HOW TO MANAGE THE CLASSROOM TO HELP LEARNING: BUILDING EVIDENCE ON TEACHING PRACTICES TO THINK ABOUT IMPROVEMENT

COME GESTIRE LA CLASSE PER AIUTARE AD IMPARARE: COSTRUIRE EVIDENZE SULLE PRATICHE DIDATTICHE PER PENSARE IL MIGLIORAMENTO

Daniela Maccario
Turin University
daniela.maccario@unito.it

Double Blind Peer Review

Citation
Maccario, D. (2025). How to manage the classroom to help learning: building evidence on teaching practices to think about improvement. *Giornale italiano di educazione alla salute, sport e didattica inclusiva*, 9(Suppl.1).

Doi:
https://doi.org/10.32043/gsd.v9i2_Sup.1553

gsdjournal.it
ISSN: 2532-3296
ISBN: 978-88-6022-515-3

ABSTRACT
In order to contribute to the construction of useful knowledge for improvement in the management of classroom teaching processes, the research set out to construct 'evidence on practices' from the perspective of their processual intelligibility. Through an internal observational approach, recurring and widespread issues in task management and student engagement were recognised; in relation to them, professional gestures typically focused on the use of language, restraint and sanctions were observed and attempts were made to capture recurring elements in the dynamics between teacher and student behaviour. In the face of the need for a deeper scientific understanding of didactic facts in contexts (Chevallard, 2014), the study recalls the importance of frameworks, constructs and tools aimed at advancing theory-practice dialogue.

Per contribuire alla costruzione di conoscenze utili per il miglioramento nella gestione dei processi didattici d'aula, la ricerca si è proposta di costruire "evidenze sulle pratiche" dal punto di vista della loro intelligibilità processuale. Attraverso un approccio osservativo interno, si sono riconosciute problematiche ricorrenti e diffuse nella gestione dei compiti e nel coinvolgimento degli studenti; in relazione ad esse, si sono osservati gesti professionali tipicamente focalizzati sull'uso del linguaggio, sul contenimento e sulle sanzioni e si è tentato di cogliere elementi ricorrenti nelle dinamiche tra comportamento dei docenti e degli studenti. A fronte della necessità di una più profonda conoscenza scientifica dei fatti didattici nei contesti, lo studio richiama l'importanza di framework, costrutti e strumenti mirati a far avanzare il dialogo teoria-pratica.

KEYWORDS
Classroom management for leaning, educational research approaches, structures of action teaching.
Gestione della classe per l'apprendimento, approcci della ricerca educativa; strutture di azione didattica.

Received 30/06/2025
Accepted 28/07/2025
Published 30/07/2025

Introduction

Identifying “evidence” that can justify educational decision-making and help it evolve to support the quality of learning and personal growth of students is probably one of the main scientific, political and professional challenges facing researchers and stakeholders in the field. We need to keep an eye on the logical and methodological rigour of the processes that underpin the construction of “evidence” that can guide operational choices, within a critical framework that's open to the potential knowledge that can come from dialogue between different possible ways of analysing complex phenomena such as education. Fundamentally at stake is the problem of the relationship between research and teaching practice and the question of the limited impact of the former on the latter. With regard to the Italian context, although it can be observed that educational research still seems to be limited in its production of empirical data and/or in its study of teaching/learning issues (Calvani, De Angelis, Marzano, Vegliante, 2022), there have been significant advances which, however, have not improved school practice because they have not served to change the professional beliefs and behaviour of teachers (Zanniello, De Vita, 2021). We may wonder whether the reasons for this problem lie in the way research results are disseminated to teachers or whether their willingness to change is in question. However, it may also be useful to reflect on the specificity of the logic and methods of educational research in order to support educational improvement. The problem of constructing evidence, which we can understand as “data” (quantitative-synthetic, descriptive-textual, etc.) reported in a rigorous and comparable manner to educational “facts” (individual and collective transformative processes related to teaching and educational interventions in defined experiential conditions) (Chevallard, 2014), seems particularly complex, given the particular epistemology of scientific investigation in the pedagogical-educational field, which structurally combines the production of knowledge of general value with an orientation towards changing practices in contexts and influencing educational policies (Tarozzi, 2021); attention must be paid to what works locally, without excluding concerns about transferability. Various approaches to research have developed within the framework of these tensions, with the aim of producing evidence to guide practices that are increasingly responsive to recurring and emerging issues. Among these, the hypothesis has also gained ground that research can feed scientific knowledge about the levers for improvement that teachers and educators can activate through the management of processes and interactions in situ practices. The article, also with the aim of fuelling the debate on the specific objectives and approaches of

