

## **Teaching Vocation, Self-Efficacy Beliefs and Teaching Competencies in Mexican Teachers**

### **Vocación docente, creencias de autoeficacia y competencias docentes en el profesorado mexicano**

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#### **Abstract**

*Educational inequality in Mexico poses significant challenges to teaching quality and teacher performance, particularly in economically vulnerable contexts. This study examines the relationship between teaching vocation, self-efficacy beliefs, and teaching competencies as key elements in educational practice. The objectives were to explore these relationships, to evaluate the mediating role of self-efficacy, and to understand perceptions of the interaction of these constructs. A mixed-methods explanatory sequential approach was employed. In the quantitative phase, 310 teachers completed instruments related to vocation, self-efficacy, and competencies. In the qualitative one, in-depth interviews were conducted with 27 teachers selected based on grounded theory. Quantitative data were analyzed using correlation and mediation techniques, while qualitative data were examined through thematic coding. Quantitative results revealed that teaching vocation can influence competencies and indirectly impacts them through self-efficacy, particularly in addressing students' unique needs. Qualitative findings highlighted that vocation serves as a driver of resilience and innovation, while self-efficacy facilitates adaptation to educational challenges. The study discusses a comprehensive understanding of these factors, suggesting practical implications for teacher training and inclusive educational policies.*

**Keywords:** inclusive education; self-evaluation; teacher competencies; teacher training.

#### **Resumen**

*La desigualdad educativa en México plantea desafíos significativos para la calidad de la enseñanza y el desempeño docente, especialmente en contextos de vulnerabilidad económica. Este estudio aborda la relación entre la vocación docente, las creencias de autoeficacia y las competencias docentes como elementos relevantes en la práctica educativa. Los objetivos fueron explorar estas relaciones, evaluar el efecto mediador de la autoeficacia y comprender las percepciones sobre la interacción de*

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*dichos constructos. Se empleó un enfoque mixto secuencial explicativo. En la fase cuantitativa, participaron 310 docentes que completaron instrumentos relacionados con la vocación, autoeficacia y competencias. En la fase cualitativa, se realizaron entrevistas a profundidad con 27 docentes seleccionados por criterios teóricos. Los datos cuantitativos fueron analizados mediante correlaciones y mediación, mientras que el análisis cualitativo empleó teoría fundamentada. Los resultados cuantitativos revelaron que la vocación docente puede influir directamente en las competencias y de forma indirecta a través de la autoeficacia, destacando la atención a la singularidad estudiantil. Los hallazgos cualitativos mostraron que la vocación actúa como motor de resiliencia e innovación, mientras que la autoeficacia facilita la adaptación a desafíos educativos. Se discute la comprensión integral de estos factores, sugiriendo implicaciones prácticas para la formación y las políticas educativas inclusivas.*

*Palabras clave:* autoevaluación; competencias del docente; educación inclusiva; formación de docentes.

## Introduction

In Mexico, educational contexts play a crucial role in students' academic and social development, being particularly influential in academic achievement. The country's socioeconomic diversity generates educational inequality (Silva-Laya et al., 2020). This inequality manifests itself in multiple dimensions, including access to educational resources, the quality of school infrastructure, teacher training, and learning opportunities for students (Cabrera-Hernández, 2020). Educational disparity highlights the need to investigate the quality of teaching and teacher performance as determinants of equitable learning environments. Teachers, as agents of change in the education system, have the potential to significantly influence students' academic trajectories, particularly in contexts of socioeconomic vulnerability (Castro Aristizabal et al., 2024).

Within this framework, three fundamental elements emerge that influence both the quality of teaching and the academic achievement of students: teaching vocation, self-efficacy beliefs, and teaching competencies. Teaching vocation, understood as a psychological attitude that encompasses satisfaction with teaching, vocational awareness, and commitment to education, can be an outstanding factor in the performance, motivation, and well-being of teachers (Torres-Hernández, 2023a). On the other hand, self-efficacy beliefs—which refer to teachers' confidence in their ability to perform teaching tasks effectively—may significantly influence their performance and, furthermore, their persistence in the face of challenges (Deng et al., 2022). Finally, teaching competencies—which encompass the knowledge, skills, and attitudes necessary for effective teaching—are essential to educational practice (Swank et al., 2021).

