

Editorial

What is the purpose of research and teacher professional development in schools?

The educational environment requires a complex approach where each action is distinct and cannot be replicated, as it engages with an ever-changing reality whose complexities cannot be managed by rigid applications or fixed solutions¹.

In this peculiar aspect of educational and teaching practices may reside both teachers' skepticism towards educational research – viewed as theoretical and distant – and the feeling of ineffectiveness related to teacher professional development, perceived as suggesting just a set of predefined solutions to implement.

Various education systems report cultural and structural barriers to the use of research. Such barriers include the perception that research is neither sufficiently accessible nor relevant to daily school practices. This highlights the frequently noted gap between research findings and their application in schools², as persistent constraints related to time and funding remain significant and understandable barriers.

At times, there is also a lack of understanding of the meaning of 'research' within educational contexts, including what the research process involves and how it can effectively support the practical development of teaching and learning practices³. This challenge also arises from the fact that the research and teaching communities often operate through distinct languages, frameworks, and perspectives.

Considering this, why conduct educational research? Why provide teacher professional development?

Promoting improvement

While research and teacher professional development can undoubtedly enhance knowledge, knowledge alone is necessary but insufficient to foster meaningful improvement. Comparative studies indicate that policies and reforms, in and of themselves, do not necessarily lead to substantive changes in classroom teaching practices⁴.

The risk is that the effectiveness of both research and professional development may become predominantly reliant on the mere transmission of content.

Transmissive teaching methods used in schools reveal the limitations of such an approach. Although content knowledge remains necessary and useful for educational processes, it is often insufficient to foster changes in practice or to generate effective impact within educational contexts that could improve

1 Mortari, L. (2003). *Apprendere dall'esperienza. Il pensare riflessivo nella formazione*. Roma: Carocci.

2 OECD (2022). *Who Cares about Using Education Research in Policy and Practice?: Strengthening Research Engagement*. In *Educational Research and Innovation*. OECD Publishing. <https://doi.org/10.1787/d7ff793d-en>.

3 OECD (2025). *Everybody Cares About Using Education Research Sometimes: Perspectives of Knowledge Intermediaries*. In *Educational Research and Innovation*. OECD Publishing. <https://doi.org/10.1787/5ef88972-en>.

4 Vincent-Lancrin, S., et al. (2019). *Measuring Innovation in Education 2019: What Has Changed in the Classroom?* *Educational Research and Innovation*. OECD Publishing. <https://doi.org/10.1787/9789264311671-en>.

reality and support students' growth, enabling them to fully develop their potential and become the best version of themselves. International evidence indicates that meaningful innovation in educational systems concerns not only content but also pedagogical practices and classroom interaction styles⁵.

In pursuing this objective, not all educational or instructional approaches are equally effective. On the contrary, educational practices, also in their everyday and ordinary dimensions, should be generative actions capable of bringing out every student's potential⁶. Educational innovation policies require tools that make such changes observable and measurable, while systematically relating them to educational outcomes⁷.

If pedagogy is understood as a practice-oriented, design-based science⁸ that promotes, through research and teacher professional development, the development of practical knowledge useful for transforming reality, we must also consider what kind of learning is useful for this purpose.

Learning for transformation

Regarding learning – understood as essential for sustaining educational research and teacher professional development within a transformative perspective⁹ –, the concept of “CSSC learning”, as outlined in an OECD report¹⁰, offers a useful framework.

This term synthesizes the distinctive characteristics of effective learning from a social-constructivist perspective:

- constructive
- situated
- self-regulated
- collaborative.

These characteristics align with evidence indicating an increasing focus within educational systems on pedagogical practices aimed at fostering higher-order skills, such as critical thinking and collaborative learning¹¹.

In this regard, Castoldi¹² develops a map illustrating the potential of these characteristics for designing research and teacher professional development initiatives in educational contexts.

5 Vincent-Lancrin, S., et al. (2019). *Measuring Innovation in Education 2019: What Has Changed in the Classroom?*, Educational Research and Innovation. OECD Publishing. <https://doi.org/10.1787/9789264311671-en>.

6 The National Guidelines for the curriculum of pre-primary and primary schools - recently approved (9 December 2025) - offer a critical reading of which would require a detailed technical, rather than ideological, analysis. The Guidelines clearly frame the contribution of school subjects to the development of pupils' personalities by identifying lifelong learning skills as the school's aim (see Student Profile and General Objectives of the Educational Process, pp. 13–20).