research in the field of pedagogy and didactics, reconstructs the main lines of a study that sought to explore a possible way to construct “practice-based evidence” to support the transformation of educational action, within a theoretical-scientific framework that seems to justify the need for multiple and integrated evidence and a commitment to studying possibilities, logics and innovative research tools (Bryk, 2015; Bryk, Grunow, Le Mahieu, 2015). The aim is to use research to increase scientific knowledge of the levers for improvement that teachers and educators can activate through the management of processes and interactions in situational practices. In particular, we have sought to contribute to the intelligibility of the classroom practices of teachers considered experts in classroom management, in their capacity as mentors of teachers in initial training, with the aim of identifying recurring professional issues and typical response strategies and analysing their quality and effectiveness in relation to available theories.

1. Problematisation: evidence for improvement, 'between' research and practice

An important line of research has investigated and continues to investigate the possibilities of improving teaching practices by using quantitative-experimental research methods to test the effectiveness of methods and principles that can be proposed to teachers to support more informed and conscious decision-making (Rosenshine, 1995; Lorin Anderson, 2004; Hattie, 2016). These studies have been incorporated into Italian research (Calvani, Trinchero, Vivanet, 2018) due to their methodological rigour, in a field such as teaching practices, which is often dominated by beliefs, fads, opinionism and methodological “myths” (Calvani, Trinchero, 2019). There is an awareness that these evidence of effectiveness can be a resource for improvement in education in relation to “how much” and “how” teachers can decide to use them, and there is also recognition of the difficulties encountered in transferring them to the world of practice through teacher involvement and training initiatives. (Hattie, Zierer, 2018; Menichetti, Pellegrini, Gola, 2019). Presumably, other “evidence” could be useful at these delicate junctures, for example by questioning the contribution of formalised knowledge about teaching to teachers' professional learning processes (Altet, 2019); analysing emerging frameworks on the factors of teaching effectiveness with the practical “grammars” of teaching in classrooms (Bucheton, Soulé, 2009), trying to build evidence on “how” to translate principles of teaching effectiveness identified in everyday practice (Brik, 2015). In general, it is a question of taking into account the

advantages, but also the limitations, of interpretations of educational facts and decisions concerning them derived from pre-established categories, when these can be traced back to theoretical frameworks that are relatively extrinsic to the problems and logic of teaching in a given situation, according to the internal decision-making perspective of teachers. A different research approach is emerging in relation to the difficulties attributed to the "evidence" produced by scientific and academic research in responding to the knowledge needs of education in real situations: the sustainability of a deductive-applicative logic in responding to problems in the field is being questioned. According to the Action Research model, reference is made to the cognitive potential of communities of practice (Wenger, 1998) in which teachers, as active agents of improvement, can collectively, and with the support of professional researchers, generate and test solutions that they recognise as valid for addressing the challenges of their daily work. Problems are addressed starting from their analysis in context, followed by the implementation of improvement strategies with the collection of information on their impact and the possible revision of interventions, according to a spiral logic (Elliot, Giordan, Scurati, 1993). The "tests" are formalised with attention to the documentation and description of the processes, using quantitative data, taking into account the potential response of the innovation to the problems that teachers recognise in their experience. This approach has also been established in Italy since the 1980s as a path to be implemented, alongside experimental studies and/or in response to their difficulties, in order to base decisions in the field of education on empirical data (Pellerey, 1980; Pourtois, 1984; Scurati, Zanniello, 1993). Among the critical issues, we note the difficult nature of formalising the "evidence" obtained, due to the difficulty of referring to clearly defined theoretical-conceptual frameworks (Zanniello, De Vita, 2021), which would facilitate intra- and inter-contextual comparison and the capitalisation of knowledge. Emphasis is also placed on the limited definition of expected improvements, a certain opacity in the methods and content of exchanges between participants, and the incisiveness of personal tacit knowledge (Bryk, 2015). Ultimately, this option seems to present difficulties in comparing phenomena based on units of analysis that can be clearly traced back to the processes to be improved, in a transparent manner that can be reappropriated in different contexts.

