Check for updates

How higher education teachers see their professional identity

Carol Halal Orfali[1], Maria Luisa Arancibia Muñoz[2]*,
Irma Riquelme Plaza[1] and Rodrigo Unda Valenzuela[1]

[1]Interdisciplinary Center for Educational Innovation, Universidad Santo Tomás, Santiago, Chile,
[2]Center for Advanced Research in Education, Institute of Education, Universidad de Chile, Santiago,
Chile

An important dimension to understand the student learning process is the professional identity of teachers, which is conceptualized as a continuous process of construction and reconstruction. In this process, teachers define and assume their roles in a specific educational context that is characterized by tensions, adjustments, and transformations. This study focuses on understanding the professional identity of higher education teachers, a field characterized by constant evolution and demands. The personal characteristics of this identity are explored, including experiences and biographical representations, as well as its interrelationship with the institutional environment. Using a qualitative interpretive approach, six teachers recognized for their pedagogical innovation and educational commitment were interviewed. The results reveal outstanding motivation and responsibility in educational work, but also tensions between personal identity and the work context, reflected in the perception of low recognition and the importance of institutional leadership. The teachers show a critical and reflective view of their work, influenced by childhood experiences that impact their conceptions of educational justice and equity. To conclude, the common characteristics of professional identity in higher education highlight the need to integrate them into professional development. The article advocates for the design of more personalized training programs and the promotion of continuous learning among peers as key elements to strengthen this identity and improve pedagogical practice.

KEYWORDS

professional development, teacher identity, higher education, teaching identity, barriers

1 Introduction

The COVID-19 pandemic has highlighted the urgency of addressing new challenges in higher education. Among these challenges is the need to adopt more student-centered pedagogical approaches to promote participation, collaborative learning, and the practical application of knowledge. It has also highlighted the need to recognize the growing importance of 21st-century skills such as critical thinking, problem-solving, effective communication, and collaboration in today's job market. These aspects are especially relevant in the teaching-learning process in higher education (Ruiz-Bolivar, 2022). International organizations such as UNESCO (2022a, 2022b, 2024) have stressed the strategic and irreplaceable role of higher education in shaping more sustainable, resilient, and peaceful societies. In this context, universities face the challenge of anticipating the emerging demands of an ever-changing society (Waller et al., 2021; Alpízar et al., 2023; Sancho et al., 2018) with the aim of becoming educational spaces that respond to the needs of the 21st century.

These demands include, according to Martínez and Sánchez (2019), continuous training and pedagogical innovation, promoting student-centered teaching and, professional competencies including digital competencies, as indicated by Vishnevsky et al. (2021). Further, Kritt and Budwig (2022) highlight the relevance of constructivist pedagogical practices and the institutional changes necessary to support this transformation, emphasizing that teacher identity must evolve in line with these new demands.

Similarly, it is essential to address the conflicts and tensions that prevent teachers from advancing their innovative pedagogical practices. Conflicts related to higher education institutions include lack of time due to administrative overload, poor institutional support, and lack of incentives for innovation (Siekkinen et al., 2020). There is also resistance to change, both at the institutional level and among teaching colleagues, as well as rigid policies that inhibit experimentation with new teaching methods (Dugas et al., 2020). The lack of adequate continuing education programs and limited interdisciplinary collaboration also limit teachers' ability to develop and apply new teaching methodologies (Cuadra-Martínez et al., 2021). It is crucial to address the tensions derived from resistance to change and teachers' work overload, as Fernández and Díaz (2020) point out, to ensure an effective transition towards new educational practices. On the other hand, Ruiz and Hernández (2021) and Fahara and Torres Tobías (2019) highlight the need for institutional policies that support teacher well-being and encourage interdisciplinary collaboration. These are key elements to overcome these challenges and adapt to contemporary demands in the educational field.

In this way, it is expected that universities will improve staff professional development considering certain aspects. Key among them is professional identity, which is an essential field of study for higher education, and which contributes to improving educational quality, promoting professional development, strengthening relationships with students, encouraging educational innovation, and promoting teacher well-being (Canaza, 2020). In a constantly evolving world, universities strive to maintain and protect their traditional privileges and financial resources. However, this effort is counteracted by increasing pressure from society itself, including the need to develop study programs that are relevant and updated, that prepare students to face the challenges of the world of work, and that contribute to economic and social development. Further, universities are expected to promote innovation and cutting-edge research that addresses pressing global problems such as climate change, public health, and social inequality (UNESCO, 2022b).

These demands strain the identity of university teachers by challenging established practices and beliefs and generating pressure to adapt to a constantly changing educational environment. Teachers may struggle to reconcile these demands with their own professional identity and their most recognized functions associated with teaching, research, and management (Zabalza-Beraza and Zabalza-Cerdeiriña, 2022).

The way in which these functions are carried out will be determined, or rather influenced, by the different dimensions of a teacher's professional identity: (a) the professional aspects connected to the demands and parameters in which teacher professional identity is built from its profession and specific knowledge, the main dilemmas in this regard, and their training needs; (b) the personal aspects related to the type of personal involvement and commitment typical of the teaching profession, teachers' life cycles, and conditions affecting them

such as personal problems, satisfaction, expectations, and beliefs; and (c) the labor aspects related to contractual conditions, selection and promotion systems, incentives, and working conditions (Zabalza-Beraza and Zabalza-Cerdeiriña, 2022; Gregory et al., 2019; Olszewski, 2023).