Although previous studies have examined these concepts individually, how they interrelate is still not well understood. For example, teaching vocation has recently been studied in terms of certain psychological characteristics, such as job burnout or subjective well-being (Torres-Hernández, 2023b, 2023a). On the other hand, self-efficacy beliefs have commonly been studied in relation to characteristics such as job satisfaction (Georgiou et al., 2020), classroom management skills (Sağlam and Kavgaci, 2021), and the efficient promotion of learning (Alanazi, 2021). However, knowledge of the interrelationship between teaching vocation, self-efficacy beliefs, and teaching competencies is virtually non-existent. Furthermore, most research on the subject has focused on quantitative or qualitative approaches, with mixed approaches being used even less frequently, which may limit understanding of the phenomenon.

Consequently, it is necessary to address these gaps and not only quantify the relationships between these components, but also explore in depth the experiences and perceptions of teachers on how the aforementioned variables are intertwined. Therefore, this study has the following objectives: 1) to explore the relationship between teaching vocation, self-efficacy beliefs and teaching competencies; 2) to evaluate the predictive role of teaching vocation and the mediating role of self-efficacy beliefs in relation to teaching competencies; and 3) to understand teachers' perceptions and experiences of the interaction between vocation, self-efficacy and competencies.

## Literature review

### Teaching vocation

Teaching vocation has been the subject of study in educational research because of its impact on teacher motivation, commitment and performance. Vocation is an orientation towards work that reflects a sense of purpose and personal meaning (Dik et al., 2012). In the educational context, teaching vocation has been conceptualised as a psychological attitude that encompasses satisfaction with teaching, vocational awareness and commitment to education (Torres-Hernández, 2022). Recent studies have shown that vocation is positively associated with job satisfaction, organisational commitment, and psychological well-being (Lee et al., 2020; Torres-Hernández, 2023a). Teachers with a high vocation tend to develop professionally and show attention to their students to motivate them to learn (Fraile et al., 2020).

Teaching vocation is a dynamic process that varies throughout one's career, influenced by the environment and experiences (Villegas and González, 2014). Furthermore, it is possible that teaching vocation, in combination with self-efficacy beliefs, contributes to preventing burnout at work and potential abandonment of the profession (Liu et al., 2023). On its own, vocation is not capable of promoting improvement in teacher performance. To encourage it, the professionalisation of their work is necessary, emphasising the attitudinal and procedural aspects of teaching (Morales and Olarte, 2021).

### Self-efficacy beliefs

High self-efficacy beliefs are understood as the positive symbolic constructions that a person makes about their ability to achieve a specific goal and that influence their behaviour and self-concept (Krüger, 2019). They are more common in trainee teachers and during the early years of their professional career, which favours differentiated teaching and curricular adjustments (Ismailos et al., 2022). According to Bandura (1997), these beliefs are based on four aspects: experiences of achievement, vicarious experience, verbal persuasion and physiological state. "Achievement experiences" refer to a person's ability to sustain effort and persevere based on their own achievements, that is, to strengthen their self-concept that they are capable of achieving goals. They are the most important source in the construction of self-efficacy. "Vicarious experience" refers to the possibility that an individual, by observing success in another person, develops the belief that they can achieve something similar. "Verbal persuasion" occurs when a person's environment convinces them that they can efficiently perform a task or challenge. Finally, "physiological state" refers to the individual's interpretation of their moods and bodily reactions.

On the other hand, as professional mastery or knowledge increases, along with the feeling of being more qualified for the teaching task, beliefs of self-efficacy may increase (Breyer et al., 2020). In general terms, experience strengthens self-confidence and assessment skills; this can be further enhanced through social persuasion when the teacher shares their successful experiences with colleagues (Myyry et al., 2022).

### Teaching competencies

Teaching competencies are defined as the knowledge, skills, and attitudes that a teacher possesses for effective teaching (Swank et al., 2021). They are also the resources that teachers use to respond accurately and efficiently to possible situations that arise in their daily work, and they are the tools that each teacher has at their disposal to carry out their educational objectives, taking into account the particularities of each classroom situation and context. Therefore, these competencies must be flexible and adaptable to different environments in order to create learning environments that promote learning contextualised to the needs of each student (Garzón, 2021).

Teaching skills, then, are abilities that are developed over time based on two variables: educational influences and work experience. Educators build their skills based on models (whether real or virtual teachers, through reading texts by other teachers) and their daily educational practice. It is therefore possible to say that educators manipulate the teaching and pedagogical resources they possess, enriched on the basis of experiences and pedagogical models, so that their students can build knowledge, skills, attitudes and values situated in their particular and unique context (Sarceda-Gorgoso et al., 2020).

