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Beliefs of pre-service teachers regarding future teaching practice

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The initial teacher training and the beliefs about their role in the classroom that prospective teachers acquire throughout their training significantly impact the construction of their teaching identity and influence their professional practice. Understanding these beliefs is crucial, as they act as filters that shape how future teachers interpret teaching-related information. This study focuses on analyzing the beliefs of future secondary education teachers, specifically students enrolled in the Master's Degree in Teacher Training at the University of La Laguna (ULL). A mixed methodology was used. Quantitative data were collected through a questionnaire on beliefs about teacher training in secondary education. This questionnaire was administered to 207 students at the beginning and end of the 2022–2023 academic year. Qualitative data were obtained from a focus group with participation from study subjects. The findings indicate that there are no significant differences in beliefs regarding disciplinary knowledge, a practical training model, and teaching vocation after completing initial training. These results suggest that certain core beliefs about teaching remain stable throughout the initial teacher training process, highlighting the need to reflect on how teacher education programs can more effectively influence the belief systems of future educators.

KEYWORDS

beliefs, educational quality, educational strategies, secondary teacher education, secondary school teachers, teaching skills

1 Introduction

Numerous authors highlight the fundamental role played by solid initial teacher training in improving educational quality (Álvarez-Medina and Sánchez-Heredia, 2022; Imbernón, 2007, 2019; Hargreaves, 2009; Serrano Rodríguez and Pontes Pedrajas, 2015). Educational quality, defined as the extent to which the school, through relevant and effective processes, promotes the cognitive, social, and emotional development of students (UNESCO, 2005; Scheerens, 2011). The quality of teaching is the interschool factor with the greatest impact on student achievement and is measured through indicators such as progress on standardized tests and graduation rates (Barber and Mourshed, 2007; OECD, 2018).

In this line, the Report prepared by the International Commission on the Futures of Education (Arévalo, 2022) highlights that “teachers are key figures on which the possibilities of transformation rest” (p. 84). Therefore, it is crucial to rethink and improve

the initial and in-service training of teachers, regardless of territorial, educational or social scope (Asterhan and Lefstein, 2023; Pérez-Jorge et al., 2022). Immediate action is needed to ensure the best possible education for our students.

In this sense, initial training should begin by defining professional identity. Any teacher's ideas and beliefs about their role in the classroom directly impact the quality of their teaching and, therefore, student achievement (Hattie, 2003; Popper-Giveon and Shayshon, 2016; Stenberg et al., 2014). In addition, identifying the assessments, expectations, and concerns aspiring teachers have about training allows for the improvement of the formative process and lays the foundation for a solid professional identity. The beliefs that teachers hold and the effect of their self-revelations on the teaching-learning process (Peña Froment et al., 2021) significantly influence their job development and level of commitment (Moses et al., 2017). Although this study does not evaluate classroom practice, understanding these initial beliefs is essential to guide training actions that can influence practice, thus increasing the likelihood of effective teaching interventions in the future. For this reason, teachers must stop to reflect on their own beliefs, be willing to adjust them and constantly improve their educational practice, adapting it to their students' individual needs and particularities. Both teachers' initial training and the beliefs they acquire throughout their teaching-learning process significantly impact the construction of their teaching identity. Teacher identity integrates cognitive (beliefs), affective (passion/commitment), and social (sense of belonging) dimensions (Beijaard et al., 2004); and its robustness is associated with higher-quality classroom practices and better student outcomes (Day and Gu, 2007; Hattie, 2009). Therefore, trainers must keep in mind the influence they exert on future teachers, not only in terms of didactic content but also in their perception as professionals (Flores and Day, 2006; Salazar Noguera and McCluskey, 2017; Stenberg et al., 2014). This is, consequently, a critical stage in creating teachers who are passionate about teaching or, on the contrary, teachers who are unmotivated with their professional work (Hong, 2010; Cabrera and Córdoba, 2011). Teachers gradually build their professional identity (García-Rubio, 2022; Ostinelli and Crescentini, 2021). The starting point is the knowledge of specific content, the fundamental competencies for teaching, and the ability to use learning materials to guide students, all from a reflective practice (Martín-Romera and García-Martínez, 2018). Teaching involves combining disciplinary knowledge with the action of teaching, and this gives rise to professional knowledge.

Disciplinary knowledge needs the acquisition of didactic knowledge to bring it to educational practice; this interaction influences the teacher's beliefs about their teaching practice (Rodríguez and Alamilla, 2018). In this regard, the importance that teachers attach to the mastery of specialized knowledge as one of the most relevant competencies within their professional profile is found in studies such as that of Ferrández Berruero and Sánchez-Tarazaga (2014), whose most valued competency by the surveyed group was knowing how to transmit knowledge, or like that of Martín-Romera and Salmerón Vilchez (2023), in which the interviewed sample highlights the need to obtain pedagogical training, but integrated with disciplinary knowledge.

On the other hand, initial training should combine knowledge of disciplinary knowledge with the acquisition of didactic knowledge (Nickel and Crosby, 2021; Pérez-Jorge et al., 2021).