In addition, teacher identity in its general and specific definitions is modified throughout professional life: it is constructed and reconstructed (Beijaard, 2019). For example, Trautwein (2018) addressed the development of teacher identity by exploring the changes in the identity of eight academics enrolled in an extensive teacher development program and concluded that the development of identity is fundamental for a teacher and that this can change over time. Other studies (Beijaard, 2019; Noonan, 2019) concluded that each profession develops its own professional identity – it is not unique – and in the same way as Trautwein (2018) points out, it evolves over time as teachers gain experience, face new challenges, and reflect on their practice. In other words, teachers develop new skills, adopt new pedagogies, or redefine their values and beliefs throughout their professional career.

This article is based on a qualitative study that explores teacher professional identity, using in-depth interviews that allow us to understand teachers' experiences and perceptions. A qualitative approach is appropriate for this analysis since it seeks to understand how personal and professional experiences, as well as the institutional context, are related in the construction of teacher identity. The study will be guide by the following research questions: (1) how do personal experiences and family context shape teaching identity? (2) how does the institutional environment affect teachers' perception of their professional identity? and (3) what individual, professional and institutional aspects are key to understanding teaching identity in Higher Education and how do they contribute to professional training?

The article will first address the personal characteristics of teachers' professional identity, which are constituted by biographical representations and experiences in their personal lives, and how these are connected to their professional performance (Hargreaves, 1994; Alonso et al., 2015). Secondly, the study will investigate the relationship between these personal experiences and, in particular, the institutional environment in which teachers operate. The perception of their work environment will be delved into, considering how feeling valued and recognized affects their vision of their professional career, as suggested by Van Lankveld et al. (2017). Finally, the study will use a multidimensional approach to examine the intersection between individual, professional and institutional aspects, following the approaches of similar studies (Kritt and Budwig, 2022; Beijaard, 2019; Cuadra-Martínez et al., 2021; Peri et al., 2023), as well as the contribution to professional training.

1.1 Definition and key aspects in the construction of professional identity

Professional identity is understood as a mixture of professional models, relational and biographical processes are anchored in what teachers interpret and internalize from emotionally charged educational experiences from the preschool stage to the exercise of the teaching profession.

Most of the research carried out on professional identity establishes a strong link between personal and professional aspects

(Alonso et al., 2015; Trede et al., 2011; El Atmani and Madrane, 2023). Personal events and experiences are linked to the teachers' professional performance (Beijaard, 2019; Noonan, 2019; Van Lankveld et al., 2017). In other words, the construction of teachers' identity construction occurs in a diversity of contexts which could affirm or produce conflicts regarding the assumed identity (Ávalos and Sotomayor, 2012).

In the field of higher education, various studies have indicated that the development of teachers' professional identity is intrinsically linked to a variety of factors ranging from childhood experiences to family and social influences. According to Pérez and Rivera (2021), play during childhood and family models can have a pivotal role in the development of a vocation and interest in teaching.

The construction of a teacher's professional identity is also shaped by their initial training, individual psychological characteristics, and sociocultural factors as pointed out by Cuadra-Martínez et al. (2021), Vanegas-Ortega and Fuentealba-Jara (2019), and Olave (2020). This initial training covers both formal education and the specific training necessary to perform the teaching role, which includes the acquisition of pedagogical knowledge, teaching skills, and practical experiences in educational environments.

The aforementioned elements not only influence teachers' perception of teaching and learning but also affect their values and the way they approach their professional work. Further, individual psychological characteristics such as personality and motivations play a fundamental role in shaping a teacher's professional identity.

Similarly, sociocultural factors such as the sociopolitical context and social expectations exert a significant influence on teachers' perceptions and practices. For example, pressure to provide quality education in environments where social advancement through education is valued can influence teachers' decisions and actions.

The construction of teachers' professional identity according to Hargreaves (1994) involves the integration of technical and emotional aspects of teaching with their personal experiences. This view is supported by studies such as Bara et al. (2018) and Day et al. (2006), who argue that the development of professional identity arises from the interaction between the individual experiences of teachers and the social, cultural, and institutional context in which they operate.

In this sense, as Serrano and Pontes (2016) mention, the development of a teacher's professional identity acquires meaning through interactions with other individuals during the exercise and evolution of their professional life. These interactions are critical in shaping teachers' perceptions, values, and practices and in influencing their ever-changing professional identity.

1.2 Relationship between teacher professional identity and pedagogical practice and reflective processes

Reflection is essential for the professional development of teachers. According to Schön (1992), this activity allows them to articulate their knowledge and beliefs about teaching, giving them greater control over their actions in the classroom and the ability to make changes. Reflection can be carried out individually or through feedback from colleagues as well as through individual and collaborative practical investigations (De Vries et al., 2014; Beauchamp, 2015).

The relationship between the personal and professional identity of a teacher is closely linked to reflective processes that enable the reconfiguration of their pedagogical practice (Vanegas-Ortega and Fuentealba-Jara, 2019; Marín et al., 2019). These processes imply a critical review of one's own experiences, values, beliefs, and actions. In the context of teaching, teachers can reflect on how their personal and professional identities are intertwined in their pedagogical work. Therefore, a reflective approach requires teachers to develop the ability to reflect through strategies such as self-observation, case analysis, reflective journal writing, collaboration, continuing education, and action research.