## Methodology

This research followed a mixed approach. A sequential explanatory design was chosen, collecting information using the instruments listed below and performing a quantitative analysis. Subsequently, the qualitative phase was carried out through in-depth interviews to explore the personal and professional experiences of the teachers.

## Participants

During the first phase of the study, the sample consisted of 310 teachers working at different educational levels. 65.81% identified as female and 34.19% as male. The average age was 43.52 (SD=10.33). 1.94% stated that they worked at the preschool level, 4.84% at the primary level, 8.39% at the secondary level, 52.26% at the high school level, 16.45% at the bachelor's degree level, 13.87% at the master's degree level, and 2.26% at the doctoral level. 84.85% reported having formal teacher training, with an average duration of 12.91 years (SD = 9.3). The second phase included 27 participants with an average age of 42.56 years (SD = 10.29): 14 women and 13 men. The average teaching experience was 14.25 years (SD = 9.3). Most of the teachers were working at the primary, secondary, and higher education levels.

## Strategies and instruments

- *Teaching Vocation Questionnaire* (Torres-Hernández, 2022). This is a recently created questionnaire that aims to assess teaching vocation based on three factors: satisfaction with teaching, vocational awareness, and commitment to education. It is a content- and construct-validated instrument with 21 items on a six-point Likert scale (from strongly disagree to strongly agree). In the present study, it obtained a McDonald's Omega reliability coefficient of 0.85.
- *Self-Efficacy Feeling Questionnaire* (Covarrubias Apablaza and Mendoza Lira, 2016). This instrument consists of 17 items on a five-point Likert scale (from not at all to very much). It is made up of four factors: 1) effectiveness in student engagement; 2) effectiveness in instructional strategies; 3) effectiveness in classroom management; and 4) effectiveness in attention to uniqueness. It is an instrument validated mainly by construct; for the present study, it obtained a McDonald's Omega reliability of 0.92.
- *Teacher Competency Scale* (Swank et al., 2021). This is a recently created instrument, validated mainly by construct, consisting of 67 items configured into four factors: instruction and assessment; knowledge, ethics, and preparation; dispositions; and behaviours and use of technology. For this research, an adaptation and content analysis of the scale was carried out, considering only 40 items (those specifically addressing university teachers and school counsellors were eliminated). For this study, it obtained a McDonald's Omega reliability of 0.97.
- *Semi-structured interview*. It consisted of 20 questions organised into five topics: 1) analysis of vocation and its implications for the profession; 2) assessment of self-efficacy beliefs and their scope; 3) analysis of key teaching competencies; 4) interrelationship between vocation, self-efficacy beliefs and teaching competencies; and 5) professional experience and training. The interview script can be found in the appendix.

## Procedure

First stage: participants completed an online form with the first three instruments mentioned in the previous section, which was distributed mainly by email through an invitation to join the study. In some cases, an instant

messaging application on smartphones was used to establish contact. Teachers who decided to participate reviewed the study objectives and the principal investigator's contact details via the online form, gave their voluntary consent, and completed the form in its entirety. The approximate time to complete the first stage was three weeks, with a maximum of approximately 30 minutes to complete the online form.

Second stage: 27 teachers were selected using theoretical criteria, taking into account their average scores on the teaching vocation scale. Candidates for interview were initially selected using statistical analysis with a 99% confidence interval. The sample size was determined following the principle of theoretical saturation, which is the point at which no new relevant themes emerged during the data analysis to support the participants' perspectives in relation to the constructs studied (Glaser and Strauss, 1967). The distribution of participants was as follows: 9 teachers were below the range, 11 were above, and 6 were within the established range (mean = 4.88; ICI = 4.82, ICS = 4.94). The time allocated for the second stage was four weeks.

The selected participants were formally contacted by email to invite them to the next phase. Subsequently, semi-structured video-recorded interviews were conducted, after obtaining individual consent and in accordance with current codes of ethics, with an approximate duration of 40 minutes per participant.

## **Data analysis**

The statistical analysis of the information—descriptive, correlational, and robust mediation analyses—was performed using JASP 0.16.2 software, and the grounded theory analysis was performed using Atlas.ti v9 software. Following the qualitative analysis, the information was triangulated to compare the trends found in the quantitative analysis and strengthen the validity of the results.

## **Results**

### **Quantitative phase**

#### **Descriptive and correlational analysis**

The following table shows the descriptive statistics and correlational analyses using Pearson's test (Table 1).