Since the last decade of the last century, there has been a recognised need to formalise the dialogue between research and practice within a framework of collaboration between researchers and innovation actors-users: it was deemed necessary to integrate the knowledge produced by research with that of practical origin in order to build training and teaching tools that could be considered

effective not only on the basis of theoretical evidence, but also following the collection of evidence on their potential for effective use in the field. This line of inquiry is generally recognised in international literature as Design-Based Research (DBR), starting with the proposals of Ann Brown (1992) and Allan Collins (1992), which were taken up in a programmatic key (DBR Collective, 1993), until it gained stable and relatively widespread recognition (Zheng, 2015; Easterday, Rees Lewis, Gerber, 2018; Philippakos et al., 2021). In the French-speaking world, proposals that update approaches based on educational engineering (Artigue, 2002; Cèbe, Goigoux, 2017) and applied research in the field of education (Van Der Maren, 2014), particular emphasis is placed on the cognitive value of knowledge linked to the professional experience of the actors because it is linked to internal participation in the phenomena to be improved, generated by the need to "make things work in some way" in contexts. In Italy, the innovative value of "Project-based Learning", analysed by Michele Pellerey (2005), has given rise to formalised models of investigation, such as RAP and the EBID model. The RAP-Ricerca azione con progetto (Zanniello, De Vita, 2021) device, in order to respond to issues recognised by schools and teachers, proposes, in collaboration with them, the adaptation of projects based on previously conducted scientific studies, so as to create conditions of comparability in the processes and outcomes of educational research, in order to build "evidence" of effectiveness and practicability with trans-contextual value. The EBID-Evidence Based Improvement Design model (Calvani, Marzano, 2020) responds to the need to increase the impact of research in the field of education by highlighting the importance of considering the ecological validity of innovation and the contribution of teachers' practical knowledge. The experimental tradition is revived in the context of scientific advances already recognised as the most reliable (Calvani, 2022, p.149): in response to problems highlighted by research (mastery of basic skills in reading, writing, mathematics, logic and science), the available scientifically based principles are translated by consulting teachers at certain stages of the investigation, according to defined procedures, with the aim of developing reliable and sustainable intervention programmes (initial evaluation of the programme by expert teachers; adaptation of specific aspects with the involvement of experimental teachers and collection of follow-up data). Anthony Brink (2015) proposes a "new research paradigm" focused on building practice-based evidence to support the improvement of educational processes. This vision recognises the following as fundamental requirements for research measurable improvement in student outcomes; the opportunity to integrate the wealth of available knowledge, including through applied research and social analysis; the need to prioritise the problems faced by teachers in order to promote professional

