



ORIGINAL PAPER

Understanding Continuous Professional Development Needs among Teachers in Vocational and Technical Education: Evidence from a Sociological Study

Alexandrina-Mihaela Popescu¹⁾, Gabriela Motoi²⁾

Abstract:

The continuous professional development of teachers represents a central dimension of contemporary educational policy, particularly in contexts marked by rapid curricular transformations, technological change, and increasing pedagogical complexity. In vocational and lower-secondary education, where teachers must simultaneously address diverse student needs and align instruction with labour market expectations, identifying real training needs becomes essential for improving educational quality. This study explores the professional development needs of teachers from two vocational high schools and one urban lower-secondary school in Dolj County, aiming to construct a nuanced portrait of their perceptions, challenges, and motivations regarding continuous training. Grounded in theories of reflective practice and organizational change, the research investigates how teachers evaluate their previous participation in training, the obstacles they encounter, and the conditions that can enhance engagement in innovative learning opportunities. By integrating theoretical foundations with empirical inquiry, the study contributes to a deeper understanding of teachers' professional learning dynamics.

Keywords: *Professional Development, Teachers' Training Needs, Vocational and Technical Education; Reflective Practice; Educational Change.*

¹⁾ Associate Professor, PhD, University of Craiova, Department of Teacher Training, Romania, Email: alexandrina.popescu@edu.ucv.ro

²⁾ Associate Professor, PhD, University of Craiova, Faculty of Social Sciences, Romania, Email: gabriela.motoi@edu.ucv.ro

Understanding Continuous Professional Development Needs among Teachers in Vocational and Technical Education: Evidence from a Sociological Study

1. Theoretical framework

Teachers' professional development represents an important element in ensuring educational quality (Popescu and Motoi, 2022), as continuous learning enhances instructional practices and supports adaptation to systemic change, a perspective aligned with Schön's concept of the "reflective practitioner," which emphasizes the need for ongoing self-assessment and experiential learning (Schön, 1983: 49–52). Schön's framework is particularly relevant for teachers working within vocational and technical education, where the pace of technological, curricular, and labour market change requires constant updating of professional competencies and adaptive instructional behaviour.

Complementing this view is Fullan's (2007) theory of educational change, which situates teacher learning within a broader organizational and systemic dynamic, arguing that professional development cannot be conceptualized solely at the individual level but must be understood as an interactive process shaped by institutional cultures, school leadership, available resources, and national educational policies (Fullan, 2007: 68–72). From this perspective, teachers' expressed needs for continuous training reflect both personal aspirations for professional growth and systemic pressures emerging from curricular reforms, digitalization of education, and increasing demands for inclusive pedagogical practices. At the same time, the theoretical model proposed by Guskey (2002) provides another essential lens, suggesting that teachers' willingness to engage in professional development is strongly influenced by their perceptions of the relevance, applicability, and immediate utility of training programs; according to this model, meaningful changes in instructional practice occur only when teachers perceive clear benefits for student learning, when training is aligned with their instructional realities, and when institutional structures support the implementation of newly acquired skills (Guskey, 2002: 383–387).

A broader understanding of teachers' continuous professional development must also consider how educational policies and governance frameworks shape organizational practices, a perspective consistent with Olimid's comparative analysis of EU-level educational programmes and institutional dynamics (Olimid, 2018: 789–797). Also, a deeper understanding of teachers' professional development needs also requires examining how organizational dynamics shape individual behaviour and decision-making, a perspective consistent with analyses of power, truth, and identity within rational organizational structures (Hirghiduș & Anghel, 2009). These theoretical insights are particularly pertinent in the context of the present study, which investigates the continuous training needs of teachers from three vocational high schools in Dolj County, Romania.

2. Methodological aspects

The present research, designed with a descriptive and exploratory character, aims to identify and analyze the continuous professional development needs of teachers working in two vocational and technical high schools and in one urban lower-secondary school in Dolj County, pursuing the broader objective of constructing a comprehensive and nuanced portrait of teachers' real professional development needs, as they intersect with the challenges of contemporary education and with the socio-demographic and professional characteristics of the teaching staff; within this framework, the study pursued several specific objectives, namely examining teachers' participation in continuous training programs and identifying the thematic areas they prefer, highlighting their perceptions of the usefulness of previous training activities and of the domains in which

they feel the greatest needs, identifying the obstacles that limit access to continuous training and the factors that could encourage participation in innovative programs, and investigating teachers' preferences regarding the organization, duration, and scheduling of future training activities.