Table 1

*Descriptive and correlational analysis*

Variable	VOC	EIE	EEI	EMC	EAS	CD
1. VOC	—					
2. EIE	.333	—				
3. EEI	.235	.603	—			
4. EMC	.362	.563	.551	—		
5. EAS	.385	.627	.624	.544	—	
6. CD	.463	.615	.616	.590	.689	—
M (DE)	4.88 (0.41)	4.19 (0.59)	4.37 (0.52)	4.16 (.63)	4.20 (0.65)	4.24 (0.48)
McDonald's Omega	.84	.79	.78	.89	.84	.97

*Note:* All correlations have a p-value <.001. VOC: Overall vocation; EIE: Effectiveness in Student Engagement; EEI: Effectiveness in Instructional Strategies; EMC: Effectiveness in Classroom Management; EAS: Effectiveness in Attention to Individuality; and CD: Teaching Competencies.

According to the above matrix, it is noteworthy that in all sub-dimensions and variables there are highly significant and positive correlations between the components of teaching vocation, self-efficacy beliefs and teaching competencies. The relationship between the latter variables stands out for its intensity. Based on this, a mediation analysis was carried out.

### Mediation analysis

The summary of the mediation analysis is presented below. Teaching vocation was taken as the independent variable, the three subscales of self-efficacy feelings as mediators, and teaching competencies as the dependent variable (Table 2).

Table 2

#### *Mediation analysis*

Type of effect	Path	Standardised Estimate	Standard Error	Z-score	P	Lower CI	Upper CI
Direct Effects	VOC → CD	.414	.093	4,429	< .001	.212	.630
Indirect effects	VOC → EIE → CD	.121	.042	2,866	.004	.031	.239
	VOC → EEI → CD	.135	.042	3,219	.001	.065	.251
	VOC → EMC → CD	.136	.044	3,061	.002	.051	.244
	VOC → EAS → CD	.284	.060	4,702	< .001	.158	.452
Total effects	VOC → CD	1.089	.123	8,858	< .001	.793	1,393
Total indirect effects	VOC → CD	.675	.098	6,890	< .001	.412	.933
Residual Covariances	EIE ↔ EEI	.527	.060	8.764	< .001	.434	.643
	EIE ↔ EMC	.437	.056	7,789	< .001	.346	.546
	EEI ↔ EMC	.448	.057	7.845	< .001	.344	.563
	EIE ↔ EAS	.490	.057	8,595	< .001	.399	.602
	EEI ↔ EAS	.518	.059	8,845	< .001	.419	.628
	EMC ↔ EAS	.393	.054	7.321	< .001	.292	.498

*Note.* R-squared values: CD: .624; EIE: .094; EEI: .062; EMC: .129; EAS: .146. VOC: Overall vocation; EIE: Effectiveness in Student Engagement; EEI: Effectiveness in Instructional Strategies; EMC: Effectiveness in Classroom Management; EAS: Effectiveness in Attention to Individuality; and CD: Teaching Competencies.

According to the above, each dimension of self-efficacy (student engagement, instructional strategies, classroom management, and attention to uniqueness) influences teaching competencies. Of these, the one with the greatest weight is effectiveness in attention to uniqueness.

As a supplement, the representation of the model is presented below (Figure 1).

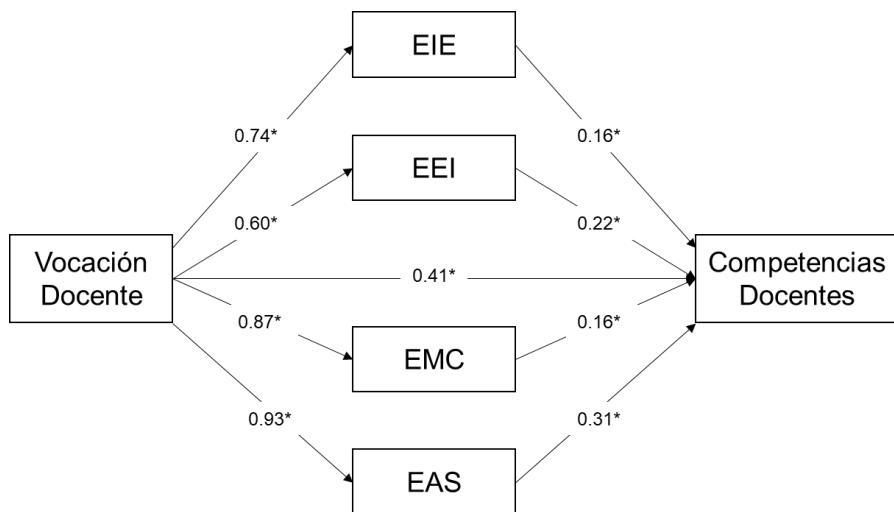


Figure 1. Representation of the mediation analysis

Note: \*  $p < .05$ . EIE: Effectiveness in Student Engagement; EEI: Effectiveness in Instructional Strategies; EMC: Effectiveness in Classroom Management; EAS: Effectiveness in Attention to Individuality.