This reflective approach allows teacher education to be approached from broader perspectives that include values, attitudes, and emotions, as well as the development of professional identity, decision-making, analysis of ethical dilemmas, and the review of one's own viewpoints (Sellars, 2012; Vanegas-Ortega and Fuentealba-Jara, 2019). Reflection is crucial for teacher professional development as it facilitates the transformation of teaching paradigms as teachers engage in activities related to their professional growth (De Vries et al., 2014) such as mentoring, learning communities, and spaces for reflection on teaching (Ávalos, 2007; Schön, 1992; Shulman, 2016). These activities prompt teachers to review, adapt, and improve their pedagogical approaches in order to promote meaningful and effective learning for all students.

2 Methods

The research is framed within a qualitative methodology (Schreirer, 2012) at the levels of data collection and in the structuring of the data analysis. This research used a cross-sectional and exploratory design (Creswell and Poth, 2016) that began with the description of a phenomenon, in this case professional identity in higher education, to then delve into its interpretation.

2.1 Participants

The study focused on Higher Education teachers who were selected by the Centre for Innovation in Education of the university under study. This centre, renowned for its work in the continuous improvement of educational quality, identified these teachers as highly motivated, committed, and innovative individuals in their pedagogical practice. Their ability to implement creative and effective strategies to improve the teaching and learning process within the university context was valued. Below is a description of the participants, whose names have been pseudonymized to protect their identities (Table 1).

2.2 Data collection

In-depth interviews were used as described by Kvale and Brinkmann (2015). This qualitative methodology stands out for its ability to explore and understand the diversity of human experiences. Through open and reflective dialogue, researchers can gain a deeper understanding of the phenomena studied. The interviews were conducted using a previously prepared protocol that addressed relevant topics. The aim was to generate an environment of trust that

TABLE 1 Description of the participants.

Name	Profession	Subjects	Qualifications
Antonia	Physics and mathematics education	- Electricity - Electronics - Applied mathematics II	- Teaching diploma EDUSUP - Master's degree in teaching
Rocío	Social worker	- Formulation of social projects - Poverty and social exclusion - Social responsibility and citizen participation	- Master's degree in Psychology with Community Social Psychology
Roberto	Social worker	- Gerontology - General sociology - Introduction to sociology - Formulation of social projects	- Master's degree in Leadership - Teaching diploma
Jorge	Mathematics education	- Mathematics in different levels	- Master and PhD in Mathematics
Ernesto	Agricultural engineer	- Vegetables - Cereals - Potato production	- Bachelor's degree in agriculture - Master's degree in agriculture - Teaching diploma
Raúl	Electrical civil Engineer Mathematics education	- Methodology - Evaluation - ICT	- Master's degree in Curriculum - Teaching diploma - Master's degree in Higher Education

would allow the interviewees to respond honestly to the questions posed (Taylor and Bogdan, 2000).

The interviews were conducted in person using a conversation format stimulated by the interviewer and with a pattern of flexible questions, leaving spaces to address topics that had not been predetermined (Corbetta, 2007). The interviews were digitally recorded and later transcribed in their entirety.

For the interview protocol, various topics were considered. Firstly, it was considered that the interpretation process could be guided by relevant theoretical frameworks such as the professional identity theory proposed by Beijaard et al. (2004) and Beijaard (2019). This conceptual framework offers a solid perspective to understanding how professionals in the field of higher education develop and negotiate their identity in their educational work. Some topics that were addressed were:

- Family influences: Aspects of your career or life story which mark and influence your professional work.
- Academic training and experience: Evaluate the teacher's academic training, including their academic degrees and expertise, as well as their previous experience in teaching and in the specific field of study.
- Aspects related to motivation and satisfaction.
- Work conditions
- Characteristics of the work environment where you work as a teacher
- Teacher reflection: as a critical process whereby teachers explore and evaluate their teaching practice.

2.3 Analysis techniques

To analyze the interview data, we followed an approach recommended by Sancho-Gil and Hernández-Hernández (2019) and Creswell and Poth (2016), who suggest that the interpretive phase involves the analysis of qualitative data to identify patterns, themes, and significant relationships related to professional identity in higher education.

Content analysis was conducted following Schreirer (2012), for its ability to systematize and code qualitative data in a rigorous manner. This method allowed us to identify emerging patterns and themes in the interviews, as well as examining the context, providing a deeper understanding of teachers' professional identities.

The following steps were followed: (a) open coding of the transcribed interviews identifying *a priori* and emerging categories and codes; and (b) comparison of codes to identify relationships between them as well as the collection of common themes. This allowed the relationships to be described and interpreted to produce a preliminary analysis of the data. For this study, open coding was first applied. This involved breaking down the textual data into meaningful units and assigning them codes that represented key themes or concepts. These codes responded to *a priori* categories, adjusting the codes as the data was studied more deeply. The second step was code comparison where the identified codes were grouped and analyzed to discover common relationships and patterns. This process allowed us to identify emerging themes and understand how the different codes interact with each other. The coding matrix is presented below (Table 2).

Regarding ethical considerations, all participants were provided with a document explaining the study and identifying who was conducting it and their institutional affiliation. In addition, the participants were asked to sign a consent letter which indicated who they could contact if they had further questions or concerns.

3 Results

Several areas and aspects that they consider fundamental to their professional identity. Among these highlights are:

TABLE 2 Coding matrix.