The research employed the sociological survey method, using a structured questionnaire administered both online and in printed form, when necessary, the instrument comprising closed-ended questions—either single-answer or multiple-choice—as well as Likert-type scale questions (1–5) designed to capture teachers' perceptions and attitudes with greater precision. The target population included teachers active in technological high schools.

The questionnaire comprised several thematic sections: socio-demographic and professional profile, previous participation in training programs, perceived usefulness and emerging needs, obstacles and enabling conditions for future training, as well as suggestions regarding organizational formats and motivational factors. Data were collected between June and August 2025 under conditions ensuring voluntary participation and confidentiality, in accordance with ethical standards, and were subsequently processed and analyzed using descriptive statistical techniques, including frequencies and percentages, which were presented in tables and graphs to facilitate interpretation.

3. Results

The analysis of teachers' participation in continuous professional development over the past three years reveals several significant trends that highlight both individual motivations and institutional dynamics.

Table 1. Participation in Continuous Professional Development Programs in the Last Three Years

Response	% of total respondents
Yes	85.2
No	14.8

The distribution of responses regarding teachers' participation in continuous professional development programs clearly illustrates a strong orientation toward professional growth, with 85.2% of respondents stating that they have taken part in such activities in the past three years. Considering the specific context of technological high schools—where labour market requirements change rapidly and the subjects taught often involve technical or technologically evolving content—continuous training becomes not merely a formal obligation, but a practical necessity for maintaining professional relevance. Teachers in these institutions are frequently required to adapt not only to new technologies, but also to new categories of students, alternative working methods, and the expectations of educational partners (including economic actors), which means that professional development is often perceived as a tool of professional survival within an ever-changing educational environment.

Understanding Continuous Professional Development Needs among Teachers in Vocational and Technical Education: Evidence from a Sociological Study

Table 2. Domains With the Highest Need for Training
(max. 3 options; percentages of total respondents)

Response	% of total respondents
Digital teaching	53.0
Modern assessment strategies	61.2
Classroom and conflict management	56.8
Inclusion/SEN	48.6
Socio-emotional competencies	45.4
School counselling and guidance	33.9
Non-formal education and extracurricular projects	30.1
Instructional design and curriculum	48.1
Individualized learning and content adaptation	66.1
Innovative teaching techniques and communication adapted to vulnerable groups	70.5
Other	4.9

Note: Percentages reported for N = 84 respondents; multiple-answer question.

The analysis of the responses regarding the domains perceived as having the greatest need for professional development reveals a complex picture, constructed on the basis of a multiple-response item—a methodological aspect of particular relevance, as it allows respondents to indicate several areas of interest simultaneously, thereby reflecting the plurality and overlap of real needs emerging from educational practice. This feature of the question requires that percentages be reported in relation to the total sample rather than to an exclusive distribution, a choice that offers a more accurate representation of the diversity of strategies teachers consider to be priorities. The pattern of prioritized training areas aligns with Fullan’s (2007) theory of educational change, which argues that teachers’ development needs intensify when institutional expectations and classroom realities become increasingly complex.

Within this interpretative context, the data clearly highlight the substantial share of the option “*Innovative teaching techniques and communication adapted to vulnerable groups*,” selected by 70.5% of respondents—a result that can be sociologically interpreted as a clear signal concerning the dominant direction of current professional concerns. Teachers in the urban educational environment of Dolj County appear to be keenly aware that the effectiveness of contemporary schooling depends largely on the capacity to integrate innovative teaching methods and to develop differentiated communication competencies suited to the cultural, social, and emotional diversity of student groups, particularly those in vulnerable situations.

At the same time, the option “*Individualized learning and content adaptation*,” selected by 66.1% of teachers, outlines a complementary profile that further nuances the structure of the responses, suggesting that teachers perceive the personalization of the instructional process—tailored to the cognitive and emotional particularities of each student—as essential. In addition, the domain “*Modern assessment strategies*,” indicated by 61.2% of respondents, completes this overall picture by showing an acute

need to reform assessment practices through the adoption of tools and methods aligned with new educational paradigms centered on competencies and individual progress.

Table 3. Obstacles to Participation in Training
(multiple options; percentages of total respondents)

Response	% of total respondents
Lack of time	73.2
High costs	48.1
Lack of relevant training opportunities nearby	30.6
Lack of institutional support	25.7
Other	8.2

Note: Percentages reported for N = 84 respondents; multiple-response question.