Training in teaching strategies and skills will make it possible to apply the contents acquired during the study of the specialty in practice. However, this situation is not expected since beginning teachers often express dissatisfaction with the training received due to its excessively theoretical nature and detachment from the practical reality of the profession (Martín-Romera and García-Martínez, 2018). Initial training programs should overcome the separate training of theoretical knowledge and practical experiences because this prevents the integration of didactic knowledge and distances future teachers from the real situations they will have to face in educational practice. In numerous studies, students in initial training demand a practical approach that provides them with didactic and methodological tools and skills for their future teaching practice (González Alfaya et al., 2019; Domínguez-Fernández and Prieto, 2019; Manso and Garrido-Martos, 2021; Poveda et al., 2021; Serrano Rodríguez and Pontes Pedrajas, 2015; Serrano Rodríguez et al., 2019).

On the other hand, a fundamental aspect in the construction of the professional identity of any teacher is their perception of the qualities that characterize a good educator. In this regard, when asked about the characteristics of the current good teacher, the study by Alonso-Sainz (2021) reveals that practicing teachers value personal competencies (patience, vocation, motivation...) more significantly than other competencies such as digital, didactic-pedagogical, emotional, social, linguistic or mathematical. In the same vein, the research by Delgado-García and Toscano Cruz (2021) points out three main factors that help to explain this process of building the professional identity of the future teacher: interest in teaching, personal qualities and the properties of initial training, understanding vocation as a critical element to face the secondary education stage, in itself "problematic."

Considering the above, this paper aims to analyze teachers' beliefs in initial training and how they might influence their future work as secondary school teachers. This study, therefore, focuses specifically on the students of the Master's Degree in Teacher Training in Compulsory Secondary Education, Baccalaureate, Vocational Training and Language Teaching (from now on MFP) of the University of La Laguna (from now on ULL).

The following specific objectives were established:

- (a) To assess how important pre-service teachers consider training in subject-area knowledge to be.
- (b) To examine pre-service teachers' perceptions of the relevance of training in the acquisition and development of teaching strategies and pedagogical skills.
- (c) To identify the beliefs about the characteristics of good teachers.

2 Materials and methods

2.1 Sample

A convenience sample was taken from students enrolled in the MPF in the 2022/23 academic year who voluntarily wished to participate in the study. The sample consisted of 207 master's degree students from all the specialties offered by the ULL.

TABLE 1 Distribution of participating students by degree and by gender.

Master's specialties	Sample		Female		Male	
	N	%	N	%	N	%
Economics, business and tourism	16	7.8	10	62.5%	6	37.5%
Biology and geology	15	6.8	7	46.7%	8	53.3%
Mathematics	15	7.3	8	53.3%	7	46.7%
Humanities	14	6.8	5	35.7%	9	64.3%
Languages and literature	12	5.9	9	75.0%	3	25.0%
English	17	8.3	11	64.7%	6	35.3%
Drawing, design and plastic arts	15	7.3	12	80.0%	3	20.0%
Physics and chemistry	13	5.9	3	23.1%	10	76.9%
Professional modules	13	6.3	10	76.9%	3	23.1%
French	17	8.3	14	82.4%	3	17.6%
Physical education	12	5.9	5	41.7%	7	58.3%
Music	15	7.3	8	53.3%	7	46.7%
Technology	16	7.8	4	25.0%	12	75.0%
Educational guidance	17	8.3	14	82.4%	3	17.6%
Total	207	100.0	120	58.0%	87	42.0%

(Table 1). The complete description of the curriculum is available in [Supplementary Material 2](#).

All participants were enrolled in the first and only year of the Master's Degree in Teacher Training, which includes both didactic coursework and a supervised teaching practicum in secondary education settings. The post-test was administered after the completion of these training components.

Based on the branch of knowledge through which they entered the master's degree program, [Figure 1](#) shows that most students came from undergraduate studies in the arts and humanities (39%) and social and legal sciences (28.8%).

Regarding the sociodemographic characteristics of the sample, 48.3% were aged up to 25 years, 43% were between 26 and 35 years, and only 8.7% were older than 35 years. The mean age of the sample was 23.6 years. About gender, the majority of the students identified themselves as female 58%, compared to 42% who identified as male.

A mixed methodology was used to conduct this study to compensate for the limitations inherent to the restriction of only one of the methodologies, thus strengthening the interpretation of the results ([Creswell and Clark, 2017](#)). On the one hand, we present quantitative results obtained from the administration of the Questionnaire of Beliefs about the Teaching Profession (CCPD) ([Pérez Gracia, 2022](#)) that measures beliefs about the initial training and professional teaching identity of secondary education teachers before training and after master's studies. The qualitative data were obtained from a focus group conducted with MFP students. [Table 2](#) shows the composition and structure.

The focus group was organized based on the specialties taught at the ULL; the 13 specialties were distributed (the speciality of Educational Guidance was excluded, as its training corresponds to a different professional profile) in 4 blocks organized into sciences, arts, vocational training and arts. The focus group consisted of six students. A purposeful maximum-variation sampling strategy was employed to compose the focus group. The final group comprised six participants, guaranteeing (a) at least one representative from

each of the four knowledge blocks offered by the programme (Sciences, Humanities, Arts, and Vocational Training); (b) gender balance (three female, three male); and (c) an age range that reflected the cohort distribution (19–34 years). This composition was considered sufficient to generate discursive diversity while preserving interaction fluency ([Krueger and Casey, 2015](#)). The distribution is presented in [Table 2](#).