A priori themes	Code	Emerging themes	Finding
Family influence	Mother's role Work ethics	Commitment and duty to educational tasks	Intersection of family life with teaching work
Effort, discipline, and meritocracy	Personal experience Hard work Autonomy	Persistence and determination	
Professional ethics and educational values	Social justice Equity Vocation	Critical view of education	
Commitment to continuous professional development	Continuous development Training from constructivist approaches Active methodologies	Continuous development	Continuous development for pedagogical innovation
Student development	Motivation and enthusiasm Skill development Creativity and self-criticism Active methodologies	Development of skills in the student	Commitment to the comprehensive development of the student
Teacher reflection	Learning from good and bad teachers Assessment of pedagogical practices Self-reflection Adaptation of methodologies	Pedagogical experiences approached from self-reflection The importance of self-reflection in teaching practice	Intersection between teaching reflection and pedagogical practice
Tensions in the workplace	Little time for educational tasks Low recognition Lack of institutional support Working conditions Leadership and trust	Little time to carry out educational tasks and low teacher recognition Importance of institutional support for teacher development	Tensions and problems faced in the workplace

Own elaboration.

3.1 Intersection of family life and teacher duties

Below are the three emerging categories representing the relationship between family life and professional duties.

3.1.1 Commitment and duty to educational tasks

For teachers, the construction of their professional identity intersects with their personal lives, with the family context being relevant and influential in the exercise of their professional activity. It is possible to identify a cultural aspect at the level of family structure, where a preferred view of gender and its associated roles (father and mother) have allowed them to strengthen the commitment and duty with the educational tasks they carry out in higher education.

…My mother was a very hardworking, my mother worked and never gave up on us, always attentive to everything that happened to us. She wasn't a tactile mother, I mean, "come here my little son," a cuddle. No, mum said, "you have to study when you have a test, you start studying today" and in some way that got us all on track, all the children… (Rocío, Social Work teacher).

I am the third of six siblings and I think that the influence that helped the whole family, all the siblings, was mum, because dad went out to work, so mum read us stories, she made us learn all the basic functions very early … (Roberto, Social Work teacher).

3.1.2 Persistence and determination

The most important element of the quote below for teacher identity is the influence of personal experiences and individual effort in the development of the teacher's professional identity. Ernesto recognizes that his life has been marked by hard work and constant effort, which has contributed to forging his identity as a professional. His view highlights the importance of personal commitment and dedication in the development of teaching identity, highlighting persistence and determination as fundamental traits in the process of training and professional growth.

…I feel that my life has not been easy, it has been a lot of effort. Although it is true that, not as much as my father and many people today, but it has been like, (…) work, with a lot of work, that is, I think that today I am the result of a lot of work, it is very difficult for me (…) but I keep trying, I keep trying, a little obsessive in terms of personality… (Ernesto, Agronomy teacher).

The following quotation highlights the importance of autonomy and authenticity in the formation of the teacher's professional identity, as well as the influence of family experiences in academic and professional decision-making.

My eldest sister had studied law and my second eldest sister studied social work, and I took the university entry test, I did well but not as well as I wanted, I must have gotten about 680, 690 [out of 850] at

that time, but it was enough for me to apply for law, for example, which was kind of what my dad wanted and at the University of Concepción, but I did not want to because of my sister's experience in law, I did not like it… (Antonia, Electrical Engineering teacher).

3.1.3 Critical view of education

There are two participants with initial teacher training and two social workers who indicate that the motivation to become teachers is related to the concept of justice, which suggests they have a critical view of education and equity.

…the other thing that motivates me has to do a little with the issue of justice, from what I was telling you… you have to be as fair as possible with the students and not discriminate against anyone… (Rocio, Social Work teacher).

Antonia's statement below about her wanting to become a teacher since she was a child suggests a connection with the teaching vocation, learned through play in her first experiences during childhood, which manifested in her games.

I always had the intention, since I was little girl, I wanted to be a teacher and for me the topic of being a teacher was always a game, we played when we were kids and everything… (Antonia, Electrical Engineering teacher).

3.2 Continuing development for pedagogical innovation

A commitment to continuous learning is a central characteristic of the participants' professional identity, as they recognize the importance of keeping up to date with the latest educational trends and teaching methodologies.

I am always updating myself; I have done a diploma, a masters, and courses that have allowed me to hone my training as a teacher… (Antonia, Electrical Engineering teacher).

Because I think that someone who works in education or wherever they work, one always has to be innovating and updating, looking for different tools… (Roberto, Social Work teacher).

3.3 Commitment to the comprehensive development of the student

The main finding in relation to emphasis on student development is the importance that teachers accord to motivation and commitment in their educational context. Roberto and Jorge below highlight the need to generate enthusiasm and motivation among their students, as well as the need to develop skills and habits necessary for learning. Further, one of the interviewees emphasizes creativity, self-criticism, and self-confidence as fundamental elements in teaching. Both teachers stress the teachers' passion and commitment to offer quality education and promote the comprehensive development of their students.

Well, first I have to find a way to make the students get excited about the specialty, acquire all those study habits, and school habits that they did not acquire in secondary school or primary education, and on the other hand try to level them up, from the viewpoint of mathematical tools, writing, communication. So, in the face of all that I believe that us teachers (…) do something different, because one could actually do more things, but looking for a new method is for that, the motivation that students will learn (Roberto, Social Work teacher).