The graph shows that the components of self-efficacy have a significant mediating effect between vocation and teaching competencies.

### **Qualitative phase**

The results of the grounded theory analysis are presented in the following five main categories.

#### **Analysis of vocation and its implications for the profession**

The participants agree that the teaching vocation goes beyond the transmission of knowledge. They describe it as a combination of personal and professional skills and a social commitment. They highlight elements such as patience, listening skills, leadership and empathy. A relevant aspect is that most do not consider vocation to be something innate, but rather a quality that is built and developed over time and through experience. One participant pointed out:

"Well, there are several characteristics: [...] patience, above all, and a desire to teach [...]. Obviously, you have to have knowledge, but I think those two are very basic. There is something that I have found difficult to achieve, which is understanding the children [...]. So that listening skill is also important."

Although most began in education for practical or circumstantial reasons, they report that they developed a deeper commitment through experience. This transformation is characterised by a shift from traditional teaching methods to more flexible, student-centred approaches. Likewise, the development of greater professional confidence and competence stands out, accompanied by an expansion of their socio-emotional skills and adaptability to the contexts and challenges presented. As one teacher explained:

"Well, I think that the evolution since they threw me into the ring [...] has been more about adapting to each change."

The teaching vocation is also crucial for facing educational challenges and is a resource for resilience and a driver of innovation: 1) a factor of resilience in the face of difficulties; 2) a driver for innovation and the search for creative solutions; 3) a source of motivation for updating and continuing education; and 4) an element that facilitates adaptation to different contexts and student needs.

A relevant finding is the tension that several teachers experience between their vocational aspirations and the systemic limitations of the Mexican educational context. Despite multiple restrictions, vocation acts as a motivational factor that enables them to maintain their commitment to educational quality. Teachers emphasise the human dimension of the teaching vocation, highlighting its role in the comprehensive training of students and the promotion of social and ethical skills, and relate it to personal and professional satisfaction.

Differences were identified between teachers who entered the profession due to an early vocation and those who discovered their inclination over time. Those who developed their vocation later in life experienced greater burnout and ups and downs in their satisfaction with teaching, focusing more on efficiency and the fulfilment of duties. In contrast, teachers with an early vocation show greater openness to pedagogical innovation, comprehensive training and continuous professional development, while the second group is distinguished by its resilience and ability to adapt to change.

### **Self-efficacy: assessment and scope**

In terms of self-efficacy beliefs, participants find their manifestations mainly through the fulfilment of curriculum objectives, the ability to transform and adapt their practice to complex conditions, and the observation of tangible learning in students. They highlight the mastery of pedagogical elements related to planning, strategies and techniques, as well as the combination of technical knowledge and pedagogical methodology. Updating and continuous training appear as fundamental elements.

"Well, for me, feeling capable means that my students learn the subject I teach. For me, that would be feeling capable, that they learn...", said one participant.

On the other hand, self-efficacy beliefs have a considerable influence on teaching practice. They act as a determining factor in conveying confidence to students, influence the willingness to implement innovations and changes, impact the ability to address challenges and complex situations, affect the ability to adapt to different educational contexts, and determine the level of commitment to continuous improvement. One teacher said:

"Well, I think the important thing that gives me a lot in these areas is training. Training myself in accordance with [...] new educational models, new ways of teaching and [...] training myself in the subjects I teach. It's about stepping outside of our daily routine and being a little innovative in this regard, because that has been an important part of what I have been able to learn over the years, because obviously things are changing [...], we can no longer continue with old practices."

With regard to areas of confidence and challenge, participants reported feeling more confident in areas such as lesson planning and delivery, assertive communication, the design of teaching materials, mastery of specific content in their area, and direct interaction with students. On the other hand, they expressed less confidence in administrative aspects, use of technology, handling subjects outside their speciality, group control and discipline, personal relationships with colleagues and managers, and adapting to changes in educational plans and programmes.