learning, assigning them research tasks within structures similar to those of the scientific community — NIC (Network Improvement Community) — whose aim is precisely to build practice-based evidence. Underlying this proposal is a focus on the increased complexity of teachers' work, which, in relation to growing educational expectations and the marked heterogeneity of classes, requires a deeper mastery of content and greater skills in “knowing how to teach”, while at the same time facing a veritable explosion of professional knowledge (on learning, the dynamics of student engagement, etc.). The hypothesis is that few professionals are able to respond effectively to this growing complexity in their daily work and that this may help to explain the gap between the expectations of school systems and the outcomes actually observed. This leads to the idea that research should pay more attention to the tasks that teachers perform in context. In addition, we need to better understand the processes underlying the wide variability in student outcomes in order to understand where and how to focus efforts to improve individual learning standards across the board, beyond a view of effectiveness that refers primarily to groups and average positive effects. It is a question of preserving the spirit of each of the research methods currently in use, in the knowledge that an “improvement paradigm” can focus more on the interaction between individual factors in controlled situations than on their impact, and therefore, ideally, on how quality results are achieved for each student in different contexts. In order to respond to the inherent uncertainty of improvements in the field of education, it is necessary to move towards a “learning by doing” approach, in which the changes achieved can “serve as proof” to fuel deeper reflection on the nature of the system to be improved, so that innovations can be introduced in diverse situations and on a larger scale. It is important that research focuses particularly on developing the knowledge needed to improve teaching processes, identifying and developing “good processes” that can facilitate forms of reasoning that are “proven” in their effectiveness and can be adapted to specific situations.

2. Methodological framework: evidence to support the transformation of practices

Italian research has addressed the issue of the need for scientific knowledge of teaching and educational practices in various ways (Damiano, 2014; Laneve, 2023), and there have been studies exploring ways to scientifically study teaching “from within”, within the framework of participatory research-training approaches based on the co-construction of knowledge between researchers and teachers (Magnoler,

2012). Giuseppe Zanniello (2023) has highlighted the lack of clear and operational theoretical constructs as a fundamental difficulty in this type of research, which is essential for collecting comparable data and building cumulative knowledge. This is a crucial challenge given the polysemy and frequent shifts in meaning of concepts and terms in the field of education (compared to common sense and other scientific perspectives on educational facts). It is also necessary to take into account the risk of considering discourse separately from actions, and behaviour separately from its significance for the subjects. A fundamental challenge for research seeking to build evidence on teaching practices is the identification of categories to which a double meaning can be attributed (Pastré, 2011), for the world of practice and for pedagogical-didactic research. On the other hand, the recognition of teaching as a profession characterised by specific skills (Rey, 2014) rests precisely on the possibility for those who practise it to justify their operational choices in a public and validated manner, starting from formalised knowledge based on non-arbitrary concepts. With regard to these requirements, it may be useful to outline possible contributions from international research in French-speaking countries. In this context, there is a specific commitment to addressing the problem of the intelligibility of teaching practices (Bru, 2019; Vinatier & Altet, 2008). The basic hypothesis concerns the possibility of defining "action structures" or deep recursive nuclei recognisable in different contexts, so as to be able to compare the teaching choices in the field in relation to the actions of the students. Of particular interest are those contributions that take up the challenge of identifying categories useful for understanding interaction in the classroom according to a systemic and dynamic logic, with a view to building forms of evidence on teaching processes to be provided to teachers in the form of repertoires, devices and representations useful for promoting professional reflection and identifying possible levers for improvement. These categories should have, rather than a textual-declarative nature, an operational significance, because they refer to the tasks of the profession, the ways in which they can be addressed and the concerns associated with them. The construct of routines concerns largely automated ways of doing things, operational habits that teachers activate to "make things work" in a given situation (Lenoir, 2012); they mostly escape rationalisation, with justifiability referring to scientific evidence of effectiveness. The identification of routines can be useful for studying habitual teaching practices; although the study of expert routines may be of interest in identifying opportunities for teaching improvement, the reference to effectiveness on student learning risks remaining rather indirect. The notion of schema (Vergnaud, 2011; Pastré 2011), of Piagetian origin, is used to indicate the way in which a competent subject mobilises the resources needed to