…a very, very strong commitment to students; there is a certain amount of creativity that suddenly escapes us, I do not know where that comes from, very creative, self-critical, we are not at the top, we are always going up, we are never at the bottom, nor at the top, just going up. There is play, what we are doing is fun, it is entertaining, I do not want to bore anyone, very strong extrinsic and intrinsic motivation, a lot of self-confidence, the eternal survivor of everything (Jorge, Mathematics teacher).

3.4 Intersection between teaching reflection and pedagogical practice

Below are the two categories that represent the intersection between teaching reflection and pedagogical practice.

3.4.1 Pedagogical experiences approached from self-reflection

These discourses emphasize the importance of reflecting on one's own experiences as students and teachers, and how these can influence professional development and the continuous improvement of educational practice.

Jorge, a mathematics teacher, highlights that even the least effective teachers can provide valuable lessons by showing how certain practices should not be carried out. This suggests that experiences with different types of teachers can help educators reflect on their own practice and identify areas for improvement.

They teach you how not to do things. Less effective teachers can provide valuable lessons by showing how certain practices should not be done (Jorge, Mathematics teacher).

Similarly, Raúl, another mathematics teacher, shares a similar opinion about learning from both good and less effective teachers. He highlights that even from teachers who are not considered good, valuable lessons can be learned about how not to do things.

Look… I even learned from the bad teachers and it's very true, from the good teacher, you obviously learn a lot from them and from the bad teacher too. They teach you how you do not have to do things (Raúl, Mathematics teacher).

Finally, Rocío, a Social Work teacher, reflects on how experiences with dull lecturers during her time at university influenced her own pedagogical approach. Although she acknowledged that she sometimes finds herself repeating teaching patterns that she criticized, she also notes that these experiences

lead her to look for ways to improve her teaching practice for future classes.

> *I felt that when I studied at the university, my teachers were so dull in some way, that I feel that I do not teach my students in the same way that I criticized, although sometimes I end up doing it, but at least I feel that it is not very useful, but at least I feel that when I end up repeating, I have to change it for another class (Rocío, Social Work teacher).*

3.5 The importance of self-reflection in teaching practice

This section highlights the importance of a critical perspective towards teaching, which implies self-reflection of one's own pedagogical actions, and which is seen as an important element in professional development.

> *… a rather critical view of our work or self-criticism of our own work, that is, when I leave a class, it is clear when I did it well, when I felt that the students were motivated, and when they were not. And I believe that that same criticism is what prevents you from being complacent, it is what allows you to look for new ways (Roberto, Social Work teacher).*

The main finding here is the teacher's constant reflection and willingness to change their practice. Below, Ernesto displays a critical attitude toward his own teaching approach, questioning whether there are better ways to convey content to his students. His quotation highlights the importance of reflective thinking and willingness to adapt by teachers who constantly seek to improve their methodology and provide a more effective educational experience for students.

> *But I question myself, I tell them, (…) I am teaching some content, I question myself when I see it in the second semester, I tell them "and will the kids understand this question, I wonder" and I say to myself, "what happens if I do it another way and I begin to reformulate myself, (…), what happens if I do it another way." And two things can happen to me, either for the worse or better, and they have not necessarily been better, I change it then, but… (Ernesto, Agriculture teacher).*

Tensions and problems they face in the work context and that are related to their teaching work.

The view shared by most of the participants is that they face an adverse environment, which makes professional development difficult. They emphasize not having time for their lesson planning, little institutional support, and plenty of administrative work.

3.5.1 Little time to carry out educational tasks and low teacher recognition

The main finding here is the dedication and personal sacrifice that teachers, like Rocío, make in their work. Below, Rocío expresses how she invests a significant amount of time working on educational projects from home, even sacrificing time that she could spend with her family. Her quotation brings to the fore the teachers' commitment

and passion for their work, as well as the additional demands they face beyond their contracts. It also raises the need to recognize and value the additional effort that teachers dedicate to their work.

> *I invest a lot of time, which I could perhaps invest in having a good time, in going out with my family, with my husband; I invest it in working on projects from home. If they paid me 3 days, three afternoons for working on projects, moving around, talking to teachers, taking a course to see how it works, networking, it would be wonderful, but currently we do the same thing, only at home with additional time to the paid one… (Rocío, Social Work teacher).*

3.5.2 Importance of institutional support for teacher development

The data also highlights the importance of institutional support for the success of teachers and the effective development of teaching. Both Antonia and Roberto emphasized the need to have an institutional environment that provides the appropriate conditions so that teachers can carry out their work effectively. This includes the availability of resources, the recognition of teaching talent, and the implementation of methods that help alleviate the administrative burden, allowing teachers to focus on their pedagogical work. These comments stress the importance of a solid institutional infrastructure and a support system to promote the success of teachers in their educational work.

> *One can have very good intentions, but there have to be certain conditions in the institution's ecosystem for that to be happen, it is essential (Antonia, Electrical Engineering teacher).*

> *I believe that institutional support is even more fundamental because talent is always there. But if there is talent without institutional support nothing is done. Invest in a method that frees the teacher from so much administrative work (Roberto, Social Work teacher).*

3.6 Effective leadership that contributes to teacher confidence

Leadership, according to the participants, is a determining factor in the development and consolidation of teachers' professional identity. They stress the importance of leadership that supports their efforts in the implementation of pedagogical innovations and in the academic sphere.