2.2 Instruments and techniques

The CCPD questionnaire ([Pérez Gracia, 2022](#)) was composed of 14 Likert-type scale items with 4 levels of response that expressed the lowest or highest degree, according to the students, concerning the questionnaire's statements. The fundamental aspects of the scale were centered on three dimensions: (1) mastery of specialized knowledge, (2) teaching strategies and skills, and (3) beliefs about the competence of a good teacher.

To contrast the results obtained with the questionnaire, a focus group was conducted, whose dimensions of analysis are identical to those of the questionnaire. [Table 3](#) shows the categories for each dimension.

2.3 Procedure

The questionnaire was administered through a Google form at two points, at the beginning and end of the 2022–2023 academic year. Before its application, the objective of the study was explained. The focus group was held after the second questionnaire application was completed. The six students representing four domains were convened, and a discussion was held based on the questions for each study dimension. The focus group was recorded for later transcription and content analysis.

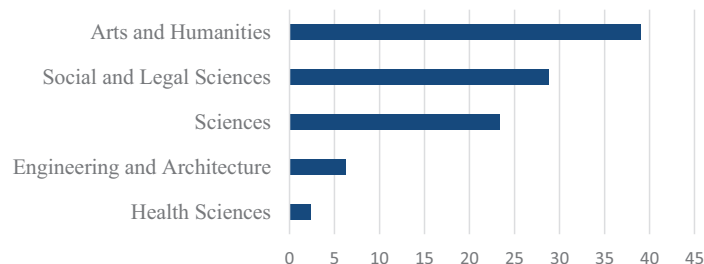


FIGURE 1

Distribution of the sample by branches of knowledge.

2.4 Data analysis

Quantitative data analysis was performed with the Statistical Package for the Social Sciences (SPSS) version 25.0. Two tests were carried out: (a) exploratory descriptive analysis of the dimensions of the questionnaire and (b) analysis of intergroup differences. For this, the Kruskal–Wallis test was used to determine the differences between the dependent variables and the established factors and between factors. For the focus group data analysis, a content analysis was performed using the MAXQDA 2020 program, which allows analysis based on the categorization of discursive elements (Rädiker and Kuckartz, 2019). The responses were coded by assigning codes to the document segments to identify the content units for each dimension and category of analysis.

The Shapiro–Wilk test indicated non-normal distribution of the data for all variables ($p < 0.05$), justifying the use of the Kruskal–Wallis test. This non-parametric test was used to compare the pre- and post-test scores for each of the three dimensions. The test statistic (H), degrees of freedom (df), and p -values are reported in the results section.

3 Results

Table 4 shows the mean scores and standard deviations for each item and factor that comprise the questionnaire. The results reflect the values collected before the students received the training and after completing the master's degree.

At a general level, it could be observed that after the training received in the master's degree, there were no significant differences that could justify an improvement in relation to the items and the dimensions (factors) in which they were grouped. It can be noted that the beliefs, expectations and evaluations of the students (future teachers) regarding (1) mastery of specialized knowledge, (2) strategies and skills for teaching, and (3) beliefs about the competence of a good teacher remain unchanged.

The Kruskal–Wallis test revealed no statistically significant differences between pre- and post-test scores for any of the dimensions: Mastery of specialized knowledge ($H = 0.000$, $df = 1$, $p = 1.000$), Teaching strategies and skills ($H = 0.000$, $df = 1$, $p = 1.000$), and Beliefs about the competence of a good teacher ($H = 0.000$, $df = 1$, $p = 1.000$).

This could indicate that the training received in the master's program has had a limited impact on the participants' beliefs about teaching competencies.

The data obtained in the focus group show the following:

1. Beliefs about the importance of mastering specialized knowledge (two categories): Relevance of the mastery of the contents of the speciality: Future teachers are unanimous in highlighting the importance of mastering the contents of the speciality for the performance of the teaching function. Ten units of meaning relative to the critical factor of content mastery are identified:

"I think it is fundamental to have a solid command of the contents of the speciality to teach well." (Physics and Chemistry Esp.)

"It is important to have a good grounding in the subject" (Esp. of Music).

1. Role played by knowledge of the speciality in teaching: Six units of meaning are identified where it is indicated that in-depth expertise in the subject has an impact on better educational practice:

"A thorough knowledge of the major gives you confidence when teaching." (Sp. of Humanities)

"It allows you to be more creative and flexible in lesson planning." (Language and Literature Sp-)

1. The importance of acquiring training in teaching strategies and skills (three categories):
2. Skills and strategies to be a good teacher: The future teachers agree that to be a good teacher, a series of skills and strategies must be brought together, fundamentally those related to effective communication, group management, planning,

TABLE 2 Selection of the students participating in the focus group.

Grouping specialties	Specialities	Number of participant	Specialities that participated
Science	Mathematics; biology; physics; physics and chemistry; physics and chemistry	2	Mathematics; physics and chemistry
Professional training	Professional modules; technology; economics, business and tourism	1	Professional modules
Artistic	Music; drawing, design and plastic arts	1	Music
Letters	Humanities; English; French; Spanish language and literature	2	Humanities; Spanish language and literature

formative evaluation and the capacity to motivate students. Twelve units of meaning associated with this category were identified: “A good teacher must be able to motivate students and awaken their interest in learning.” (Sp. Humanities)

“Well, I think it is essential to know how to transmit the knowledge, what you are going to teach. To know how to transmit and order everything that is going to be taught” (Sp. of Mathematics).

