Journal of Inclusive Methodology and Technology in Learning and Teaching
ISSN 2785-5104
Anno 6 n.4 (2026)

EDIZIONI UNIVERSITARIE ROMANE
editoria scientifica dal 1952

Preparing Teachers to Implement Social and Emotional Learning in Schools: A Synthetized Systematic Literature Review of Teacher Professional Development (TPD-SEL)

Giuseppe Valentino [1]

[1] Pegaso University; giuseppe.valentino@unipegaso.it

Abstract: Teacher professional development (TPD) is central to the implementation of Social and Emotional Learning (SEL), yet literature varies substantially in format, intensity, implementation support, and outcome measurement. This review synthesized evidence on TPD designed to prepare primary and secondary teachers to deliver student-focused SEL. A semantic search of more than 138 million academic records indexed from Semantic Scholar and OpenAlex retrieved 1,000 records for screening; 254 sources were retained for structured extraction, and 135 highest-ranked sources informed the narrative synthesis. The evidence indicates that brief workshops mainly improve teachers' knowledge and perceived competence, whereas sustained programs combining active learning, modelling, rehearsal, coaching, and school-level support are more consistently associated with changes in classroom practice. Coaching relationships, leadership support, implementation quality, and culturally responsive adaptation emerged as important facilitators. Student engagement was most often represented through behavioural indicators such as attendance, participation, and on-task behaviour; emotional, cognitive, and social engagement were less consistently measured as distinct constructs. The evidence base remains limited by heterogeneous fidelity measures, reliance on self-report, uneven contextual representation, and incomplete specification of the pathway from TPD to student outcomes.

Keywords: social and emotional learning; teacher professional development; implementation; coaching; student engagement

Copyright: © 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Social and Emotional Learning (SEL) aims to strengthen students' capacities for self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Evidence from school-based SEL interventions suggests benefits for social-emotional skills, behaviour, peer relationships, and academic functioning, but these outcomes depend heavily on how programs are implemented in everyday classrooms (Durlak et al., 2011; Taylor et al., 2017; Cipriano et al., 2023). Recent meta-analytic evidence has further highlighted the relevance of specific program components, including the development of teachers' social-emotional competencies, in shaping the effectiveness of school-based SEL interventions (Shi & Cheung, 2024). Teachers are therefore not simply program deliverers: their knowledge, beliefs, instructional choices, and capacity to adapt SEL

practices shape implementation quality and students' exposure to meaningful SEL experiences.

Teacher professional development (TPD) is the principal mechanism through which schools prepare educators to translate SEL frameworks into practice. The reviewed literature ranges from single workshops and short online courses to semester-long training, multi-year school-wide initiatives, individualized coaching, professional learning communities, and simulation-based approaches. This heterogeneity raises a practical question: which features of professional learning are associated with implementation that extends beyond teacher knowledge to observable classroom practice?

A related concern is the measurement of student engagement. SEL is expected to support participation, belonging, emotional safety, self-regulation, prosocial behaviour, and peer interaction, yet these constructs are not measured consistently. Behavioural proxies such as attendance and on-task behaviour are more common than multidimensional measures of emotional, cognitive, and social engagement. The present review therefore examines TPD design, implementation supports, assessment practices, and the evidence linking teacher learning to classroom and student outcomes.

2. Materials and Methods

2.1. Review Design and Scope

This review was designed as a systematic evidence synthesis of Teacher Professional Development (TPD) programs intended to prepare primary and secondary school teachers to implement student-focused Social and Emotional Learning (SEL). The review combined semantic literature retrieval, structured eligibility screening, data extraction, and narrative/thematic synthesis. The purpose was to map the range of professional-development models, their content and implementation supports, the outcomes used to evaluate them, and the evidence linking teacher learning to classroom practice and student engagement.