A notable aspect is the relationship that teachers establish between their beliefs about self-efficacy and the observable results in their students. Most measure their effectiveness through student learning and achievement, rather than through external standards or institutional evaluations. It was evident that beliefs about self-efficacy are perceived as a continuously developing process that requires constant updating and adaptation to educational demands. There is also tension between individual capabilities and the limitations of the Mexican educational context. This tension stems from various administrative, technological, and resource constraints that affect their sense of capability and effectiveness in the classroom. On the other hand, collaborative work and support among colleagues play an important role in strengthening their self-efficacy beliefs.

## **Analysis of key teaching competencies**

The main competencies of teachers are grouped into four types: 1) technical and academic skills; 2) socio-emotional and personal competencies; 3) adaptation and innovation; and 4) interpersonal and communication skills.

In terms of technical and academic skills, emphasis was placed on mastery of subject matter and use of technological tools, along with assessment and teaching planning skills. The importance of formal academic training and ongoing professional development in educational methodologies and regulations was also highlighted.

"In order to perform the minimum job requirements, you need to know your field or profession and have knowledge of your professional area. Secondly, you need to be proficient in or have knowledge of ICT [...]. All teachers must have a minimum knowledge of the platforms so that they can improve the teaching-learning process [...]," commented one teacher.

On the other hand, among the most relevant socio-emotional and personal skills, leadership, empathy, self-confidence, emotional management, professional ethics, commitment and responsibility stood out. These skills are essential for fostering student motivation and overcoming contextual challenges. In relation to adaptation and innovation, creativity, problem solving, proactivity, and the ability to integrate emerging technologies into teaching were highlighted. Finally, interpersonal and communication skills include effective communication, teamwork, and participatory leadership that foster collaboration among colleagues, administrators, and students. One participant reflected:

"Right now, there is a lot of focus on soft skills, the first being effective communication in how one expresses one's ideas, how one shares them, how one structures them [...], and in recent times, one word too many or one word too few can be the reason why a student stays or even leaves [...] Let's see, because we mainly deal with emotional [skills] that mainly [...] involve managing situations of conflict and stress."

The development of these skills occurs mainly through teaching practice, continuous training, feedback from managers and colleagues, and self-assessment. Teachers also resort to training in courses and workshops, the implementation of innovative methodologies, and reflection on their own educational practices. In terms of areas for improvement, needs have been identified such as the advanced use of technology, strengthening English language skills, more effective planning and assessment, and the integration of fun and dynamic activities. In addition, some teachers seek to work on their leadership, organisation, and emotional management. A relevant aspect is confidence: it is perceived as a factor that drives the development of competencies by motivating continuous improvement and fostering safety in the classroom. However, it is noted that overconfidence could limit professional growth.

## **Interrelationship between vocation, self-efficacy beliefs and teaching competencies**

The interaction between teaching vocation, self-efficacy and skills in teaching practice is dynamic and complementary, forming an essential core that drives continuous professional development. These three elements act as interdependent 'cogs' that work in synergy to promote effective teaching, adapting to the needs and challenges of the educational context. This process generates a cycle of constant improvement, in which each aspect reinforces and enhances the others. In this regard, one interviewee points out:

"Okay, yes, I think the three are interlocking, the three interlock because I think that sometimes we adopt our role as teachers based on situations we may have experienced as children, and we adopt behaviours or methods used by our teachers that we probably think are also effective. [...] So I think that's part of our beliefs and our effectiveness [...]. There will be times when we do feel self-sufficient because we achieve

things, but I also think there are times, as in everything, when we don't get what we want and we feel frustrated."

Vocation manifests itself as the inspiration and passion that motivate interest and effort in teaching. Self-efficacy provides the confidence needed to face challenges and achieve goals, while teaching skills provide the practical tools and essential knowledge to implement effective educational strategies. Together, these elements enable the planning and execution of learning activities tailored to the needs of the environment, the management of emotional pressure, and the promotion of resilience in the face of difficulties. However, interaction is not without its challenges. Routine can lead to monotony, affecting motivation and performance. Likewise, feedback is a key tool for strengthening both confidence and skills, while self-care, especially in terms of mental health, is crucial for maintaining a balance between personal and professional life.

In this context, training and continuous practice are essential to consolidate this integration and enhance effective teaching. Vocation, self-efficacy and skills not only form an inseparable part of a teacher's identity, but also reflect their commitment to the academic and personal development of their students. This balance allows them to face daily challenges with passion, confidence and solid skills, fostering a positive and relevant impact on the educational environment.

