom and centre" (S4), differ between the years 2015 and 2016; being more developed in 2016. All these differences indicate a greater development of the competences in the degree of PE, except for "Promote coexistence in the classroom and beyond and address the peaceful resolution of conflicts", which seems to have further development in the degree of ECE.

**Table 4**

*Significant competences attending to the interaction, degree and year*

Competence	F	f.d.	Sig.	HSD Tukey
G2. Address learning situations of languages in multicultural and multilingual contexts effectively	3,438	2	.033	.010* .043***
G4. Promote coexistence in the classroom and beyond and address the peaceful resolution of conflicts	13,432	2	.000	.013*
G5. Know the organization of schools and the diversity of actions that comprise its functioning	11,084	2	.000	.010* .048***
S1 Acquire a practical knowledge of the classroom and its management	16,504	2	.000	.000* .003**
S2. Know and apply the processes of interaction and communication in the classroom	14,675	2	.000	.008* .002**

Competence	F	f.d.	Sig.	HSD Tukey
S4. Relate theory and practice with the reality of the classroom and the centre	5,028	2	.007	.010**

*Nota.* Level of significance: 95%. \*Difference between the first and the second year. \*\*Difference between the second and the last year. \*\*\* Difference between the first and the last year.

## Conclusion and discussion

In the first place, it can be stated that " Acquire a practical knowledge of the classroom and its management ", " Participate in the teaching activity and learn how to act from practice ", " Know and apply the processes of interaction and communication in the classroom ", " Accept that the teaching profession has to be perfected and adapted to scientific, pedagogical and social changes throughout life "and" Reflect on classroom practices to innovate and improve teaching activity " are the most developed competences by students during their internship period. These competences would, therefore, be directly linked to the "professional activity" and in whose development a clear contribution is attributed to the centres of internships. This leads to consider the importance of a careful selection of them, as well as the choice of tutors, since it is demonstrated that the previous teaching models and the contemporaries with whom they work in this period of training "become, in the end, the paradigm of the teacher's profession"(Martín, 2015, p.148). In addition, all this helps to shape a certain school culture that will be reproduced over time as well as to enhance or limit the development of certain competences.

The second objective was to analyse whether the development of competences varies according to the university degree and the year of completion of the studies. The results show that there are significant differences in terms of the degree, the year of completion of the studies, and both variables were considered jointly, placing the highest level of competence development in students who finished their training in the year 2014, followed by the students that finished it in 2015. The students that finished in 2016 are the group that perceives the least development of its competences.

Although there were slight organizational changes about tutors, supervisors or type of centre throughout the years studied in this work, it can be claimed, without a doubt, that the greatest variation took place in relation to the realization of the internship periods. The students of the year 2014 alternated the university training and the educational centre as follows: one week in the internship centres, Monday and Tuesday in the centres and the rest of the week in the university over the course of three months, and one last full week in practical scenarios. The students of 2015 followed the next sequence: four complete weeks in the internship centres, and Monday and Tuesday at the school and the rest of the week at the university throughout two months. The Practicum of the last year of this study (2016) was developed continuously in schools for two consecutive months, without contact with the university. These results indicate that the alternation between both scenarios is significantly linked to the development of professional competences, the greater the alternation, the greater the development of professional competences.

This allows affirming that the organization of the Practicum and the intervening elements in it are factors that influence the development of competences and, consequently, in the learning of the teaching profession, as it had already been shown in previous studies (Ruiz-Bernardo et al., 2022; Sarceda-Gorgoso & Rodicio-García, 2018). In this sense, it is interesting to consider the manifestations of specialists in the subject that go beyond suggesting specific modifications and advocate to overcome the traditional organization of the Practicum with the adoption of new approaches, such as Service-Learning, after finding that the Practicum "appears as an optimizer of learning compared to traditional internships in all the evaluated dimensions (...) from those related to the acquisition of theoretical content, to those of critical or reflexive thought development" (Ortega-Tudela et al., 2015, p.454).

This reflexive approach represents a turning point in the practical education of teachers and the investigation of their practice, since, as stated by Bandjur & Maksimović (2013, p.11) "a necessary precondition for one to learn what it is that he or she does, that he or she knows, and in which segments one should advance, individually and socially." However, the Practicum does not only imply a practical apprenticeship with the tutor, but also requires processes of reflection with the supervisor, which, without a doubt, are facilitated by combining the training in both scenarios, which has already been highlighted in the literature on the subject (Vizek-Vidović & Domović, 2013), as a common problem in teacher training in Europe and in other contexts. These works claim the need to incorporate new methodologies into practices (Andrade, 2023, Darling-Hammond, et al., 2023b, Pupik et al., 2023), which enable a greater connection between theory and practice (Waine, 2022), solid alliances between school and university, which enable practice contexts to enable cutting-edge experiences and which, today, constitute one of the challenges for initial teacher training (Darling-Hammond, et al., 2023b).

In line with these results, a question arises: What are the reasons that are at the base of these perceptions? This would be one of the limitations of the work that is presented, derived from its quantitative approach that does not allow to deepen the understanding of why the data is what it is, but only to verify it. We do not want to reduce the reliability of students' perception, but it must be complemented by other data sources and other forms of information collection, coinciding with Sáez (2017) that it depends on the type of educational problems, "we will need knowledge of the education and we will apply the most appropriate form of knowledge to the object of study as it corresponds to the adequate use of methodological complementarity as a principle of pedagogical research "(p. 239). In this sense, the analysis of the open questions of the QEESP and of the portfolios of the internships, which we hope will allow us a holistic understanding of the research problem, is still pending, (Stenberg et al., 2016).

If we want the Practicum to be an opportunity to reflect on the experience and examine it carefully in the light of the knowledge that is possessed, it will be necessary to design a Quality Practicum in which the organizational aspects are considered. This justifies and gives opportunities to studies of this type that, contextualized in a concrete reality, deepen their knowledge with the goal of improvement.

### **Conflict of interests**

The authors declare that they have no conflict of interest.

### **Author contributions**

Conceptualization, M. Carmen Sarceda-Gorgoso; methodology, María-Paula Ríos-de-Deus; validation, María-Paula Ríos-de-Deus and María-Luisa Rodicio-García; formal analysis, María-Luisa Rodicio-García; research, M. Carmen Sarceda-Gorgoso, María-Paula Ríos-de-Deus and María-Luisa Rodicio-García; data analysis, María-Paula Ríos-de-Deus and María-Luisa Rodicio-García; wording of original draft, M. Carmen Sarceda-Gorgoso, María-Paula Ríos-de-Deus and María-Luisa Rodicio-García; writing, reviewing and editing, M. Carmen Sarceda-Gorgoso, María-Paula Ríos-de-Deus and María-Luisa Rodicio-García.

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