7 Vincent-Lancrin, S. (ed.) (2023), *Measuring Innovation in Education 2023: Tools and Methods for Data-Driven Action and Improvement*. In *Educational Research and Innovation*. OECD Publishing. <https://doi.org/10.1787/a7167546-en>.

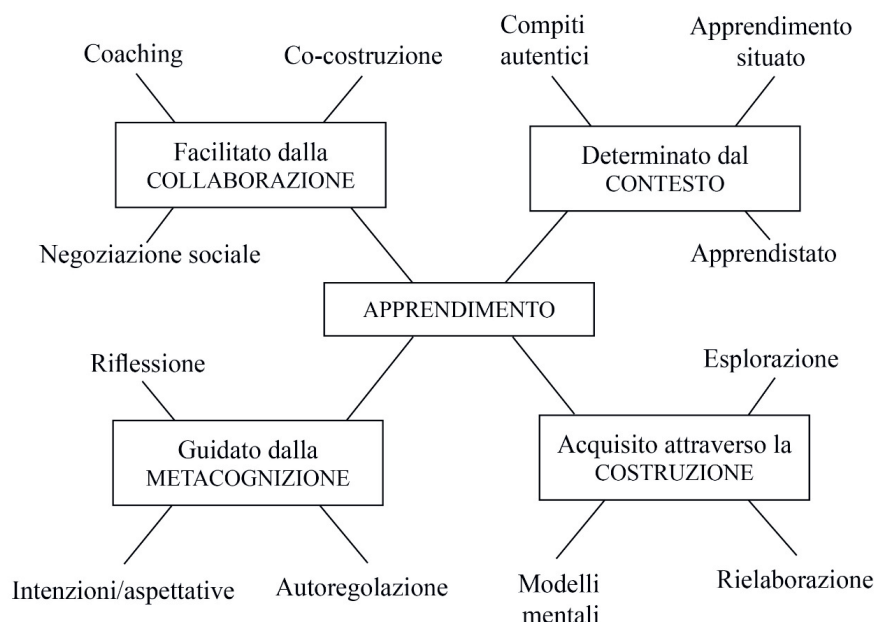
8 Pellerey, M. (1998). *L'agire educativo. La pratica pedagogica tra modernità e postmodernità*. Roma: LAS.

9 This is a particularly interesting summary for classroom teaching as well, as it highlights, from this perspective, the importance of using active teaching methods to promote meaningful learning among pupils.

10 See De Corte, E. (2010). Historical developments in the understanding of learning. In H., Dumont, D., Istance, & F., Benavides (Eds.), *The Nature of Learning: Using Research to Inspire Practice* (pp. 35–68). OECD Publishing. <https://doi.org/10.1787/9789264086487-en>, and Istance, D. & Dumont, H., (2010). Future directions for learning environments in the 21st century. In H., Dumont, D., Istance, & F., Benavides (Eds.), *The Nature of Learning: Using Research to Inspire Practice* (pp. 317–340)., OECD Publishing. <https://doi.org/10.1787/9789264086487-en>. The latter forms part of the OECD's fascinating 'Educational Research and Innovation' series, which presents the results of the OECD's work on innovation in education. For a full list of publications, see: https://www.oecd.org/en/publications/series/educational-research-and-innovation_g1ghbfcb.html.

11 Vincent-Lancrin, S., et al. (2019). *Measuring Innovation in Education 2019: What Has Changed in the Classroom?*, Educational Research and Innovation. OECD Publishing. <https://doi.org/10.1787/9789264311671-en>.

12 Castoldi, M. (2017). *Costruire unità di apprendimento* (p.47). Roma: Carocci.

CSSC Learning

This represents an intriguing point of reference for educational research and teacher professional development, which aims to change practices to support the development of individuals engaged in educational and training processes, including teachers, researchers, and students.

Reflecting to innovate and grow professionally

The school experience is inherently singular and unrepeatable, and teachers are daily confronted with open-ended, challenging situations that resist predefined or standardized solutions. It is precisely this irreducible uniqueness that requires teachers to understand, interpret, and act in a context-specific way, tailored to the specificities of each situation.

An effective educational and instructional action requires practical knowledge, which is, on the one hand, certainly informed by engagement with theories and knowledge, but, on the other, generated daily, constantly reflective, and in dialogue with research¹³.