### **Experience and professional training**

The influence of time and experience in teaching practice, as well as pedagogical training and adaptive strategies, revealed a constant process of professional and personal change in the participants. This analysis highlights three essential elements that shape and transform the teaching identity: experience accumulated over time, pedagogical training as a tool for improvement, and strategies developed to adapt to the challenges of the educational context.

Time acts as a catalyst that allows teachers to reflect on their role. Accumulated experience generates greater serenity, confidence, and skills to manage complex groups and situations. This translates into a more reflective and adaptive approach, which allows teachers to overcome initial insecurities, refine their teaching techniques, and adapt their methods to the individual characteristics of their students. Experience also fosters resilience in the face of challenges such as generational gaps and cultural differences.

"Well [...] I feel closer to the children. [...] Yes, yes, yes, of course, because over time, from being inflexible and rigid, I have seen the advantages of being understanding but firm. So that gives me a lot of confidence," said one teacher.

Participants reported developing a greater ability to set boundaries, maintain a professional attitude and balance work and personal demands. The use of technological tools has transformed the way of teaching, leading to more effective activities that are better suited to the needs of the context.

Pedagogical training is presented as an indispensable component for enriching teaching practice. It provides the theoretical and methodological tools necessary for planning and innovation. Teachers recognise that this training has enabled them to improve their methodologies, implement inclusive strategies and use technological resources effectively. In addition, pedagogical training encourages critical thinking, constant updating and academic exchange. Although some teachers highlight the lack of institutional support, they value training as a personal process of continuous improvement that complements practical experience. One interviewee pointed out:

"It is very important to prepare yourself, because you can't just arrive and do whatever comes to mind. You have to prepare yourself and know what you are going to do, what you are going to apply, and whether it is feasible for this sector, which is adolescents. [...] [This] has helped me to know [...] [whether] my students can understand it or simply adapt it to their language as well."

The educational context requires teachers to develop strategies that allow them to adapt to the particularities of their environments. These range from detailed planning and active methodologies to the incorporation of innovative technologies and resources. Participants stated that they use empathy, flexibility and active listening to

understand the needs of their students and adjust their pedagogical approaches. Organisation, self-care and resilience are essential for maintaining motivation and facing challenges. Finally, some teachers highlight the use of specific strategies: the implementation of video tutorials, the adaptation of materials for students with disabilities and effective communication.

## Discussion

The quantitative results revealed a statistically significant correlation between teaching vocation and self-efficacy beliefs. This finding coincides with various studies suggesting that a strong teaching vocation is associated with higher levels of self-efficacy, which has a positive impact on finding solutions to the challenges of teaching, making it more adaptable to professional performance (Lee et al., 2020; Santana Mejía and Gutiérrez Martes, 2023). In addition, it was observed that teachers with high self-efficacy beliefs tend to implement more effective teaching strategies and show a greater ability to manage the classroom, which also converges with previous studies (Hernandez-Jáquez and Ceniceros-Cázares, 2018; Sağlam and Kavgaci, 2021).

An important finding is the mediating effect of self-efficacy beliefs between vocation and teaching competencies. The results show that a vocation for teaching not only improves teaching competencies, but also does so indirectly by increasing teachers' self-efficacy in various aspects of their work, with greater emphasis on attention to the uniqueness of students. Although previous studies have explored the relationships between self-efficacy and teaching competencies (Kuyini et al., 2020; Vega Rodríguez et al., 2023), few have examined the mediating role of self-efficacy in the interaction between teaching vocation and professional competencies. This study is therefore pioneering in exploring how teaching vocation interacts with self-efficacy to influence teaching competencies. A novel point is that vocation may be a factor that enhances these attitudes, probably derived from participation in professional training programmes aimed at improving teaching practice (De la Torre, 2020).

With regard to the qualitative phase, in-depth interviews provided a detailed insight into how teachers perceive their vocation, self-efficacy and professional competencies. Firstly, the teaching vocation transcends the transmission of knowledge. It integrates personal and professional skills with a social commitment and is seen as a developable quality that changes with experience and focuses on the student and on adaptability and socio-emotional skills, as mentioned in some studies (Carlo Atim, 2022; Fraile et al., 2020). It also functions as a factor of resilience in the face of challenges and is a driver of innovation and motivation for continuous improvement, in line with the findings of Baron and Baron (2019). Although teachers face systemic tensions, they are also able to highlight their human dimension and promote an impact on students' professional training, finding personal and professional satisfaction despite constant challenges (Bybee, 2020).