Training model (of skills and strategies): The participants unanimously highlighted a practical training model. Six units of meaning were identified where it was pointed out that the experience obtained from practice is necessary to acquire the strategies and skills needed to be a good teacher:

“A good teacher comes with practice, with time” (Professional Module Teacher).

“No matter how much you read the theory, it is not until you put it into practice that you learn and see everything...” (Music teacher).

1. Importance of didactic training: Five units of meaning are identified, and the importance attributed to didactic training stands out, indicating that it is fundamental to perform teaching practice effectively.

“The master’s degree has made me aware of how many things to always keep in mind in a classroom.” (Eng. Music)

“...because in the end the master’s degree becomes a formality that you pay for and everyone passes it.” (Eng. Humanities)

1. Beliefs about whether a good teacher can be trained or is innate (three categories):
2. Nature of a good teacher: the perception of teachers in initial training as to whether the characteristics for being a good teacher are innate or acquired is analyzed. Nine units of meaning are identified where it is stated that it is possible to acquire the competencies to be a good teacher:

“I believe that, well, you are not born, you learn. That’s why you spend many hours studying, to learn and to know how to manage yourself, and to know how to be a teacher, to be a good teacher.” (Eng. Music)

“No, I think you learn. In my case, I have found that it has been an enriching practical experience.” (Eng. Humanities)

However, three of the units of meaning qualify that there are people who possess these characteristics innately:

“In my opinion, you can improve your teaching skills with practice, but I think there are people who are born.” (Physics and Chemistry Esp.)

1. Development and teaching skills through training: When explicitly asked if it is possible to acquire the skills to be a good teacher, three units of meaning are identified, which indicate that they can be acquired, although it is more complex, and that there are people who possess them innately, relating them to having a vocation to be a teacher:

“Some people are born with an ability that cannot be achieved even with much practice.” (Physics and Chemistry).

“Everything can be learned except the intrinsic skills that we commented on of public speaking, public service.” (Eng. Mathematics).

1. Vocation and career choice: Five units of meaning are identified where the importance of having a vocation to be a good teacher is manifested, this being one of the factors that will determine professional performance in the future:

“I have always thought that it is by vocation because since I was little, it was always clear to me that what I wanted to do was just what I am trying to be today.” (Esp. Language and Literature)

TABLE 3 Selection of the students participating in the focus group.

Dimensions	Categorías	Category description
Beliefs about the importance of mastering specialized knowledge	Relevance of the mastery of the contents of the specialty.	Need for a solid and deep knowledge of the content of the specialty.
	Role of specialty knowledge in education	Impact of broad knowledge on teaching practice
The importance of acquiring training in teaching strategies and skills	Skills and strategies to be a good teacher	Skills that students consider essential to be a good teacher
	Training model (skills and strategies)	Approach or model that students consider most appropriate for acquiring the strategies and skills needed to be a good teacher.
	Importance of didactic training	Value attributed by future teachers to training and its influence on the development of their educational practice.
Beliefs about whether a good teacher can be trained or is innate	The nature of a good teacher	Creencias sobre si ser buen docente es una característica innata o adquirida
	Development of teaching skills and abilities through training.	The skills and strategies required to be a good teacher can be acquired through training or are innate.
	Vocation and career choice	Vocation plays a determining role in the choice of a teaching career and whether it influences professional performance.

TABLE 4 Pre and post results of the CCPD questionnaire.

Comp.	Ítems	Pretest		Posttest	
		Mean	SD	Mean	SD
C1	You must have a broad knowledge of the contents and teach them with clarity.	3.2174	0.68697	3.1981	0.62659
C3	In-depth knowledge of psychology, pedagogy and specific didactics must be acquired.	3.1546	0.72089	3.0242	0.67866
C6	Secondary school teachers are subject-specialists, and this training is only acquired during their careers.	2.1014	0.83279	2.1836	0.84481
F1	Mastery of specialized knowledge	2.8245	0.43918	2.8019	0.46791
C2	Learning and improvement can be achieved through theoretical and practical training.	3.6618	0.50401	3.6039	0.55528
C4	A training course does not teach authority or the ability to manage students.	2.7440	0.85738	2.8261	0.88608
C5	The ability to interest students in learning must be possessed	3.1159	0.66543	3.0435	0.71939
C7	To motivate students it is necessary to acquire the skills of the teaching profession.	3.4444	0.60384	3.2802	0.62220
C8	A good teacher possesses innate qualities for communication and teaching.	2.3816	0.75957	2.5024	0.81177
C9	Training focused on learning to program and mastering communication techniques in the classroom.	2.5942	0.70337	2.6522	0.78504
C14	You can acquire in one course the training to teach your subject well and perform the rest of the teaching duties	2.4686	0.84056	2.3623	0.92910
F2	Teaching strategies and skills	2.8140	0.33046	2.8958	0.41433
C10	Teaching training is only acquired through experience.	2.3768	0.73935	2.5894	0.80682
C11	Initial training should develop a professional teacher identity focused on educational problems.	3.0097	0.59927	2.8889	0.71883
C12	The teaching vocation is fundamental, but it is not achieved in pedagogical training courses.	2.4444	0.82176	2.4879	0.86384
C13	It is not easy to be a secondary school teacher if you have been trained with a different profession in mind.	2.5556	0.91139	2.6812	0.91629
F3	Beliefs about the competence of a good teacher	2.5966	0.49972	2.6618	0.53666