deal with a new task or situation. Through assimilation processes, a schema can be activated not only in the situation in which it was constructed, but also in partially different situations. At the same time, a schema can generate skills and therefore improvement and innovation: it is in fact susceptible to change when faced with new situations. One problem is that of having knowledge of scientifically validated schemas in terms of their effectiveness, which can be translated into registers that are consistent with the problematisation and representation of renewed possibilities for educational action (e.g. through stories, videos, etc.). Marc Bru (2021) proposes the construct of practice configuration, which is relevant because it derives from the empirical study of deep teaching invariants that cannot be explained solely in terms of methodological options declared by teachers. To study the "teacher effect" on the quality of student learning, one can take into account the tasks given to students (taxonomic category; delivery; calibration of content and cognitive difficulty); the relational, motivational, initiative-taking, interactive and evaluative processes activated; the social, spatial, temporal and material organisation of the classroom. The notion of "professional gesture" (Bucheton, 2021), used in various empirical studies, refers to a verbal or non-verbal communicative action directed at one or more students that the teacher uses to "make them act" (perform a task, reflect, etc.); it is likely to be understood in the specific context and moment in which it occurs and can be combined with other gestures according to relatively stable configurations or postures that are generally aimed at helping students learn in a profound and meaningful way. The study of some "archetypal pedagogical formats" (also taken up in Italian research: Pentucci, 2018) (lectures, dialogues, individual written work —seatwork—) has made it possible to recognise profound structural elements that are typical in terms of "individual concerns and actions" and "configuration of collective activity", which have made it possible to document classroom teaching processes, dismantling and reassembling them (Veyrunes, 2017) in order to analyse them, also in relation to their potential support for learning.

3. The research: layout and first exploratory analysis of the results

Starting from the outlined framework, we present the framework and some exploratory results of a study conducted with the aim of outlining useful research avenues for reconstructing recurring problems in classroom management -such as to represent challenges for teachers' professional decision-making- and feed the construction of scientific knowledge about the levers of quality and effectiveness that teachers can activate thanks to their teaching activity. It is assumed that

research in the pedagogical-didactic field can usefully contribute to detect these dynamics in order to make them evident to the actors themselves, that it can try to analyse their processes and formulate explanatory and improvement hypotheses in dialogue with the available theories, so as to return knowledge useful for reflection and professional reflexivity, as validated in a theoretical-pragmatic perspective. In terms of training, it is also a matter of working to increase the quality, at once scientific and professionalising, of the content of teacher training, right from initial training in university courses. With particular reference to the latter, the research was carried out with the aim of validating and possibly relaunching the training offer related to the teaching of General Didactics - Classroom Management for Learning addressed to the students of the last year of the Degree Course in Primary Education Sciences at the University of Turin - Savigliano (Cuneo) campus. The survey covers the year 2022-2023 and concerns a sample of 100 lessons conducted by teachers self-selected as experts and willing to be observed in their classroom actions, as tutors of trainees, by the latter. The selection of observation units was carried out by the trainees, after training on the reference constructs, in relation to a specified theoretical framework whose mastery was verified. The trainees were asked to describe (specifying the class scenario: school context, class level, teaching discipline, class composition, ...) a 'typical situation', which could exemplify current ways of conducting the classroom that were expert but potentially hindering student learning, from a theoretical point of view and in relation to precise dynamics observed in the students' response. From a methodological point of view, these were narrative reconstructions of observed participatory modes of teaching intervention. Protocols - no. 100 - consistent in terms of reference constructs and delivery were selected for analysis. The analysis strategy adopted is 'structural' in nature (Maccario, 2021) oriented by theoretical frameworks on teaching action (Bucheton, 2019) and teachers' professional skills (Rey, 2014), supported by coding and categorisation software (N-Vivo 12). In the preliminary phase of the research, which is accounted for in this article, the study consisted of testing the resilience of a 'nested' or 'stratified' experimental approach to data, consistent with the systemic nature of educational processes according to the problematic and methodological frameworks outlined above. In the first instance, an analysis was conducted with the aim of identifying recurring problematic situations in supporting students in their learning processes. A preliminary coding and categorisation process carried out, in an exploratory key, on 30 protocols, selected according to criteria to ensure a certain representativeness per class level, made it possible to recognise how the most widespread and recurrent problem-situations (in all the cases considered)