The findings indicate that self-efficacy beliefs are reflected in the teaching staff's ability to meet curricular objectives and adapt their practice to complex conditions. This coincides with studies that highlight the relationship between self-efficacy and performance in inclusive contexts (Kuyini et al., 2020). Teachers value continuing education as a means to innovate and face challenges, which is consistent with the observations of Ismailos et al. (2022), who highlight the role of professional development in improving self-efficacy, as it provides practical tools and knowledge necessary to face classroom challenges.

From the participants' perspective, professional competencies encompass technical skills, socio-emotional abilities, adaptation and innovation. The teaching staff highlights disciplinary mastery, use of technologies and constant updating, as also reported in other studies (Sarceda-Gorgoso et al., 2020). Through continuous training, feedback and self-care, they strengthen their performance, facing challenges with passion, confidence and a positive impact on the educational environment. These results are also reported in Ramsey (2024).

The convergence of quantitative and qualitative data, based on the triangulation of information, suggests that teaching vocation and self-efficacy are not only related but also mutually reinforcing in influencing the development of teaching competencies. This finding is consistent with studies indicating that self-efficacy acts as a

mediator in the relationship between vocation and teaching performance, facilitating the implementation of innovative and effective pedagogical practices, as well as demonstrating persistence in the face of challenges (Deng et al., 2022; Vega Rodríguez et al., 2023).

Although this study provides relevant findings, it has limitations that must be considered. The sample consisted mainly of upper secondary and higher education teachers, which potentially limits the generalisation of the results to other educational levels. Furthermore, the cross-sectional design prevents the establishment of definitive causal relationships between the variables analysed. Future studies could adopt more robust and heterogeneous samples to explore how these interactions evolve over time and in different educational contexts. It would also be relevant to investigate how contextual factors, including institutional support and educational policies, influence the relationship between the variables analysed.

Among the main practical applications that can be derived from the findings of this study are the design of training programmes focused on strengthening self-efficacy and vocation, with active and reflective methodologies based on mentoring or learning communities. Vocation can also be fostered in the selection of teaching staff and by promoting effective feedback, peer observation and socio-emotional development workshops.

## Conclusions

This study highlights the need to adopt a comprehensive approach to teacher professional development that incorporates both technical skills and psychological dispositions and personal beliefs. The link between teaching vocation, self-efficacy beliefs, and teaching competencies offers a broad perspective that can guide policies and practices to improve education, particularly in contexts of structural inequality, such as in Mexico. This reinforces the idea that educational quality depends not only on material resources, but also on the psychological and professional resilience and adaptability of teachers.

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## **Appendix**

### **Interview script (spanish)**

1. ¿Podría contarme sobre su trayectoria como docente?
2. ¿Qué le motivó inicialmente a elegir la docencia como profesión?
3. ¿Qué significa para usted tener vocación docente en el contexto educativo mexicano?
4. ¿Considera que posee vocación docente?
  - 4.1 ¿Cómo ha evolucionado su sentido de vocación a lo largo de su carrera?
5. ¿Cómo influye su vocación en su forma de abordar los desafíos educativos en su contexto específico?
6. ¿Qué significa para usted sentirse capaz como docente en el sistema educativo mexicano?
7. ¿En qué áreas o aspectos de su trabajo como docente se siente más confiado? ¿Y menos confiado?
8. ¿Cómo cree que sus creencias sobre su propia capacidad influyen en su práctica docente diaria?
9. ¿Cuáles considera que son las competencias más importantes para un docente en México?
10. ¿Cómo ha desarrollado estas competencias a lo largo de su carrera?
11. ¿Qué competencias cree que necesita desarrollar más para ser más efectivo en su contexto actual?
12. ¿Puede describir cómo interactúan la vocación, las creencias de autoeficacia y competencias docentes en su práctica diaria?
13. ¿Cómo cree que estos tres elementos le ayudan a enfrentar los desafíos cotidianos?
14. En cuanto a su experiencia en la profesión docente, ¿cómo ha influido el tiempo en su quehacer?
15. ¿Cómo considera que la formación pedagógica puede ayudarle a desempeñar su trabajo docente?
16. ¿Qué estrategias ha desarrollado para adaptarse a las particularidades del contexto educativo en el que trabaja?
17. ¿Hay algo más que le gustaría añadir sobre su experiencia como docente en relación con estos temas?