“I was not born with a teaching vocation. I had learned, and over time, I did realize that it is a way to contribute to society.” (Sp. Humanities)

4 Discussion

Regarding the questionnaire dimension on beliefs about teaching competence and the corresponding research question about future teachers' beliefs, it can be seen that there is no variation between the beliefs held before starting the master's degree and those at the end of it. This finding is consistent with previous studies (Aarts et al., 2019; Asensio Muñoz and Ruiz de Miguel, 2017; Martín-Romera and Salmerón Vílchez, 2023). This result is predictable, given that in order for beliefs to evolve, conflicting processes must occur—typically generated during the transition from initial training to early professional experience in educational settings (Hong et al., 2017; Morales and Taborda, 2021; Sims and Fletcher-Wood, 2020).

In relation to the first objective and the questionnaire dimension focused on subject-matter knowledge, this study shows that pre-service teachers place great importance on mastering their subject area, considering it a key aspect of their teaching role (Borquez et al., 2023; Carrasco Aguilar and Figueroa, 2019). These future teachers understand that a deep mastery of subject content facilitates essential teaching tasks, such as selecting relevant content, designing appropriate teaching strategies, and planning assessment systems. Similar results were found by Martín-Romera and Salmerón Vílchez (2023), who observed that pre-service teachers consider disciplinary training essential and only begin to appreciate pedagogical training once they are exposed to practical experiences.

With respect to the second objective, as well as the questionnaire dimension related to teaching strategies and skills, the findings indicate that participants value pedagogical training, but believe it should be strongly linked to practice. This vision is related to the proposals formulated in other countries such as Germany, Finland or Canada (Donaire, 2020; Trobat, 2021), where training is complemented with “induction” (beginning teacher induction) (Martínez, 2020; Martínez and Marín, 2018); also called initiation, or immersion, to play the teaching role as a fundamental element to culminate the training process (Fenwick, 2011). This proposal allows new faculty to explore and question their pre-existing beliefs while being trained in practice.

The training of education professionals should not be limited to the practical application of what they have learned in their initial training. It should also involve building knowledge on the concrete situations offered by real classroom experience. This type of training will enable future teachers to be competent in their professional work to respond to the demands of society (Marcelo, 2010; Martínez et al., 2019).

Finally, in relation to the third objective and the questionnaire dimension on beliefs about the characteristics of good teachers, the data confirm that participants unanimously emphasized vocation as a fundamental quality, with it being the most frequently mentioned concept in the focus group. This result is consistent with other studies that analyzed the opinions of future primary

and secondary teachers (Marchesi Ullastres and Díaz Fouz, 2007; Rodríguez-Gutiérrez et al., 2019; Ruohotie-Lyhty et al., 2024; Sánchez et al., 2021). Teaching activity is conceived as a profession with a vocation or a profession of values (Larrosa, 2010; Lau et al., 2022) that requires competencies, attitude, dedication and knowledge about ethical duties and rights.

5 Conclusion

In conclusion, it is essential to consider teachers' beliefs in their initial and ongoing education. Identifying the beliefs and evaluations of teachers not only improves the training process but lays the foundation for a solid professional identity. This study has shown that the beliefs of future teachers about the mastery of specialized knowledge, teaching strategies and skills, and the competencies of a good teacher did not change significantly during the master's program.

1. Importance of mastering specialized knowledge: Future teachers attribute great importance to mastering the content of their speciality, considering it an essential aspect of their teaching work. This mastery facilitates content selection, the design and appropriate choice of methodological strategies, and the evaluation system. These findings are consistent with previous studies highlighting the relevance of disciplinary knowledge in teacher training.
2. Acquisition and mastery of teaching strategies and skills: Participants value didactic training but emphasize that it should be linked to and developed through practice. This perspective aligns with proposals from other countries that complement theoretical training with induction programs, allowing new teachers to explore and question their pre-existing beliefs while being trained in practice.
3. Beliefs about the competencies of a good teacher: Vocation emerges as a fundamental element for being a good teacher, the most mentioned term in the focus groups. This finding is consistent with research analyzing the opinions of future teachers, highlighting that teaching is conceived as a vocational profession that requires competencies, attitudes, dedication, and knowledge of ethical duties and rights.

Overall, the results suggest that for there to be a modification in teachers' beliefs, an evolutionary process that combines initial training with the first professional experiences in educational centers is required. The training of education professionals should not be limited to the practical application of what they have learned in their initial training. Still, it should involve building knowledge from real classroom situations. This training will enable future teachers to respond competently to society's demands.

In light of these results, it is advisable to strengthen the master's program by placing greater emphasis on the fundamental aspects of professional identity and its connection to teachers' beliefs. While actual teaching practice is essential for changing beliefs, the small changes that occurred during the course suggest that experiences are not intentionally integrated into reflection and identity development. Strengthening this connection could

contribute to improving the levels of personal and professional development of future teachers who enroll in the program.