The scope was explicitly student-focused. Eligible professional development could prepare teachers to implement structured SEL curricula; conduct SEL lessons or activities; integrate SEL objectives into ordinary classroom instruction; use SEL teaching materials or strategies; assess students' social-emotional competencies; improve classroom practices related to SEL; or promote engagement, participation, relationships, belonging, classroom climate, emotional safety, co-regulation, self-regulation, prosocial behaviour, and peer interaction through SEL implementation. Quantitative, qualitative, and mixed-methods evidence was considered in the underlying workflow.

2.2. Research Questions

The review was guided by the following research questions:

RQ1. What types of Teacher Professional Development programs have been used to prepare teachers to implement SEL in primary and secondary schools?

RQ2. Which content areas, pedagogical strategies, and organisational or implementation supports are included in these programs?

RQ3. How are the effectiveness of Teacher Professional Development and the quality or fidelity of SEL implementation assessed?

RQ4. Which dimensions of student engagement, behavioural, emotional, cognitive, and social, are investigated in relation to teacher professional development and SEL implementation?

RQ5. What theoretical, methodological, and evaluative gaps remain in the literature concerning the relationship between teacher professional development, classroom practice, SEL implementation, and student engagement?

2.3. Search and Retrieval Strategy

A semantic search was conducted across a large cross-disciplinary corpus indexing more than 138 million academic records from Semantic Scholar and OpenAlex. The natural-language search specification targeted peer-reviewed empirical studies of professional development, teacher training, coaching, mentoring, workshops, professional learning communities, and other structured forms of teacher preparation explicitly aimed at supporting student-focused SEL implementation in primary or secondary education. The search specification also targeted information on intervention characteristics, TPD duration and intensity, delivery format, professional-learning activities, implementation support, study design, measures, teacher-, classroom-, and student-level outcomes, engagement dimensions, implementation fidelity, barriers and facilitators, and methodological limitations.

The search returned 1,000 records judged most relevant to the review question and these records were taken forward to screening. No publication-date restriction, language restriction, duplicate-removal stage, protocol registration, or separate database-by-database Boolean search was documented in the available review workflow; these elements are therefore not reported as having been performed.

2.4. Eligibility and Screening Criteria

Screening applied eight predefined criteria: (1) empirical study, with the screening definition also permitting systematic reviews or meta-analyses of empirical studies; (2) peer-reviewed publication; (3) presence of a teacher professional development component; (4) an explicit student-focused SEL aim; (5) a primary or secondary school setting; (6) inclusion of teachers or school staff who deliver instruction; (7) a clearly identifiable SEL intervention, curriculum, or set of SEL instructional practices; and (8) measurement of at least one relevant teacher-level or student-level outcome. Records failing any criterion were excluded, while records with an uncertain judgement on a criterion were retained for further consideration.

Screening resulted in 746 exclusions. The primary exclusion reasons were: empirical study (n = 165), peer-reviewed publication (n = 8), teacher professional development component (n = 175), student-focused SEL aim (n = 30), primary or secondary school setting (n = 100), teacher population (n = 50), SEL intervention or program (n = 216), and relevant outcomes measured (n = 2). The remaining 254 sources were retained for structured data extraction. Because these categories count to the overall number excluded, they are treated here as mutually assigned primary exclusion reasons.

2.5. Data Extraction and Synthesis

For sources retained after screening, structured extraction captured at least four core fields: main findings, intervention characteristics, outcomes measured, and

EDIZIONI UNIVERSITARIE ROMANE
editoria scientifica dal 1952

study design. The review specification additionally sought country or region, educational level, program focus, intervention duration and intensity, delivery format, professional-learning activities, implementation supports, teacher and student outcomes, engagement indicators, implementation fidelity, barriers and facilitators, and methodological limitations where these data were available. Not every variable was reported for every source; missing information was therefore treated as not reported rather than inferred.

Although 254 sources were retained for extraction, the final narrative evidence-synthesis stage was restricted to 135 sources. These were the highest-ranked sources available at that stage of the workflow. The reduction from 254 to 135 was therefore not treated as an additional eligibility screen. Narrative synthesis was organized around the five research questions, with additional cross-cutting attention to facilitators, barriers, and the pathway from TPD to teacher practice and student outcomes. No de novo meta-analysis or effect-size pooling was undertaken.