concerned the mismatch between teachers' requests/expectations and students' responses. Two situations seem to represent the typical phenomenology: cases of failure or carelessness in carrying out homework and situations of inadequate response by students to class work assignments, especially in terms of willingness to get involved and readiness, before that of correctness and completeness in the re-elaboration of knowledge. These dynamics concern low performing pupils, foreigners and pupils with difficulties in school integration and participation. Generally speaking, from a theoretical point of view, repeated professional challenges that are also proposed to experienced teachers seem to particularly touch the areas relating to the management of learning progressions (Bucheton, 2019), which suffer from modalities that appear inflexible and adapted to the pupils' responses, and the management of scaffolding, which is rather limited, almost as if it were a task not perceived as an integral element of the professional exercise in classroom management. According to the testimonies analysed, for example, the teacher generally proposes undifferentiated tasks, often in a verbal and scarcely interactive manner; he tends not to establish a dialogue with the student on the task to be carried out, does not seek to obtain elements to understand the situation, does not relaunch the activities, is little inclined to feedback. Widespread repercussions are also noted at the level of the class climate, which seems marked by limited teacher-student and student-student dialogue and cooperation. The student seems to be asked for autonomy in the elaboration of expected answers, with limited space for the explication of thought processes, errors and one's own experience, also emotional, of learning in the classroom. Forms of cooperative group involvement around learning challenges, norms of class life and participation, which the occurrence of critical moments could nurture, are hardly recorded in the observational material constituting the data base. Although biases related to the survey methods adopted in the research are to be admitted, the relative mismatch between the reconstructed phenomena and a criterion that can be considered accredited and widespread in the scientific literature (Charles, Cole, 2018) encourages further investment in research on classroom teaching processes. A second phase of the analysis concerned the professional gestures (Bucheton, Soulé 2009) that, with respect to the critical situations detected, are expressed above all in the use of language as an instrument of control, when not frankly tinged with violence (when, for example, the teacher shouts and rails against the student), imposing (with the use of sarcasm, of judgements extended to the person of the learner and his value (Carles, Cole, 2018). There are also frequent actions aimed at the containment and sanctioning of behaviour perceived as inappropriate, with an attitude of delegation to other actors, such as families

(school-family sanctioning communications), separation from peers or from the class itself, actions of real punishment, with elements of retaliation, which may take the form, for example, of deprivation of recreation time or increasing the workload, ... At a deeper level of analysis, in an attempt to identify interaction structures with students that can be traced back to the processes outlined, put in place by teachers to deal with problematic situations, effects are consistently observed that seem contrary to the reflexive or reinvestment dynamics presumably expected and desired in pupils, often effects of 'withdrawal' or total disinvestment on the part of the pupils with regard to learning (the 'difficult' pupils more or less temporarily seem to divest themselves of the behaviour reported as inadequate, without however orienting themselves in an alternative way, rather manifesting behaviour of avoidance, flight, closure).

Conclusions

In the perspective of refining the analysis and arriving at a more settled interpretative framework of the collected data, consolidating both the coding and the repertoire and the 'system' of the emerging analysis categories, also in a quantitative key and with reference to contextual elements (e.g. regarding the class level, the discipline taught, etc.), we can observe in the first instance a certain coherence of the multi-level logic of analysis suggested by the theoretical frameworks taken as reference, the construction and refinement of which, therefore, appears to be a useful and necessary direction of the commitment of research in the educational field. It should be pointed out that the study suffers from a limitation linked to the observational instruments of a markedly 'mediated' nature, an option favoured for reasons of sustainability; other approaches, such as video-observation accompanied by explanatory interviews with teachers could increase the validity of the data. On the level of data analysis, the attempt to consider a relatively large sample of 'cases' clashes with the well-known difficulties of coding and analysing qualitative data, which is only partially supported by the use of software, which can only marginally facilitate the examination by 'units of analysis' in a stratified key. On the cognitive and formative level, however, it is felt that the research approach tested may represent a path to be explored further, due to a certain coherence with the problems and cognitive and formative objectives of educational research. Ultimately, it seems to be safe to assume that the study of "expert" teaching practices can be a way of increasing knowledge of educational problems and phenomena, to which educational research is called upon to provide answers, first and foremost by making them visible to the players themselves,

exploring sustainable avenues to be experimented in a collaborative manner and, in the long term, monitoring their impact and educational effectiveness, in support of teachers' professionalisation processes.