Limitations of the study: One of the limitations of this study lies in the use of a single focus group, which may restrict thematic saturation. While the data collected provided valuable insights into the beliefs of pre-service teachers, relying on one group limits the depth and diversity of perspectives. This constraint has been acknowledged in the Limitations section. Future research is encouraged to incorporate multiple focus groups or individual interviews to enhance the validity and transferability of the findings.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical approval was not required for the studies involving humans because this study was conducted within the Master's Degree in Teacher Training, with the approval of the Academic Committee. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

CP-L: Writing – review & editing, Writing – original draft. DP-J: Writing – review & editing, Writing – original draft. MG-A: Writing – review & editing, Writing – original draft.

References

- Aarts, R., Kools, Q., and Schildwacht, R. (2019). Providing a good start. Concerns of beginning secondary school teachers and support provided. *Eur. J. Teach. Educ.* 43, 277–295. doi: 10.1080/02619768.2019.1693992
- Alonso-Sainz, T. (2021). ¿Qué caracteriza a un "buen docente"? Percepciones de sus protagonistas. *Prof. Rev. Curr. Formación Del Profesorado* 25, 165–191. doi: 10.30827/profesorado.v25i2.18445
- Álvarez-Medina G. M., and Sánchez-Heredia, N. (2022). Revisión sistemática: Identidad profesional en la formación docente durante los años 2018 al 2020. *Polo Del Conocimiento* 7, 2406–2433.
- Arévalo, E. (2022). Reimaginar juntos nuestros futuros: Un nuevo contrato social para la educación (2021) Informe de la Comisión internacional sobre los futuros de la educación. *UNESCO Sumario. Warisata Rev. De Educ.* 4, 87–91. doi: 10.61287/warisata.v4i12.6
- Asensio Muñoz, I., and Ruiz de Miguel, C. (2017). Medida y evaluación de las creencias sobre la profesión de los maestros en formación. *Rev. Electr. Interuniv. Formación del Profesorado* 20, 79–91. doi: 10.6018/reifop.20.3.265231
- Asterhan, C. S. C., and Lefstein, A. (2023). The search for evidence-based features of effective teacher professional development: A critical analysis of the literature. *Prof. Dev. Educ.* 50, 11–23. doi: 10.1080/19415257.2023.2283437
- Barber, M., and Mourshed, M. (2007). *How the World's Best-Performing School Systems Come Out on Top*. Chicago, IL: McKinsey & Company.
- Beijaard, D., Meijer, P. C., and Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teach. Teach. Educ.* 20, 107–128. doi: 10.1016/j.tate.2003.07.001
- Borquez, J., Sanhueza, T., Alarcón, P., and y Díaz, P. (2023). Desarrollo de competencias en la formación inicial de docentes: Percepción de las personas tituladas de una universidad chilena. *Rev. Actual Investig. Educ.* 23, 41–69. doi: 10.15517/aie.v23i2.52941
- Cabrera, L., and Córdoba, M. (2011). Evaluación de un procedimiento de validación y acreditación de competencias profesionales. *Rev. Investig. Educ.* 9, 51–75.
- Carrasco Aguilar, C., and Figueroa, M. (2019). Formación inicial docente y high stakes accountability: El caso de Chile. *Profesorado. Rev. Curr. Formación Profesorado* 23, 71–91. doi: 10.30827/profesorado.v23i3.9978
- Creswell, J., and Clark, V. (2017). *Designing and Conducting Mixed Methods Research*. Thousand Oaks: Sage Publications.
- Day, C., and Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: Sustaining commitment and effectiveness over a career. *Oxford Rev. Educ.* 33, 423–443. doi: 10.1080/03054980701450746