Two participants stress how direct supervision positively influences their motivation and their ability to implement pedagogical innovations in the classroom. For them, leadership is defined by trust and autonomy among teachers, as well as believing in their own abilities. This implies that effective leadership fosters an environment wherein teachers feel supported and empowered to explore new educational practices, which will in turn contribute to better performance and greater commitment to teaching and learning.

> *Today we have the leadership of a program lead that has encouraged and allowed me and Roberto to innovate. We have a program lead that has allowed us to advance, and I also feel that they have allowed us to create and trust in ourselves (Antonia, Social Work teacher).*

4 Discussion

Qualitative analysis of the teachers' perceptions has provided valuable insight, showing how personal experiences, family values, and the institutional context influence their professional identity (Sancho-Gil and Hernández-Hernández, 2019; Zabalza, 2009; Zabalza-Beraza et al., 2018).

One of the key findings is the influence of family experiences and values on educational practice. The participants indicated that their commitment and sense of duty towards education are strengthened through family roles, such as the support and responsibility learned in the family unit. This highlights how specific family values not only shape the perception of teacher identity, but also directly affect the implementation of teaching methods. The existing literature, such as Ávalos and Sotomayor (2012), and Cuadra-Martínez et al. (2021), has addressed the influence of personal context on teacher identity, but the current study deepens our understanding of how these specific family values, such as work ethic and vision of social justice, influence their professional identity.

Regarding continuous training based on constructivist approaches, teachers highlight that this training is essential not only for their professional development, but also for their personal commitment to the continuous improvement of their teaching practice. Participation in courses and workshops that promote constructivist methodologies allows teachers to adapt to changes and enrich the teaching-learning process. In line with previous research (e.g., Ávalos, 2007; Cuadra-Martínez et al., 2021), the current study reveals that this training acts as an integral element in the professional identity of teachers, strengthening their sense of purpose and personal connection with teaching, which goes beyond simple technical updating.

Teachers' ability to reflect on their past experiences, both positive and negative, plays a crucial role in their professional development. This finding indicates that critical reflection not only improves pedagogical practice, but it also becomes an essential aspect of teacher identity – a finding reflecting Ávalos (2007) and El Atmani and Madrane (2023), who highlight the importance of teaching reflection.

The study also shows the pivotal role of work tensions in pedagogical performance. Teachers face challenges such as lack of time for lesson planning, lack of institutional support, and a significant administrative burden, all of which limits their ability to focus on teaching, overall affecting its quality. Previous literature, such as that of Siekkinen et al. (2020) and Dugas et al. (2020), have also shown how these tensions have a negative impact on educational quality.

Finally, leadership that supports teacher efforts in the implementation of pedagogical innovations and in professional development is essential to strengthen teacher identity. Although leadership has been recognized in previous literature, such as in the work of Day et al. (2006), the current study reveals that effective leadership not only supports professional development, but it also influences the construction of teacher identity, highlighting the need for leadership to go beyond managing teachers, but instead, inspiring and motivating them.

These findings show that a teacher identity based on reflection, motivation and commitment to teaching prevails despite an adverse institutional context. Teachers share common elements of commitment and satisfaction with their practice (Sancho-Gil and Hernández-Hernández, 2019; Sancho-Gil et al., 2022; Hernández-Hernández and Sancho-Gil, 2019). It is also important to highlight that the findings are in line with previous research documenting how personal, family, and professional dimensions are elements for the construction of teacher identity (Kritt and Budwig, 2022; Beijaard, 2019; Cuadra-Martínez et al., 2021; Peri et al., 2023).

5 Conclusion

The study enriches our knowledge about teacher identity by demonstrating how family experiences, continuing training, and critical reflection interact to strengthen teachers' professional identity. The study was based on a specific sample of teachers, which may limit the generalization of the findings to other educational contexts.

These findings highlight the complexity of teacher identity, which is not only developed in the educational environment, but it is also influenced by personal and social factors outside the school.

The study also offers a significant practical contribution by highlighting the need to implement policies and strategies that support teachers in their professional development. Evidence suggests that providing ongoing training based on constructivist approaches, as well as strong institutional support, can improve teacher effectiveness and satisfaction. Additionally, encouraging critical reflection and recognizing the extra effort teachers put into their work can strengthen their professional identity and commitment to teaching.

Universities should prioritize the improvement of teachers' professional development, focusing on professional identity as a fundamental factor. This attention not only improves educational quality, but also strengthens relationships with students, drives educational innovation and promotes teacher wellbeing. However, they face increasing pressure from society to adapt to a constantly changing educational environment, which generates tensions in university teaching identity. As this study reveals, although teachers show a positive perception of their professional identity, it contrasts with the institutional reality marked by tensions and conflicts. This discrepancy underscores the urgency of addressing institutional tensions to improve the work environment and well-being of teachers.

This study reveals how events and experiences in teachers' personal lives are intrinsically related to their professional work. In addition, it highlights the sense of vocation and commitment to teaching that teachers manifest, influenced by their family and personal experiences that have left a significant mark on their life trajectories.

This commitment manifests itself in a remarkable way even in adverse working conditions, where teachers face challenges in adopting new methodologies and dedicating attention to their students. This deep connection to teaching strengthens teacher identity by providing a clear sense of purpose, cultivating resilience in the face of challenges, shaping personal experiences, and motivating the adoption of new pedagogical practices.