Educational innovation and professional development find fertile ground only in considering oneself as a reflective teacher-researcher.

Personal and group reflections constitute one of the central factors in the development of professional teaching identity: by reflecting on their own practice, teachers can attribute meaning to educational actions and understand what works and what needs to change. From this perspective, innovation is not limited to the introduction of new techniques or tools, but it involves a process of introspection and continuous renegotiation of “who I am” and “how I act” as a teacher¹⁴.

¹³ Mortari, L. (2009). *Ricericare e riflettere. La formazione del docente professionista*. Roma: Carocci.

¹⁴ Suarez, V., & McGrath, J. (2022). *Teacher professional identity: How to develop and support it in times of change* (OECD Education Working Papers). OECD Publishing.

Learning through practical experience

Such a professional mindset requires an initial training that is specifically designed for it. For those working in kindergartens and primary schools, this is adequately provided by master's degree programs in primary education, whereas it seems not to be sufficiently guaranteed by training programs that prepare teachers for lower and upper secondary schools.

Beyond the question of whether teacher initial training is adequate or not, it is also crucial to address how in-service teacher professional development is nurtured and supported. Not every teacher professional development program is made equally, and, despite their validity, not all training methods can build upon what was gained in the initial training programs or fill the gaps they may have.

What is needed is (i) an institutional framework that, within the ordinary functioning of the school system, is attentive and can contribute to the professional development of teachers, and (ii) a model of in-service professional development consistent with the profile of the reflective teacher-researcher.

This involves viewing the school experience as a learning opportunity for teachers – not just for students – by fostering and encouraging reflective processes that develop within a research-oriented mindset.

In fact, what does conducting research in schools mean for teachers? It means systematically investigating their own teaching practices to gain a deep understanding of implementation methods, their own stance, and its implications for learning¹⁵. The so-called practitioner research is defined as a form of inquiry that professionals conduct within their own classroom context¹⁶ to improve their teaching, to address and attempt to resolve a problem, and to effectively introduce pedagogical innovation¹⁷.

Research-based Teacher Professional Development is possible

While meaningful research allows teachers to improve their practices and effective professional development supports situated learning, for researchers, this represents an opportunity to anchor their work in educational realities and address emerging challenges, thereby fostering a service-oriented approach.

On the one hand, combining research and training is, therefore, particularly effective for teachers' professional development; on the other, it is also a generative source of pedagogical and educational knowledge. The reflective processes triggered by school experience constitute, in fact, a common foundation for educational research and teacher professional development that interact and mutually reinforce one another¹⁸.

The linkage between research and professional development indicates a complex process that can serve as a mutually fertile ground between the world of schools and the world of universities, between teachers and researchers.

¹⁵ See Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York: Teachers College Press and Dana, N. F., & Yendol-Hoppey, D. (2009). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry*. Corwin Press.

¹⁶ Fox, M., Green, G., & Martin, P. (2007). *Doing practitioner research*. London: Sage.

¹⁷ See Murray, L., & Lawrence, B. (2000). *Practitioner-based enquiry: principles for postgraduate research*. London: Routledge and Falmer and Hopkins, D. (2014). *A teacher's guide to classroom research*. McGraw-Hill Education (UK).

¹⁸ Considering the need for this dialogue, Damiano highlights the possibility of partnership between researchers and practitioners to develop effective educational research. Damiano, E. (2006). *La nuova alleanza. Temi e problemi della nuova ricerca didattica*. La scuola, Brescia.

Research-based Teacher Professional Development (R-TPD) does not indicate an established condition, but rather a guiding principle to be pursued for jointly promoting innovation in schools, such as the professional development of teachers, and the growth of pedagogical and didactic knowledge, including the definition of researchers dedicated to the educational sector.

Among the many initiatives that, in various ways and at different times, have sought to realize this vision, CRESPI's¹⁹ stands out as a particularly significant one, which is still evolving. It is worth noting how *«certain essential commitments that characterize Research-based Teacher Professional Development (R-TPD) and that constitute open questions for the researcher are identified:*

A clear articulation of the research's purpose in terms of growth and professional development of the teachers directly involved, along with a focus on documenting and analyzing the impacts in terms of change.