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Supplementary material

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- Delgado-García, M., and Toscano Cruz, M. (2021). Construcción de la identidad profesional del futuro docente de Secundaria. *Profesorado Rev. Curr. Formación Profesorado* 25, 109–130. doi: 10.30827/profesorado.v25i1.8372
- Domínguez-Fernández, G., and Prieto, E. (2019). Experiencias y reflexiones sobre la formación inicial del profesorado de enseñanza secundaria: Retos y alternativas. *Prof. Rev. Curr. Form. Profesorado* 23, 1–13. doi: 10.30827/profesorado.v23i3.11229
- Donaire, C. (2020). “Relación entre el Prácticum y los procesos de inducción docente. Un estudio comparado entre Alemania, Chile, España y Finlandia,” in *La Docencia en la Enseñanza Superior. Nuevas aportaciones desde la investigación e innovación educativas*, ed. R. Roig-Vila (España: Octaedro), 1375–1388.
- Fenwick, A. (2011). The first three years: Experiences of early career teachers. *Teach. Teach. Educ.* 17, 325–343. doi: 10.1080/13540602.2011.554707
- Ferrández Berrueto, M., and Sánchez-Tarazaga, L. (2014). Competencias docentes en secundaria. Análisis de perfiles de profesorado. *Rev. Electr. Investig. Eval. Educ.* 20, 1–20. doi: 10.7203/relieve.20.1.3786
- Flores, M., and Day, C. (2006). Contexts which shape and reshape new teacher identities: A multi-perspective study. *Teach. Teach. Educ.* 22, 219–232. doi: 10.1016/j.tate.2005.09.002
- García-Rubio, J. (2022). Construcción de la primera identidad profesional del profesorado español de secundaria durante su formación inicial. *Rev. Mexicana Investig. Educ.* 27, 751–778.
- González Alfaya, E., Muñoz Moya, M., Cruz Pérez, A., and Olivares García, M. (2019). Construcción de la identidad profesional docente en educación infantil en Córdoba (España). *Rev. Ciencias Soc.* 25, 30–41. doi: 10.31876/res.v25i3.27354
- Hargreaves, L. (2009). “The status and prestige of teachers and teaching,” in *International Handbook of Research of Teacher and Teaching*, eds L. Saha and A. Dworkin (Boston, MA: Springer), 217–229. doi: 10.1007/978-0-387-73317-3_13
- Hattie, J. (2003). *Teachers Make a Difference — What is the Research Evidence? Professional Learning and Leadership Development*. Melbourne: NSW Department.
- Hattie, J. A. C. (2009). *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement*. London: Routledge.
- Hong, J. (2010). Pre-service and beginning teachers’ professional identity and its relation to dropping out of the profession. *Teach. Teach. Educ.* 26, 530–543. doi: 10.1016/j.tate.2010.06.003
- Hong, J., Day, C., and Greene, B. (2017). The construction of early career teachers’ identities: coping or managing? *Teach. Dev.* 22, 249–266. doi: 10.1080/13664530.2017.1403367
- Imbernón, F. (2007). La formación inicial del profesorado de secundaria ¿sigue siendo un tema pendiente? *Aula Innovac. Educ.* 161, 5–6.
- Imbernón, F. (2019). La formación del profesorado de Secundaria: La eterna pesadilla. *Profesorado Rev. Curr. Formación Del Profesorado* 23, 151–163. doi: 10.30827/profesorado.v23i3.9302
- Krueger, R. A., and Casey, M. A. (2015). *Focus Groups: A Practical Guide for Applied Research*, 5th Edn. London: SAGE.
- Larrosa, F. (2010). Vocación docente versus profesión docente en las organizaciones educativas. *Rev. Electr. Interuniv. Formación Del Profesorado* 13, 43–51.
- Lau, J., Vähäsantanen, K., and Collin, K. (2022). Tensiones de identidad docente y estrategias de afrontamiento relacionadas: Interacción con las etapas de la carrera y el contexto sociopolítico. *Prof. Profession.* 12, 1–21. doi: 10.7577/pp.4562
- Manso, J., and Garrido-Martos, R. (2021). Formación inicial y acceso a la profesión: Que demandan los docentes. *Rev. Educ.* 393, 293–319. doi: 10.4438/1988-592X-RE-2021-393-494
- Marcelo, C. (2010). La identidad docente: Constantes y desafíos. *Rev. Int. Investig. Educ. Pedagogía RIIIEP* 3, 15–42. doi: 10.15332/s1657-107X.2010.0001.01
- Marchesi Ullastres, A., and Díaz Fouz, T. (2007). *Las Emociones y los Valores del Profesorado*. Madrid: Fundación SM.
- Martínez, M. (2020). Sobre la transformación de la formación inicial y el acceso a la profesión docente. *Rev. Científica Prof Pedagogía Psicopedagogía* 5, 129–141.
- Martínez, M., Calderón, I., and Villamor, P. (2019). “El papel de la práctica en la formación de profesionales de la educación,” in *Formar Para Transformar. Cambio Social Y Profesiones Educativas*, ed. J. Vera Villa (Granada: Editorial GEU), 133–156.
- Martínez, M., and Marín, A. (2018). “De la formació inicial a la professió docent: La inducció a la docència,” in *Reptes de l’educació a Catalunya*, ed. J. Riera (Barcelona: Anuari), 491–535.
- Martín-Romera, A., and García-Martínez, I. (2018). Profesionalización del docente en la actualidad: Contribuciones al desarrollo profesional. *Prof. Rev. Curr. Formación del Profesorado* 22, 7–23. doi: 10.30827/profesorado.v22i1.9916
- Martín-Romera, A., and Salmerón Vilchez, P. (2023). Evolución del reconocimiento de la importancia del componente pedagógico en futuros docentes de Educación Secundaria. *Rev. Educ. Soc.* 4, 72–82. doi: 10.53940/reys.v4i7.140
- Morales, I., and Taborda, M. (2021). La investigación biográfico narrativa: Significados y tendencias en la indagación de la identidad profesional docente. *Folios* 53, 171–182. doi: 10.17227/folios.53-11257