Challenges in the institutional context, such as lack of recognition, work overload, and low valuing of leadership, can negatively affect both teachers' professional development and work experience. Exploring these difficulties could open up an interesting line of research.

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 in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

CH: Conceptualization, Data curation, Formal analysis, Investigation, Writing – original draft, Methodology. MA: Conceptualization, Data curation, Formal analysis, Investigation, Writing – original draft. IR: Investigation, Project administration, Resources, Writing – review & editing. RV: Project administration, Resources, Writing – review & editing.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

References

Alonso, I., Lobato, C., and Arandia, A. (2015). A professional teaching identity as key to change in higher education. *Opción* 31, 51–74.

Alpízar, M., Velázquez, R., and García Báez, R. (2023). The challenge of facing inequality and quality in higher education in Latin America. *Rev. Univ. Soc.* 15, 10–23.

Ávalos, B. (2007). Teacher continuous professional development: what international and Latin American experiences tell us. *Pensamiento Educ. Rev. Invest. Latinoam.* 41, 77–99.

Ávalos, B., and Sotomayor, C. (2012). How Chilean teachers see their identity. *Persp. Educ. Formación Prof.* 51, 57–86.

Bara, E., Martínez, M., and Lleixà, T. (2018). "The issue of identity in today's university training" in Education 2018–2020. Challenges, trends, and commitments. eds. B. Gros, T. Mauri and J. L. Medina (IRE-UB), 33–38.

Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflect. Pract. Int. Multidiscip. Perspect.* 16, 123–141. doi: 10.1080/14623943.2014.982525

Beijaard, D. (2019). Teacher learning as identity learning: models, practices, and topics. *Teach. Teach.* 25, 1–6. doi: 10.1080/13540602.2019.1542871

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

Canaza, F. (2020). Higher education in the global quarantine: disruptions and transitions. *Rev. Digit. Invest. Docencia Univ.* 14, 1–10. doi: 10.19083/ridu.2020.1315

Corbetta, P. (2007). Methodology and techniques of social research: McGraw Hill.

Creswell, J., and Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches: Sage Publications.

Cuadra-Martínez, D., Castro-Carrasco, P. J., Oyanadel, C., and González-Palta, I. N. (2021). Teacher's professional identity during university education: a systematic review of qualitative research. *Formación Univ.* 14, 79–92. doi: 10.4067/S0718-50062021000400079

Day, C., Kington, A., Stobart, G., and Sammons, P. (2006). The personal and professional selves of teachers: stable and unstable identities. *Br. Educ. Res. J.* 32, 601–616. doi: 10.1080/01411920600775316

De Vries, S., Van de Grift, W., and Jansen, E. (2014). How teachers' beliefs about learning and teaching relate to their continuing professional development. *Teach. Teach.* 20, 338–357. doi: 10.1080/13540602.2013.848521

Dugas, D., Stich, A. E., Harris, L. N., and K. H. (2020). 'I'm being pulled in too many different directions': academic identity tensions at regional public universities in challenging economic times. *Stud. High. Educ.*, 45, 312–326, doi: 10.1080/03075079.2018.1522625.

El Atmani, Z., and Madrane, M. (2023). Reflective practice as a way of developing the professional identity of teachers and professionalizing nursing education. *Int. J. Modern Educ. Comp. Sci.* 15, 57–68. doi: 10.5815/ijmecs.2023.04.05

Fahara, M. F., and Torres Tobías, J. A. (2019). Critical aspects of the professional development of higher education teachers. *Am. J. Educ. Learn.* 4, 234–247. doi: 10.20448/804.4.2.234.247

Fernández, M., and Díaz, C. (2020). Resistance to change and workload in university faculty. *Rev. Psicol. Educ.* 26, 101–120.

Gregory, A., Cathcart, E., and Bates, A. (2019). Professionalism and the construction of teacher professional identity. Inquiry@Queen's Undergraduate Research Conference Proceedings.

Hargreaves, A. (1994). Changing teachers, changing times: Teachers College Press.

Hernández-Hernández, F., and Sancho-Gil, J. M. (2019). About the senses and places of learning in the teachers' lives and their implications for teacher education. *Rev. Curríc. Form. Prof.* 23, 68–87. doi: 10.30827/profesorado.v23i4.11510

Kritt, D. W., and Budwig, N. (2022). The future of constructivist education. *Hum. Dev.* 66, 295–309. doi: 10.1159/000526275

Kvale, S., and Brinkmann, S. (2015). InterViews: Learning the craft of qualitative research interviewing. *2nd* Edn: Sage Publications.

Marín, L., Parra, R., Burgos, B., and Gutiérrez, M. (2019). The reflective practice of the professor and the relationship with professional development in the context of higher education. *Rev. Latinoam. Estudios. Educ.* 15, 154–175. doi: 10.17151/rlee.2019.15.1.9

Martínez, J., and Sánchez, P. (2019). Pedagogical innovation and continuous training in higher education. *Rev. Iberoamericana Educ.* 80, 55–75.