Starting from the distribution of teachers' responses regarding the obstacles encountered in participating in continuous professional development programs, the sociological interpretation reveals several trends and correlations that merit deeper analysis. Viewed through the perspective of organizational sociology, these barriers reflect what Lipsky (1980) described as the constraints faced by "street-level bureaucrats," whose limited time and resources shape their capacity to participate in professional learning.

It is important to emphasize that this item allowed respondents to select multiple options, a feature that provides a more accurate depiction of the complexity of perceived barriers, as the percentages—reported to the total number of respondents (N = 84)—capture the overlap and interdependence of limiting factors.

First, the overwhelming prevalence of the option "*Lack of time*," selected by 73.2% of teachers, indicates that the main barrier to participation in training is temporal in nature. From a sociological perspective, this reality may be associated with work overload and the high volume of professional and administrative tasks characteristic of the urban educational context, where teachers juggle teaching, assessment, involvement in extracurricular projects, and bureaucratic responsibilities. The lack of time thus becomes a symptom of an organizational culture marked by pressure on personal resources and the absence of efficient workload-reduction mechanisms that would enable genuine participation in training activities. Secondly, "*High costs*," indicated by 48.1% of respondents, signal the economic dimension of inequalities in access to professional development. Even in an urban setting, where training opportunities are more diverse than in rural areas, limited individual financial resources and the absence of institutional subsidies constitute significant restrictive factors. This finding highlights the need for educational policies to include mechanisms for public or institutional funding of training programs so that professional development does not depend on teachers' personal economic means. The third-ranked obstacle, "*Lack of relevant training opportunities nearby*" (30.6%), points to a structural problem of geographical accessibility and curricular relevance. Even within the urban area of Dolj County, there are situations in which available training programs fail to align with teachers' real needs or are not sufficiently accessible logistically, discouraging participation. This barrier is complemented by "*Lack of institutional support*" (25.7%), which reveals another dimension of the organizational context: the absence of clear and proactive internal policies encouraging professional development, whether through workload reductions,

Understanding Continuous Professional Development Needs among Teachers in Vocational and Technical Education: Evidence from a Sociological Study

logistical facilitation, or symbolic support from school leadership.

Table 4. Preferred Form of Training

Response	% of total respondents
Face-to-face courses (in-class)	29.5
Synchronous online courses (live)	25.7
Asynchronous online courses (platform-based)	19.7
Practical workshops	18.0
Good-practice exchanges / study visits	7.1

Note: Percentages reported for N = 84 respondents; single-response question.

The results concerning teachers' preferred format for participating in continuous professional development programs provide a valuable perspective on how urban educators in Dolj County wish to engage in professional learning activities, revealing preferences that reflect both the long-standing educational tradition and the more recent trends toward digitalization. As this was a single-response question, the data allow for a clear hierarchy of the expressed options and highlight the dominant orientations. The highest share corresponds to "face-to-face courses (in-class)," selected by 29.5% of respondents, indicating that, despite the evident advantages of digital environments, direct interaction, unmediated contact with trainers, and informal exchanges of ideas remain essential for a significant proportion of teachers. This format is often perceived as highly valuable due to its capacity to offer immediate feedback and to foster a collaborative learning climate.

**Table 5. Expectations From Training Programs
(coded categories; multiple responses)**

Response	% of total respondents
Immediate applicability in the classroom	64.5
Access to resources and lesson models	52.5
Mentoring/coaching	45.4
Recognized certification	42.1
Professional networking	28.4

Note: Percentages reported for N = 84 respondents; multiple-response question.

The data show that the most prominent expectation is "*immediate applicability in the classroom*" reported by 64.5% of respondents, highlighting the pressing need for training programs to be pragmatic, practice-oriented, and directly transferable to everyday teaching activities. Teachers are no longer seeking only the accumulation of theoretical knowledge; instead, they expect concrete solutions, examples of good practice, and tools that enable effective and innovative instructional interventions at the classroom level. In a similar vein, "*access to resources and lesson models*" selected by 52.5%, reinforces this trend by suggesting that continuous professional development is valued particularly when it provides tangible support: teaching materials, planning templates, sample instructional scenarios, and adaptable digital resources. This expectation reflects teachers' desire to save time and to rely on validated methodological support rather than rebuilding materials individually. At the same time, "*mentoring and coaching*" indicated by 45.4%, points to an openness toward more personalized and collaborative forms of professional learning,