The creation of an R-TPD group comprising researchers and teachers, in which the different roles of the participants are clarified, and where objectives and subjects, as well as the value-based and methodological choices of the R-TPD, are negotiated and clarified.

- *A focus on the specific nature of the contexts—institutional and otherwise—in which the R-TPD takes place, which is reflected in all phases of the research through an analysis of the constraints and resources present within them.*
- *Ongoing and systematic dialogue among research participants regarding the documentation of results and processes implemented in school and teacher-training contexts.*
- *A focus on the actual impact of outcomes in schools, both in terms of educational and instructional innovation and teacher professional development.*

This does not constitute an achievement for the CRESPI Center, but rather a question, a journey undertaken by a group of researchers who see the urgent need to come together as a scientific community to seek answers regarding teachers' professionalism that are authentic, not instrumental, free from the logic of particular interests, and strongly tied to the needs emerging from to-day's school contexts. An experience of a research community on the move»²⁰.

Reflections on Research-based Teacher Professional Development

This journal has frequently published articles on Research-based Teacher Professional Development²¹ and highlighted the activities of CRESPI²². The present issue presents research and reflections aimed at showcasing

¹⁹ Inter-university Educational Research Centre on Teacher Professional Development; comprising 13 Italian universities. <https://site.unibo.it/crespi/it>.

²⁰ Vannini, I. (2018). Introduzione. Fare ricerca educativa per promuovere la professionalità docente. Il 'qui e ora' del Centro CRESPI. In G. Asquini (Eds.), *La ricerca-formazione: temi, esperienze, prospettive* (pp. 22-23). Milano: Franco Angeli. The discussion initiated in this text was further developed in the volume edited by Dodman M., Cardarelli, R., Damiani, V., & Ciani A. (Eds.) (2025), *La Ricerca-Formazione: impatti, strumenti, fattori*. Milano: FrancoAngeli.

²¹ Issue 13/2 (2021) of *RicercAzione* featured several articles assessing the impact of research-based training on teachers' professional development, based on a critical analysis of several case studies (pp. 75-127).

²² Issue 14/2 of *RicercAzione* (2022) reported on the establishment of Crespi as an inter-university research centre (pp. 187-190).

this perspective, which is valuable for both teacher education, because it is grounded in research, and researchers at universities studying schools, because it places research at the service of educational practice.

We believe this dialogue is necessary and fruitful for both teachers and researchers, as well as for schools and universities.

In the first article, Damiani and colleagues focus on the second phase of a PRIN project centered on civic and citizenship education, specifically regarding the support provided to schools in R-TPD initiatives. Starting with the characteristics and objectives of the various initiatives, the article provides a preliminary assessment by analyzing specific aspects of civic and citizenship education in schools, such as collaborative work, cross-curricular integration, and teachers' instructional and assessment skills.

Batini and colleagues present a study, conducted as part of the PRIN "Aloud!" project, that examines the effectiveness of shared reading aloud in lower secondary schools as a tool for educational equity. With a quasi-experimental design, the article investigates cognitive development, oral text comprehension, and social cognition. The findings suggest that reading aloud may be a promising instructional strategy for enhancing core competencies and preventing school failure.

The article by Bertolini and colleagues presents a multifaceted study aimed at, on the one hand, enhancing fourth-grade students' reading comprehension skills and, on the other, promoting teachers' professional development. Based on empirical evidence, the project tests three diverse instructional approaches. In parallel, it develops three R-TPD initiatives, which focus specifically on formative assessment from an inclusive perspective.

The theoretical, methodological, data collection framework, and the series of interventions – during the initial implementation phase – of a PRIN22 project that examined the dynamics of sociocultural disadvantage and educational poverty in lower secondary schools are presented by Agrusti and colleagues in their contribution. The initial mixed-methods study yielded important findings that formed the foundation for R-TPD initiatives that actively involved class councils, thereby promoting critical reflection and professional innovation. Key findings from the first mixed-methods study formed the foundation for R-TPD programs that actively involved class councils, encouraging professional innovation and critical reflection.

The article by Stanzione and colleagues describes a multiple-case study conducted as part of a PRIN project using a mixed-methods approach, which revealed that PCTO experiences are characterized by significant heterogeneity across the various contexts analyzed. The R-TPD activities implemented fostered teachers' active involvement in a reflective process that allowed both the deconstruction of simplified representations of PCTO and the activation of collaborative dynamics, offering insights for rethinking PCTO as authentic educational experiences.