Noonan, J. (2019). An affinity for learning: teacher identity and powerful professional development. *J. Teach. Educ.* 70, 526–537. doi: 10.1177/0022487118788838

Olave, S. (2020). Review of the concept of teaching professional. *Rev. Innova. Educ.* 2, 378–393. doi: 10.35622/j.rie.2020.03.001

Olszewski, S. (2023). Higher education as a space for shaping the professional identity of special educators. *Man Disabil. Soc.* 59, 5–16. doi: 10.5604/01.3001.0053.8525

Pérez, S., and Rivera, E. (2021). Analysis of professional identity construction in excellent teachers: encountering BEING a teacher of educators. *Foro Educ.* 36, 79–100. doi: 10.29344/07180772.36.2688

Peri, E., Jõgi, L., and Remmik, M. (2023). Who am I—teacher or practitioner? Teacher-practitioners' experience of identity in higher education—a phenomenological view. *Fut. Educ. Res.* 2, 65–80. doi: 10.1002/fer3.20

Ruiz, A., and Hernández, L. (2021). Institutional policies and faculty well-being in higher education. *Educ. Futuro* 44, 67–88.

Ruiz-Bolivar, C. (2022). Educational research and innovation in Latin America in times of pandemic. *PARADIGMA* 43, 01–16. doi: 10.37618/PARADIGMA.1011-2251.2022.p01-16.id1181

Sancho, J. M., Ornellas, A., and Arrazola, J. (2018). The changing situation of university in the digital age. *Rev. Iberoamericana Educ. Distan.* 21, 31–49. doi: 10.5944/ried.21.2.20673

Sancho-Gil, J. M., and Hernández-Hernández, F. (2019). "Being a teacher for a common life project" in Profession and teaching professionalism. An educational action committed to human development. eds. I. J. Manso and J. Moya (ANELE-REDE), 179–187.

Sancho-Gil, J. M., Hernández-Hernández, F., González-Ramírez, T., Gewerc-Barujel, A., and Hernández-Rivero, V. M. (2022). University research networks as spaces for collaboration and social capital. The case of REUNI+D. *Arch. Anal. Polít. Educ.* 30, 2–17. doi: 10.14507/epaa.30.7084

Schön, D. (1992). The reflective practitioner: Eds. Taylor and Francis Routledge.

Schreirer, M. (2012). Qualitative content analysis in practice: SAGE.

Sellars, M. (2012). Teachers and change: the role of reflective practice. *Procedia Soc. Behav. Sci.* 55, 461–469. doi: 10.1016/j.sbspro.2012.09.525

Serrano, R., and Pontes, A. (2016). The development of the teaching professional identity in the initial training of secondary teachers. *Teach. Rev. Interuniv. Didáctica* 34, 35–55. doi: 10.14201/et20163413555

Shulman, L. (2016). Educational innovation with open eyes and no excuses: the challenges and opportunities of learning from experience. *Rev. Gestión Innov. Educ. Superior* 1, 13–28.

Siekkinen, T., Pekkola, E., and Carvalho, T. (2020). Change and continuity in the academic profession: Finnish universities as living labs. *High. Educ.* 79, 533–551. doi: 10.1007/s10734-019-00422-3

Taylor, S., and Bogdan, R. (2000). Introduction to qualitative methods: Taylor and Francis Paidos.

Trautwein, C. (2018). Academics' identity development as teachers. *Teach. High. Educ.* 23, 995–1010. doi: 10.1080/13562517.2018.1449739

Trede, F., Macklin, R., and Bridges, D. (2011). Professional identity development: a review of the higher education literature. *Stud. High. Educ.* 37, 365–384. doi: 10.1080/03075079.2010.521237

UNESCO (2022a). Transforming education together for just and sustainable futures: statement from the international commission on the futures of education. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000381984_spa (Accessed June 20, 2024).

UNESCO (2022b). Thinking higher and beyond: perspectives on the futures of higher education to 2050. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000377530 (Accessed June 20, 2024).

UNESCO (2024). Knowledge-driven actions: transforming higher education for global sustainability. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380519 (Accessed July 25, 2024).

Van Lankveld, T., Schoonenboom, J., Volman, M., Croiset, G., and Beishuizen, J. (2017). Developing a teacher identity in the university context: a systematic review of the literature. *High. Educ. Res. Dev.* 36, 325–342. doi: 10.1080/07294360.2016.1208154

Vanegas-Ortega, C., and Fuentealba-Jara, A. (2019). Teaching professional identity, reflection and pedagogical practice: key considerations for teacher training. *Perspect. Educ.* 58, 115–138. doi: 10.4151/07189729-vol.58-iss.1-art.780

Vishnevsky, V., Beresnev, A. A., Bura, L., Vakula, I. M., Alekseenko, I. N., and Ganshina, G. V. (2021). Professional competences of a higher school teacher. *Rev. Polít. Gestão Educ.*, 4250–4263. doi: 10.22633/rpge.v25iesp.7.16182

Waller, R., Lemoine, P., Garretson, C., and Richardson, M. (2021). "Disruption and innovation in global higher education as viewed through the lens of complexity theory" in Handbook of research on modern educational technologies, applications and management. ed. M. Khosrow-Pour, 677–700. doi: 10.4018/978-1-7998-3476-2.ch042

Zabalza, M. (2009). Being a university professor today. *La Cuestión Univ.* 5, 68–80.

Zabalza-Beraza, M. Á., and Zabalza-Cerdeiriña, M. (2022). "Internationalization in higher education: creating synergies and affections" in Research, technological development and innovation in university education, 73–83.

Zabalza-Beraza, M. A., Zabalza-Cerdeiriña, M. A., and De-Castro-Vilariño, M. I. (2018). "University teaching professional identity" in Teaching professional identity. eds. I. Cantón and M. Tardif, 141–157.