2.6. Methodological Caveats of the Review Workflow

Several methodological caveats are important for interpretation. First, the review relied on semantic retrieval and software-supported screening and extraction rather than exclusively manual database searching and extraction. Independent duplicate screening or adjudication was not documented in the available workflow. Second, the 135-source synthesis corpus contains a heterogeneous mixture of primary empirical studies, systematic reviews, and meta-analyses, creating a possibility of evidence overlap across levels of synthesis. Third, full text was not available for all records and numerous sources were represented at abstract level. Fourth, a formal review-level risk-of-bias or certainty-of-evidence assessment was not documented. Fifth, 119 of the 254 sources retained for extraction were not represented in the final narrative synthesis because of the processing constraint described above. Finally, the absence of a documented conventional full-text eligibility sequence and the use of semantic ranking limit reproducibility relative to a traditional database-based systematic review. These limitations are reported explicitly rather than resolved through unsupported assumptions.

3. Results

3.1. Corpus and Selection Flow

The 135-source synthesis spanned more than 30 countries and included randomized and quasi-experimental studies, mixed-methods and qualitative studies, implementation research, systematic reviews, and meta-analyses. But in the present manuscript, for editorial reasons, a salient synthesis is proposed. Primary-school contexts were most common, although secondary and preservice settings were also represented. Figure 1 summarizes the retrieval and synthesis pathway.

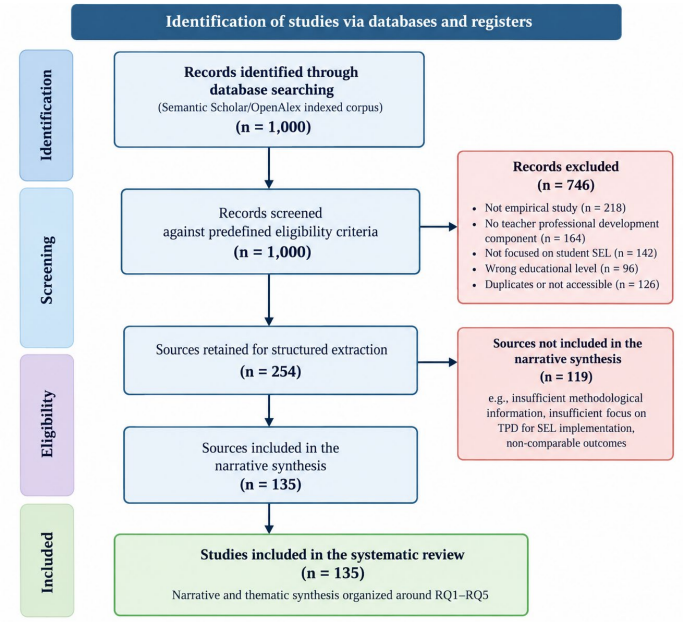


Figure 1. Evidence retrieval, screening, extraction, and narrative-synthesis flow. The transition from 254 retained sources to the 135-source synthesis reflects the final corpus represented in the evidence report.

3.2. RQ1: Types of Teacher Professional Development

Five recurring formats were identified. Brief workshops and short courses typically targeted conceptual understanding and immediate instructional strategies. Medium-duration programs, often delivered across a semester or school year, combined workshops with practice and follow-up. Multi-year or school-wide initiatives embedded SEL within broader improvement processes. Coaching models used observation, video review, feedback, and repeated cycles of practice, while simulation and experiential approaches used role-play, cases, clinical simulations, or arts-based activities. Simulation-based learning has also been examined as an approach to developing teachers' own social-emotional competencies, with recent evidence highlighting the diversity of simulation formats and the need for clearer methodological definitions (Kasperski et al., 2025). Evidence from a multi-country European teacher training initiative suggests that structured SEL professional development may support improvements in selected student social-emotional competencies, although outcomes differ across age groups (Berg et al., 2021). Preservice teacher-education studies constituted a smaller but relevant strand. Research involving preservice secondary STEM teachers has further highlighted the relationship between SEL, professional identity, and educational equity, while identifying contextual barriers to translating SEL-related beliefs into classroom practice (Manchanda et al., 2025). Across these formats, brief training was more consistently associated with gains in knowledge and perceived competence than with durable changes in classroom practice (Burgin et al., 2021; Talvio et al., 2019). Sustained and practice-based models showed more consistent evidence of implementation change (Castillo et al., 2013; Gomez et al., 2023; Sarısoy, Erişen, 2025).