References

Altet M. (2019). Conjuguer des recherches sur les pratiques enseignantes et sur la formation des enseignants: une double fonctionscientifique et sociale des sciences de l'education. *Les Sciences de l'éducation- Pour l'Ère nouvelle (52)*2: 29-60.

Artigue M. (2002). Ingénierie didactique: quel rôle dans la recherche didactique aujourd'hui? *Les dossiers des sciences de l'éducation,* 8: 9-52.

Brown A.L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classrooms settings. *Journal of the Learning Sciences*, 2: 141-178.

Bryk, A. (2015). Accelerating the way we learn to improve. *Educational Researcher*, 44 (9): 467-477.

Bryk A., Gomez L., Grunow A., Le Mahieu P. (2015). *Learning to Improve. How America's Schools Can Get Better at Getting*. Harvard: Harvard Education Pr.

Bru, M. (2019). De quelques reconfigurations du rapport des recherches aux pratiques enseignantes. *Les sciences de l'Éducation - Pour l'Ère Nouvelle*, 1(52): 79-101.

Bru, M. (2021). *Les méthodes en pédagogie*. Parigi: PUF.

Bucheton, D. (2019). *Les gestes professionnels dans la classe: Ethiques et pratiques pour les temps qui viennent*. Parigi: PUF.

Bucheton D., Soulé Y. (2009). Les gestes professionnels et le jeu des postures de l'enseignant dans la classe: un multi-agenda de préoccupations enchâsses. *Éducation & Didactique*, 3-3: 29-48.

Calvani, A. (2022). La ricerca didattica può diventare rilevante per la pratica? Se sì, in che modo? *ECPS Journal*, 26: 143-162.

Calvani A., De Angelis M., Marzano A., Vegliante R. (2022). Lo stato della ricerca

didattica in Italia. Una Scoping Review. *Giornale Italiano della ricerca educativa*, 29: 34-48.

Calvani A., Trinchero R., Vivanet G. (2018). Nuovi orizzonti della ricerca scientifica in educazione. Raccordare ricerca e decisione didattica: il manifesto SApIE. *ECPS-Journal of Educational Cultural and Psychological Studies,* 18: 311-339.

Calvani A., Trinchero R. (2019). *Dieci falsi miti e dieci regole per insegnare bene.* Roma: Carocci.

Cèbe S., Goigoux R. (2017). *Narramus. Apprendre à comprendre et à raconter*. Paris: Retz.

Calvani A., Marzano A. (2020). Progettare per un miglioramento basato su evidenze. Quale metodologia? *Giornale Italiano della ricerca educativa, XIII*(24): 67-83.

Charles C.M., Cole K.M. (2018). Building classroom management management: Methods and models. New York: Pearson.

Chevallard, Y. (2014). Des didactiques des disciplines scolaires à la didactique comme science anthropologique. *Education & Didactique*, 1, 8: 35-43.

Collins A. (1993). Toward a design science of education. In E. Scanlon, T.O. Shea (eds), *New directions in educational technology* (pp.15-22). New York: Springer-Verlag.

Damiano, E. (2013). *La mediazione didattica. Per una teoria dell'insegnamento*. Milano: Franco Angeli.

DBR Collective (2003). Design-Based research: An emerging paradigm for educational inquiry. *Educational Researcher, 32*(1): 5-8.

Easterday M.W., Rees Lewis D.G., Gerber E.M. (2018). The logic of design research. *Learning: Research and Practice,4*(2): 131-160.

Elliot J., Giordan A., Scurati C. (1993). *La Ricerca-Azione. Metodiche, strumenti e casi.* Torino: Bollati Boringhieri.

Fabre, M. (2017). *Quest-ce que problématiser?* Parigi: Vrin.