In their paper, Cibien and colleagues present a questionnaire-based survey designed to explore teachers' specialized knowledge and beliefs regarding mathematics instruction and assessment. This survey was conducted as part of a PRIN project aimed at leveraging both data and materials generated by INVALSI tests to support the professional development of mathematics teachers at all school-grade levels.

The article by Savio and colleagues presents a R-TPD initiative conducted with educators, teachers, and pedagogical coordinators from daycare cen-

ters and preschools in the Municipality of Brescia. The initiative aimed to promote the participatory co-construction of a pedagogical culture, considering both the legislation establishing the integrated 0-6 system and the specific characteristics of the Brescia region. R-TPD activities aimed at professional empowerment and based on reflection, discussion, and collaboration were implemented.

In their article, Schenetti and Antonietti explore outdoor education as a pedagogical response to the growing disconnect between children and nature, in line with the 2030 Agenda and the European Green Competences framework. They present several R-TPD experiences, highlighting the crucial role of sharing research questions and documentation in R-TPD processes and demonstrating how the connection with the natural environment can transform education into an ecological, participatory, and sustainable endeavor.

Drawing on the outcomes of the San Paolo 0-6 project coordinated by Save the Children, the contribution by Lazzari and colleagues highlights the intervention strategies developed within a R-TPD initiative designed to address the complex needs of children and families in vulnerable situations. The article builds upon recent reform of the integrated 0-6 system, which emphasizes the importance of ensuring equal educational opportunities for all children from the earliest years of life and aims to combat the social and cultural inequalities that hinder their full participation in community life.

In their article, Zecca and colleagues present a R-TPD project that involved a primary school teacher in facilitating discussions in a third-grade classroom and analyzing them together with two researchers using the ODIS (Observation of Discussion) tool. This intersubjective analysis highlighted the educational potential of the ODIS coding process for the teacher's professional development in recognizing and intentionally designing discursive and interactive forms in the classroom and in assessing the impact of her interventions on children's learning.

In their contribution, Gentile and colleagues present two working models for the development of functional literacy and a hypothesis for integrating the two, to offer teachers structured teaching protocols useful in classrooms from fourth grade through lower secondary school. The salient features of both models are described, along with the R-TPD contexts in which they were proposed and the results of experimental evaluations. Finally, the activities and main observations arising from the proposed integration of the two models are presented.

Capperucci's article, drawing on the theoretical and methodological framework of authentic assessment, presents a R-TPD initiative targeting a group of lower-secondary schools in Tuscany. The research aims at developing shared models for assessing and certifying students' competencies. The program consists of two studies – a main study and a follow-up – conducted at some distance from one another to verify the validity and reliability of the assessment rubrics developed by the project group and to promote the professional development of researchers and teachers in this area.

In their article, Corsini and De Vincenzo explore preliminary findings from a R-TPD project conducted with teachers at a high school in the province of Rieti, who based their ongoing classroom assessment not on grades but on descriptive feedback. They present the results of a questionnaire administered to students at the school to investigate significant aspects of their

well-being at school and their classroom experiences, as well as how these relate to assessment practices.

The paper by Luppi and colleagues proposes a methodological extension of R-TPD to socio-educational contexts and to Vocational Education and Training. Through an analysis of the methodological aspects of R-TPD and the defining characteristics of the contexts under consideration, the paper proposes a reworking of its five founding principles to reflect on their applicability in settings “beyond school,” highlighting the challenges and opportunities that arise in terms of educational professionalism, interprofessional work, and the co-construction of reflective practices.

In their article, Pintus and colleagues describe a R-TPD initiative undertaken with several educational communities for minors in the regions of Parma, Piacenza, and Reggio Emilia, which focused on two key areas: the need for visibility – both for the communities within the local area and for the university within the network of communities; the critical examination of their own practices – within and among the communities, in the relationship between the communities and the university, and within the university itself – concerning the specific issue of training educators who work in these settings.

Finally, the contribution by Ellerani and colleagues focuses on the School Cooperative Associations (ACS), which were an innovative initiative for cooperative education launched by the Trentino Federation of Cooperation. Through a R-TPD approach, starting from a problem highlighted by teachers, the article describes the launch of a support process to identify research hypotheses and actions aimed at enhancing the educational experience of the ACS.

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