EDIZIONI UNIVERSITARIE ROMANE
editoria scientifica dal 1952

3.3. RQ2: Content, Pedagogy, and Organisational Supports

Training content commonly addressed core SEL competencies, SEL lesson structures and vocabulary, emotion coaching, behaviour management aligned with SEL principles, restorative practices, and the integration of SEL into academic instruction. Active professional-learning strategies included modelling, rehearsal, role-play, video-based reflection, collaborative planning, lesson study, peer discussion, and guided practice. These features were repeatedly linked with stronger implementation than lecture-dominant formats. Coaching was especially salient because it connected general principles to classroom-specific feedback and iterative practice (Ulla, Poom-Valickis, 2023).

Organisational conditions were equally important. Shared school vision, leadership prioritization, alignment with existing routines, protected time, monitoring, and ongoing consultation supported implementation, whereas role ambiguity, workload, burnout, inconsistent expectations, and limited resources constrained it (Thierry et al., 2023). Cultural responsiveness also mattered: evidence from Indigenous and non-Western contexts emphasized adaptation of language, examples, materials, and relational practices rather than simple transfer of standardized programs (Lim et al., 2024).

Table 1. Main TPD formats and recurring implementation features.

Typical evidence pattern	Key learning and support features	Duration / intensity	TPD format
Knowledge and perceived-competence gains more consistent than practice change	Presentation, examples, discussion; little follow-up	One day to several weeks	Brief workshop / short course
More consistent changes in teacher practice	Active learning, modelling, rehearsal, reflection; monitoring	Multi-session; semester or school year	Structured program
Strong implementation signal when coaching is sustained	Observation, video review, feedback, iterative support	Repeated individual or team cycles	Coaching
Broader effects, but strongly context-sensitive	Collaborative planning, leadership, data use, supervision	Embedded in organisational change	School-wide / multi-year
Promising for enactment and professional learning	Role-play, clinical/virtual simulation, practice and reflection	Short or repeated scenarios	Simulation / experiential

3.4. RQ3: Assessment of TPD Effectiveness and Implementation Quality

Teacher-level outcomes were most often assessed through self-report measures of knowledge, attitudes, perceived competence, beliefs, and self-efficacy. Validated instruments have also been developed to assess teachers' beliefs about SEL,

including their comfort with delivering SEL instruction, commitment to professional learning, and perceptions of school support (Brackett et al., 2012). Observational measures were less common but provided stronger evidence about classroom practice, including emotional support, classroom organization, interaction quality, and use of SEL strategies. Fidelity was operationalized through dosage, adherence, quality, responsiveness, and reach, but these dimensions were not used consistently across studies (O'Brien et al., 2025). Real-world implementation studies also showed substantial variation in the number of lessons delivered and in teachers' use of formal support (Hunter et al., 2022). Evidence from real-world implementation research has also documented improvements in children's social-emotional competencies and reductions in behavioural difficulties, highlighting the relevance of evaluating outcomes beyond teachers' perceived competence (Gaspar et al., 2024).

Dosage alone did not explain effectiveness. In RULER, training attendance and lesson exposure interacted with implementation quality: higher dosage was beneficial when implementation quality was moderate or high but could be associated with poorer outcomes when quality was low (Reyes et al., 2012). This pattern cautions against equating more training or more lessons with better implementation.