- Moses, I., Berry, A., Saab, N., and Admiraal, W. (2017). Who wants to become a teacher? Typology of student-teachers’ commitment to teaching. *J. Educ. Teach.* 43, 444–457. doi: 10.1080/02607476.2017.1296562
- Nickel, J., and Crosby, S. (2021). Professional identity values and tensions for early career teachers. *Teach. Educ.* 33, 1–15. doi: 10.1080/10476210.2021.1895107
- OECD (2018). *Effective Teacher Policies: Insights from PISA*. Paris: OECD Publishing. doi: 10.1787/9789264301603-en
- Ostinelli, G., and Crescentini, A. (2021). Policy, culture and practice in teacher professional development in five European countries. A comparative analysis. *Prof. Dev. Educ.* 50, 74–90. doi: 10.1080/19415257.2021.1883719
- Peña Froment, F., García González, A., and Bohórquez Gómez-Millán, M. (2021). Autorrevelación docente: Una revisión de la literatura. *Rev. Fuentes* 23, 13–26. doi: 10.12795/revistafuentes.2021.v23.i1.11383
- Pérez Gracia, E. (2022). *Creencias Sobre la Formación Inicial y la Identidad Profesional Docente Del Profesorado de Educación Secundaria*. Córdoba: Universidad de Córdoba.
- Pérez-Jorge, D., Delgado-Castro, A., González-Afonso, M., and Ariño-Mateo, E. (2022). Perception of the students of the master in teacher training of the University of La Laguna on training in competences for educational guidance and the tutorial function. *J. Effic. Respons. Educ. Sci.* 15, 103–115. doi: 10.7160/eriesj.2022.150205
- Pérez-Jorge, D., González-Dorta, D., Rodríguez-Jiménez, M., and Fariña-Hernández, L. (2021). Problem-solving teacher training, the effect of the Proyecto Mates Programme in Tenerife. *Education* 49, 777–791. doi: 10.1080/03004279.2020.1786427
- Popper-Giveon, A., and Shayshon, B. (2016). Educator versus subject matter teacher: The conflict between two sub-identities in becoming a teacher. *Teach. Teach.* 23, 532–548. doi: 10.1080/13540602.2016.1218841
- Poveda, B., Barceló, M., Rodríguez, I., and López-Gómez, E. (2021). Percepciones y creencias del estudiantado universitario sobre el aprendizaje en la universidad y en el practicum: Un estudio cualitativo. *Rev. Compl. Educ.* 32, 41–53. doi: 10.5209/reed.67953
- Rädiker, S., and Kuckartz, U. (2019). *Analyse Qualitativer Daten Mit MAXQDA: Text, Audio and Video. BoD—Books on Demand*. Marburg: Philipps University of Marburg. doi: 10.1007/978-3-658-22095-2
- Rodríguez, J., and Alamilla, P. (2018). La complejidad del conocimiento profesional docente y la formación del conocimiento práctico del profesorado. *Actual. Investig. Educ.* 18, 434–458. doi: 10.15517/aie.v18i2.33129
- Rodríguez-Gutiérrez, P., Muñoz-Fernández, G., and Luque-Vílchez, M. (2019). Estudio exploratorio sobre el panorama actual de la formación inicial del profesorado de secundaria en España. *Int. J. Educ. Res. Innovat.* 11, 169–184.
- Ruohotie-Lyhty, M., Jääskelä, P., and Pitkänen-Huhta, A. (2024). “Identity tensions in teacher education,” in *Language Teacher Identity Tensions: Nexus of Agency, Emotion, and Investment*, eds Z. Tajeddin and B. Yazan (London: Routledge), 127–141. doi: 10.4324/9781003402411-11
- Salazar Noguera, J., and McCluskey, K. (2017). A case study of early career secondary teachers’ perceptions of their preparedness for teaching: Lessons from Australia and Spain. *Teach. Dev.* 21, 101–117. doi: 10.1080/13664530.2016.1204353
- Sánchez, A., García, A., and Castro, B. (2021). ¿Cómo entienden las y los docentes su vocación? Implicaciones de la vocación percibida en el desarrollo de la profesión docente. *Pulso* 44, 145–162. doi: 10.58265/pulso.4656
- Scheerens, J. (2011). “Measuring educational quality by measuring student outcomes: Theory and practice,” in *Perspectives on Educational Quality*, eds J. Scheerens, H. Luyten, and F. van Ravens (Cham: Springer), 35–51. doi: 10.1007/978-94-007-0926-3_3
- Serrano Rodríguez, R., and Pontes Pedrajas, A. (2015). Expectativas ante la formación inicial entre el alumnado del Máster de Profesorado de Enseñanza Secundaria. *Rev. Investig. Educ.* 33, 489–505. doi: 10.6018/rie.33.2.203471
- Serrano Rodríguez, R., Pontes Pedrajas, A., and Perez Gracia, E. (2019). Beliefs on the teacher professionalism and teaching models in initial teacher education. *Rev. Bras. Educ.* 24, 1–24. doi: 10.1590/S1413-24782019240018
- Sims, S., and Fletcher-Wood, H. (2020). Identifying the characteristics of effective teacher professional development: A critical review. *Sch. Effect. Sch. Improv.* 32, 47–63. doi: 10.1080/09243453.2020.1772841
- Stenberg, K., Karlsson, L., Pitkaniemi, H., and Maaranen, K. (2014). Beginning student teachers’ teacher identities based on their practical theories. *Eur. J. Teach. Educ.* 37, 204–219. doi: 10.1080/02619768.2014.882309
- Trobat, O. (2021). *¿Tiene sentido un sistema de acceso a la profesión tipo MIR para ser docente? Los procesos de iniciación a la docencia como elemento de innovación y transformación de la formación inicial docente. En La educación en Red. Realidades diversas, horizontes comunes: XVII Congreso Nacional y IX Iberoamericano de Pedagogía*. A Coruña: Universidad Santiago de Compostela.
- UNESCO (2005). *Education for All Global Monitoring Report 2005: The Quality Imperative*. Paris: UNESCO Publishing.