Hattie J. (2016). *Apprendimento visibile, insegnamento efficace*. Trento: Erickson.

Hattie J., Zierer K. (2018). *10 Mindframes for Visible Learning. Teaching for success*. New York: Routledge.

Laneve C. (2023). *Il sapere didattico*. Roma: Armando.

Lenoir, Y. (2017). *Les médiations au cœur des pratiques d'enseignement-apprentissage*. Sherbrooke: Cursus Universitaire.

Lorin Anderson W. (2004). *Increasing Teacher Effectiveness*. Unesco- International Institute for Educational Planning.

Maccario, D. (2012). Come studiare le pratiche didattiche? Unità di analisi e funzioni della teoria. In S. Polenghi, F.Cereda, P. Zini, *La responsabilità della Pedagogia nelle trasformazioni dei rapporti sociali. Storia, linee di ricerca e prospettive*. Lecce: Penda Multimedia, pp. 135-142.

Magnoler, P. (2012). *Ricerca e formazione. La professionalizzazione degli insegnanti*. Lecce: Pensa MultiMedia

Menichetti L., Pellegrini M., Gola C. (2019). Cornici mentali e stereotipie didattiche nella formazione degli insegnanti. *Formazione&Insegnamento XXII* (1): 351-374.

Pastré P. (2011). La didattica professionale. Parigi: PUF.

Pentucci M. (2018). *I formati pedagogici nelle pratiche degli insegnanti.* Milano: Franco Angeli.

Pellerey M. (1980). Il metodo della Ricerca-Azione di K. Lewin nei suoi più recenti sviluppi e applicazioni. *Orientamenti Pedagogici, 27*(3): 449-463.

Pellerey M. (2005). Verso una nuova metodologia di ricerca educativa. La Ricerca basata su Progetti. *Orientamenti Pedagogici, 52*(5): 721-737.

Philippakos Z.A. *et alii* (2021). *Design-Based Research in Education. Theory and Applications.* New York-London. Guilford Press.

Puortois J.P. (1984). La Ricerca-Azione in Pedagogia. In E. Becchi, B. Vertecchi (ed.). *Manuale critico della sperimentazione e della ricerca educativa* (pp. 134-155). Milano: Franco Angeli.

Rey, B. (2014). *La notion de compétence en éducation et formation. Enjeux et problèmes. Enjeux et problèmes.* Bruxelles: De Boeck.

Rosenshine B. (1995). Advances in research on instruction. *Journal of Educational Research, 88*(5): 262-268.

Scurati C., Zanniello G. (1993). *La ricerca azione. Contributi per lo sviluppo educativo.* Napoli: Tecnodid.

Tarozzi, M. (2021). Le evidenze complesse nella ricerca educativa. In S. Polenghi, F. Cereda, P. Zini (a cura di). Le responsabilità della pedagogia nella trasformazione dei rapporti sociali (pp.111-118). Lecce: Pensa Multimedia.

Vander Der Maren J.-M. (2014). *La recherche appliquée pour les professionnels - Education, (para)médical, travail social*. Bruxelles: De Boeck.

Vergnaud G. (2011). Au fond de l'action, la conceptualisation. In J.-M. Barbier (ed.), *Savoirs théoriques et savoirs d'action* (pp. 275-292). Paris: PUF.

Veyrunes, P. (2017). *La classe: hier, aujourd'hui et demain?* Touolouse: Presses Universitaires du Midi.

Vinatier, I. & Altet, M. (2008). Analyser et comprendre la pratique enseignante. Rennes: PUR.

Wenger E. (1998). Communities of Practices, Leaning, Meaning and Identity. Cambridge: University Press.

Zanniello G. (2023). Educational practices, evidence-based experimentation and R-A whith project. Italian Journal of Educational Research, 16 (30), 11-22.

Zanniello G., De Vita (2021). La ricerca didattica in Italia (1950-2020). Roma: Armando.

Zheng L. (2015). A systematic literature review on design-based research from 2004 to 2013. J.Comput. Educ, 2 (4): 399-420.