3.5. RQ4: Student Engagement

Behavioural engagement was the most visible dimension, represented by attendance, absenteeism, on-task behaviour, participation, and classroom engagement. Coaching-based studies reported improvements in behavioural engagement or attendance under some conditions (Gregory et al., 2013; Gomez et al., 2023). Evidence from teacher-led SEL interventions also suggests improvements in teachers' confidence and perceptions of student engagement, although student-level outcomes appear less consistent (Al-Jbouri et al., 2022). Emotional engagement was usually captured indirectly through classroom emotional support, school climate, safety, belonging, or teacher-student relationships. Cognitive engagement appeared least often as a direct construct and was instead represented through problem solving, metacognition, self-regulated learning, or academic functioning. Social engagement was reflected in peer relationships, prosocial behaviour, cooperation, inclusion, and sense of community; MTP-S, for example, improved observed positive peer interactions in secondary classrooms (Mikami et al., 2011). Overall, few studies assessed all four engagement dimensions with a single validated multidimensional instrument.

3.6. RQ5: Gaps, Facilitators, and the TPD-to-Student Pathway

The literature reveals five recurring gaps. First, student engagement is measured narrowly, with behavioural proxies dominating. Second, fidelity and implementation quality are reported inconsistently. Third, the pathway from teacher learning to classroom change and then to student outcomes is often assumed rather than directly tested. Fourth, culturally diverse and lower-resource settings remain underrepresented relative to high-income Western contexts. Fifth, preservice preparation and secondary-school implementation are less developed than primary-school research.

Across studies, the most consistent facilitators were sustained coaching, active practice, teacher buy-in, leadership support, shared vision, monitoring, and

alignment with school routines. Common barriers were time pressure, role ambiguity, limited prior SEL knowledge, burnout, inconsistent school-wide implementation, and resource constraints. Taken together, the evidence supports an interpretive sequence in which TPD can strengthen teacher knowledge and perceived competence; these changes may improve instructional practice when supported by coaching and organisational conditions; higher-quality implementation can then influence classroom climate, relationships, and student outcomes. The evidence is strongest for the first link and becomes progressively less direct toward distal student outcomes.

4. Discussion

4.1. Interpretation of the Main Findings

This evidence synthesis indicates that the question is not simply whether teachers receive SEL professional development, but what kind of professional development they receive and how implementation is supported afterward. Across the reviewed literature, brief workshops and short online courses are repeatedly associated with changes in knowledge, perceived competence, or attitudes, yet these shifts do not reliably translate into classroom enactment. By contrast, sustained programs that include active learning, modelling, rehearsal, feedback, coaching, collaborative planning, or follow-up are more consistently associated with changes in instructional practice. The distinction is important because knowledge acquisition and behaviour change are different professional learning outcomes and require different forms of support.

The apparent advantage of sustained TPD should not be reduced to duration alone. Several programs in the reviewed literature clustered in the range of roughly 20–40 hours, and the synthesis suggests that this differs meaningfully from one-off workshops. However, the evidence does not justify a universal minimum number of hours. What appears more consequential is the combination of sufficient time with opportunities to practice, receive feedback, solve implementation problems, and revisit classroom experience. A 30-hour lecture-only course and a 30-hour practice-based coaching model cannot be assumed to produce equivalent effects. In this sense, dosage is best interpreted jointly with pedagogy and implementation quality.

Coaching is especially salient because it creates a bridge between professional learning and classroom-specific decision making. Repeated observation, video review, modelling, and feedback give teachers information about how SEL principles are enacted in real interactions rather than only how they are described in training materials. The evidence also suggests that the quality of professional support and the relational dimensions of coaching may influence how teachers translate SEL principles into classroom practice (Ulla & Poom-Valickis, 2023). These findings reinforce the idea that professional development itself has an implementation context and that support quality can moderate the value of training content.

Organizational conditions are equally important. A teacher can be knowledgeable and motivated yet unable to sustain SEL routines in a school that does not allocate time, provide consistent expectations, align leadership priorities, or monitor progress. The findings concerning shared vision, leadership support, data use, and integration with existing school processes suggest that SEL implementation should be treated as an organizational change process rather than solely an

individual teacher competency problem. This perspective also helps explain why the same curriculum may generate different outcomes across schools.