in which direct interaction with an expert or an experienced colleague facilitates sustained instructional development. This need aligns with the broader transformation of school organizational culture, which increasingly values learning within professional communities and reciprocal support among teachers. Moreover, “*recognized certification*” selected by 42.1%, shows that beyond intrinsic motivations for professional growth, pragmatic career-related considerations—such as earning credits or accumulating points for promotion—also play a significant role. Finally, although “*professional networking*” was chosen by a smaller share of respondents (28.4%), it remains meaningful, reflecting teachers’ interest in building professional connections, exchanging ideas, and participating in communities of practice—an essential component of a modern, interconnected educational environment.

Table 6. Intention to Participate in Training Programs
(in the next 24 months)

Response	% of total respondents
Yes, I intend to participate	73.8
No, I do not intend to participate	13.7
Unsure / I do not know yet	12.5

Note: Percentages reported for N = 84 respondents.

Over the next 24 months, teachers’ intention to participate in professional development programs is notably high, according to the collected data: 73.8% of respondents state that they plan to attend a training course on one of the previously identified topics, 13.7% indicate that they do not intend to participate, and 12.6% remain uncertain. These results illustrate a substantial interest in continuous professional development and highlight a tangible demand for training opportunities that are both relevant and flexible. The strong orientation toward future participation suggests that teachers increasingly perceive professional development as essential for adapting to curricular changes, enhancing instructional practices, and meeting the diverse needs of contemporary learners. At the same time, the presence of a hesitant group underscores the importance of institutional support, accessible formats, and well-structured programs to encourage engagement from all teachers.

Table 7. To what extent do you believe that participating in a training course on innovative teaching techniques would improve your work with students from vulnerable groups?

Response	% of total respondents
1 – Not useful at all	2.7
2 – Slightly useful	6.6
3 – Moderately useful	20.2
4 – Very useful	35.0
5 – Extremely useful	35.5

Note: Percentages reported for N = 84 respondents.

The results of this item reveal a highly positive perception regarding the potential impact of innovative teaching training on work with vulnerable students: 70.5% of

Understanding Continuous Professional Development Needs among Teachers in Vocational and Technical Education: Evidence from a Sociological Study

respondents consider such a course to be very useful or extremely useful, indicating a strong awareness of the need for adapted and inclusive methodologies. Only 9.3% perceive the usefulness as low or non-existent, while 20.2% rate it as moderately useful. This distribution confirms the existence of strong demand for training programs focused on innovative instructional practices, especially those aimed at supporting students at risk of school exclusion. Furthermore, the results underscore the opportunity—and indeed the necessity—of integrating practical modules, applied strategies, and relevant case studies into training offers to enhance teachers' ability to respond effectively to the complex challenges faced by vulnerable learners.

Authors' Contributions:

The authors contributed equally to this work.

References:

- Ainscow, M. (2020). *Promoting inclusion and equity in education: Lessons from international experiences*. Routledge.
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109–132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). Teachers College Press.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3), 381–391. <https://doi.org/10.1080/135406002100000512>
- Hirghiduș I, Anghel M (2009). „The Self, the Power and the Truth in Rational Organizations” The 15th International Conference, *The Knowledge-Based Organization*, Behavioural and Social Sciences, The 26nd – 28th of November 2009, Land Forces Academy Publishing House Sibiu, 39-42
- Knowles, M. S. (1984). *The adult learner: A neglected species* (3rd ed.). Gulf Publishing.
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. Russell Sage Foundation.
- Olimid, A. P. (2018). Comparing educational policies, programmes and practices in EU institutional governance (2011–2017). *The European Proceedings of Social & Behavioural Sciences (EpSBS)*, 67, 789–797.
- Popescu, A. M., & Motoi, G. (2022). Continuous Training of Teachers in Romania Comparative Analysis before and after the Pandemic. *Revista Universitara Sociologie*, year XVIII, issue 1, 9-17
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Article Info

Received: November 01 2025

Accepted: November 21 2025

How to cite this article:

Popescu, A.-M., Motoi, G. (2025). Understanding Continuous Professional Development Needs among Teachers in Vocational and Technical Education: Evidence from a Sociological Study. *Revista de Științe Politice. Revue des Sciences Politiques*, no. 88, pp. 192-300.