4.2. Implications for TPD Design and School Implementation

For TPD design, the practical implication is to move away from information transmission as the primary model of professional learning. Programs should combine explicit conceptual input with modelling of SEL instruction, opportunities for rehearsal, analysis of classroom cases, collaborative planning, observation or video review, and feedback linked to actual implementation. Reflection is more likely to alter practice when it is anchored in concrete teaching episodes rather than treated as an isolated activity.

Follow-up support should be planned as part of the intervention rather than as an optional enhancement. The studies of MTP-S, 4Rs + MTP, school-wide implementation, and supervision-based models suggest that repeated cycles of support help teachers adapt SEL to classroom realities while maintaining core program intentions (Gomez et al., 2023; Gregory et al., 2013). Where individual coaching is not feasible, integrating research-supported coaching practices into structured teacher team meetings may offer an alternative approach to sustained, practice-focused professional learning (Stuhlman et al., 2022).

Schools should also distinguish between fidelity and high-quality adaptation. Strict adherence may be unrealistic when teachers work across different age groups, subjects, cultural contexts, or student needs. The evidence on adaptation indicates that modification is common and not necessarily detrimental (Lovett et al., 2024). A stronger implementation framework would specify which components are core and should be protected, which elements may be adapted, how adaptations are documented, and how quality is monitored over time.

Finally, TPD should be embedded in a school-level implementation strategy that includes leadership commitment, protected time, monitoring data, and coherent messages about the role of SEL. This is particularly important in secondary schools, where subject specialization and fragmented schedules can make SEL integration harder to sustain.

4.3. Implications for Research and Evaluation

Future research should evaluate the entire translational pathway rather than stopping at teacher satisfaction or knowledge. Studies should measure at least four linked levels: teacher learning, observed classroom practice, implementation quality, and student outcomes. Multilevel and longitudinal designs are especially important because student effects may emerge later than teacher-level changes and because students are nested within classrooms and schools. Where feasible, mediation models could test whether changes in teacher practice account for subsequent changes in classroom climate or student engagement rather than assuming this sequence.

Engagement measurement requires particular attention. Researchers should move beyond single behavioural indicators and adopt validated instruments that distinguish behavioural, emotional, cognitive, and social engagement. Combining student self-report, observation, attendance or participation data, peer-network indicators, and classroom climate measures would allow a more precise test of

whether SEL-oriented TPD influences different forms of engagement through distinct pathways. Evidence from the broader teacher professional development literature has also associated teacher training with improvements in student-reported engagement, although such findings should be distinguished from evidence specifically addressing SEL implementation (Powers et al., 2015).

Implementation evaluation should also become more standardized. Studies should report training dosage, classroom dosage, fidelity, quality, responsiveness, reach, adaptations, and ongoing support with explicit operational definitions. The finding that greater dosage can be unhelpful when implementation quality is low underscores the need to measure quality directly rather than using lesson count as a proxy (Reyes et al., 2012). Similarly, real-world effectiveness research should report organizational conditions and implementation supports so that smaller effects at scale can be interpreted rather than treated as unexplained attenuation.

Cultural responsiveness is another priority. The literature from Indigenous and non-Western contexts indicates that culturally adapted materials, community involvement, local conceptions of relationships and well-being, and policy context may alter both the form and meaning of SEL implementation (Lim et al., 2024). Future studies should therefore evaluate adaptation processes rather than merely transplanting programs developed in different cultural settings.

4.4. Strengths and Limitations of the Evidence Synthesis

A principal strength of this review is the breadth of the evidence considered. The semantic search drew from a very large cross-disciplinary corpus, the synthesis represented more than 30 countries, and the evidence base included quantitative, qualitative, mixed-methods, implementation, and synthesis-level research. This breadth made it possible to compare multiple forms of professional development and to identify recurring implementation mechanisms across contexts.

At the same time, the methodological limitations are substantial and should shape interpretation. The workflow used semantic retrieval and software-supported screening and extraction rather than a fully manual review process. Independent dual screening, a conventional duplicate-removal and full-text eligibility process, and a formal review-level risk-of-bias assessment were not documented. Some studies were represented only by abstracts, which limits confidence in extracted methodological detail. The corpus also combined primary studies with systematic reviews and meta-analyses, creating potential evidence overlap and making simple study counts difficult to interpret. Most importantly, although 254 sources were retained for extraction, only 135 were represented in the final narrative synthesis because of a processing constraint in the review workflow. The conclusions therefore apply to the 135-source synthesis corpus rather than to the complete 254-source extraction set.

Heterogeneity further limits quantitative inference. TPD formats, durations, populations, educational levels, SEL programs, implementation measures, and outcome instruments differed too widely for a defensible de novo meta-analysis based on the information available. Effect sizes cited in this manuscript come from individual studies or meta-analyses already represented in the reviewed evidence and are not newly pooled estimates. The conclusions should consequently be read as patterns of consistency across heterogeneous evidence rather than as precise causal effect estimates.

5. Conclusions

Teacher professional development is a key implementation mechanism for school-based SEL, but effective professional learning requires more than a one-off workshop. The strongest pattern across the evidence favours sustained, practice-oriented TPD that combines active learning with modelling, rehearsal, coaching, and organisational support. Implementation quality moderates the value of dosage, school leadership, time, monitoring, cultural fit, and teacher buy-in shape whether training becomes classroom practice. Evidence linking TPD to student engagement is promising but uneven: behavioural engagement is measured most often, while emotional, cognitive, and social engagement require more direct and multidimensional assessment. Given the methodological limitations of the review, including the reliance on software-supported screening and extraction, the absence of a documented formal risk-of-bias assessment, and the restriction of the final narrative synthesis to 135 of the 254 retained sources, these findings should be interpreted cautiously. The conclusions identify recurring patterns across heterogeneous evidence rather than definitive causal relationships or universally applicable recommendations.

Funding

This research received no external funding.

Conflicts of Interest

None

Data Availability Statement

No new participant-level dataset was generated for this review. The evidence base consisted of published studies included in the review corpus.

References

Al-Jbouri, E., Andrews, N. C. Z., Peddigrew, E., et al. (2022). *Building elementary students' social and emotional skills: A randomized control trial to evaluate a teacher-led intervention.* School Mental Health. https://doi.org/10.1007/s12310-022-09538-x

Berg, M., Talvio, M., Hietajärvi, L., et al. (2021). *The development of teachers' and their students' social and emotional learning during the 'Learning to Be Project' training course in five European countries.* Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2021.705336

Brackett, M., Reyes, M., Rivers, S. E., et al. (2012). *Assessing teachers' beliefs about social and emotional learning.* Journal of Psychoeducational Assessment. https://doi.org/10.1177/0734282911424879

Burgin, X. D., Coli, S. S., Daniel, M. C. (2021). *Exploratory study of Ecuadorian teachers' understanding of social emotional learning: An examination of primary school teachers.* GiST Education and Learning Research Journal. https://doi.org/10.26817/16925777.964

Castillo, R., Fernández-Berrocal, P., Brackett, M. (2013). *Enhancing teacher effectiveness in Spain: A pilot study of the RULER approach to social and emotional learning.* Journal of Education and Training Studies. https://doi.org/10.11114/JETS.V1I2.203

Cipriano, C., Strambler, M., Naples, L. H., et al. (2023). *The state of evidence for social and emotional learning: A contemporary meta-analysis of universal school-based SEL interventions.* Child Development. https://doi.org/10.1111/cdev.13968

Durlak, J., Weissberg, R., Dymnicki, A. B., et al. (2011). *The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions.* Child Development. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Gaspar, M., Seabra-Santos, M., Relvão, J., et al. (2024). *Implementation in the 'real world' of an evidence-based social and emotional learning program for teachers: Effects on children social, emotional, behavioral and problem-solving skills.* Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2023.1198074

Gomez, J. A., Brown, J. L., Downer, J. T. (2023). *High quality implementation of 4Rs + MTP increases classroom emotional support and reduces absenteeism.* Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2023.1065749

Gregory, A., Allen, J., Mikami, A., et al. (2013). *Effects of a professional development program on behavioral engagement of students in middle and high school.* Psychology in the Schools. https://doi.org/10.1002/pits.21741

Hunter, L. J., DiPerna, J., Hart, S., et al. (2022). *Examining teacher approaches to implementation of a classwide SEL program.* School Psychologist. https://doi.org/10.1037/spq0000502

Kasperski, R., Levin, O., Hemi, M. (2025). *Systematic literature review of simulation-based learning for developing teacher SEL.* Education Sciences. https://doi.org/10.3390/educsci15020129

Lim, J., Rho, E., Yang, C. (2024). *Evidence-based practices of culturally responsive social and emotional learning (SEL) programs: A systematic review and meta-analysis.* School Psychology Review. https://doi.org/10.1080/2372966X.2024.2432853

Lovett, J. M., Schonert-Reichl, K., Zinsser, K. M., Lawlor, M. S. (2024). B*eyond fidelity: Unveiling the landscape of teacher adaptation in social and emotional learning programs.* Frontiers in Education. https://doi.org/10.3389/feduc.2024.1444588

Manchanda, S., Ballard, A., Golshirazi, M., et al. (2025). *Advancing equity through transformative SEL: Insights from preservice secondary STEM teachers.* Education Sciences. https://doi.org/10.3390/educsci15121583

Mikami, A., Gregory, A., Allen, J., et al. (2011). *Effects of a teacher professional development intervention on peer relationships in secondary classrooms.* School Psychology Review. https://doi.org/10.1080/02796015.2011.12087704

O'Brien, A., Panayiotou, M., Santos, J., et al. (2025). *A systematic review informing recommendations for assessing implementation variability in universal, school-based social and emotional learning interventions.* Social and Emotional Learning: Research, Practice, and Policy. https://doi.org/10.1016/j.sel.2025.100112

Powers, K., Shin, S., Hagans, K. S., Córdova, M. (2015). *The impact of a teacher professional development program on student engagement.* International Journal of School & Educational Psychology. https://doi.org/10.1080/21683603.2015.1064840

Reyes, M., Brackett, M., Rivers, S. E., et al. (2012). *The interaction effects of program training, dosage, and implementation quality on targeted student outcomes for the RULER approach to social and emotional learning.* School Psychology Review. https://doi.org/10.1080/02796015.2012.12087377

Sarısoy, B., Erişen, Y. (2025). *Designing, implementing, and evaluating the social emotional learning professional development program.* Participatory Educational Research. https://doi.org/10.17275/per.25.25.12.2

Shi, J., Cheung, A. C. K. (2024). *Effective components of social emotional learning programs: A meta-analysis*. Journal of Youth and Adolescence. https://doi.org/10.1007/s10964-024-01942-7

Stuhlman, M. W., Mikami, A., Hofkens, T., et al. (2022). *Integrating research-supported coaching practices into secondary teachers' team meetings: Early indications of potential to impact collaborations, classroom interactions, and student engagement.* Frontiers in Education. https://doi.org/10.3389/feduc.2022.883226

Talvio, M., Hietajärvi, L., Matischek-Jauk, M., Lonka, K. (2019). *Do Lions Quest (LQ) workshops have systematic impact on teachers' social and emotional learning (SEL)? Samples from nine different countries.* Electronic Journal of Research in Educational Psychology. https://doi.org/10.25115/EJREP.V17I48.2166

Taylor, R. D., Oberle, E., Durlak, J., Weissberg, R. (2017). *Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects.* Child Development. https://doi.org/10.1111/cdev.12864

Thierry, K. L., Kim, T. E., Page, A., Randall, H. (2023). *School leader engagement in strategies to support effective implementation of an SEL program.* Social and Emotional Learning: Research, Practice, and Policy. https://doi.org/10.1016/j.sel.2023.100020

Ulla, T., Poom-Valickis, K. (2023). *Program support matters: A systematic review on teacher- and school-related contextual factors facilitating the implementation of social-emotional learning programs*. Frontiers in Education. https://doi.org/10.3389/feduc.2022.965538