

Professional Development and Coaching in School Settings: A Literature Review

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As leaders look to improve practices in school settings, professionals have commonly used paths such as coaching, professional development, and a mixture of coaching and professional development amongst other methods. The purpose of this literature review is to understand if both coaching and professional development must be present to increase ability of personnel. Ability, in this literature review, is loosely defined as increased confidence, student outcomes, professional outcomes, and other aspects of the job that can be improved. This paper is organized through findings literature on professional development, findings on literature of coaching, the current literature gap, and implications for the field.

Findings

Throughout the literature, it was determined that professional development with coaching leads to better practices for teachers than just professional development alone. There are parts of professional development that make it essential to improving teachers' abilities with or without coaching.

Professional Development

Key Features of Professional Development

Key features of professional development emerged and were mentioned multiple times throughout the literature base. The five features identified by Desimone and Garet (2015) are content focus, active learning, coherence, sustained duration, and collective participation. In addition to these features, professional development must be content and instructionally

specific, to the teachers, to make change in classrooms. When professional development opportunities align with key aspects of day-to-day teaching such as curriculum, content standards, and lessons, research shows that it is more likely to be implemented in classrooms (Desimone & Pak, 2017). Kelley et al. (2022) explains that professional development needs to exist over time and be ongoing if the leaders hope to foster new teaching behaviors, a one-time lesson will not lead to change in the classroom. An ongoing direct relation to the classroom helps provide teachers with clear next steps to put into action rather than leaving teachers questioning what next steps they should take.

Monitoring, Feedback, and Opportunity to Discuss

Professional development is an essential part of K-12 schools across America. Different aspects of professional development make the information in the sessions more likely to be brought into classrooms than others. Professional development should have opportunities to check in and provide feedback to teachers (Desimone & Garet, 2015). By offering monitoring and feedback loops, the professional development providers can adjust lessons and create an improvement cycle without providing direct classroom coaching (Desimone & Garet, 2015). Feedback provided by professional development stakeholders after teachers have implemented practices has been more effective (Desimone & Pak, 2017). Moreover, professional development attendees have stated that the session is more effective when they have an opportunity to have conversations with the facilitator after the session is over (Peterson-Katz et al., 2023). Providing opportunities to discuss, adjust for feedback, and provide monitoring can allow for more targeted professional development sessions without the intensity that coaching provides.

Professional Development and Teachers Attitudes

After attending professional development sessions, many teachers feel more confident and have an adjusted mindset about student groupings, their abilities, or mindset. After attending a content specific PD, 71% of teachers felt a shift in attitude towards students' capabilities in academics and their social behaviors (Song, 2016). Moreover, teachers who participated in professional development sessions throughout the year, with no coaching, rated themselves higher on mindset, self-efficacy, and outside reviewers saw significant increases in the teachers' instructional practices (Kelly et al., 2022).

Coaching

Coaching is a subset of professional development that takes place in the natural school setting, usually in the classroom, with the purpose of supporting teachers to acquire and improve specific teaching practices or behaviors (Hsieh et al., 2009). The literature base of coaching discusses that there is typically professional development prior to the coaching, that the coaches will continue to support.

Coaching – The Student Impact

Coaching has shown to make a positive impact on students' and teachers' abilities inside the classroom (Domitrovich et al., 2009; Shidler, 2009). In terms of academic skills, classrooms that received more content specific coaching hours, were likely to see higher student achievement outcomes (Shidler, 2009). Domitrovich et al. (2009) showed that after teachers attended professional development and received subsequent coaching, teachers engaged in more rich and sensitive conversations with children. In comparison to only receiving professional development, coaching showed additional significant outcomes to a positive

classroom environment, language use, and emotional climate for students (Domitrovich et al., 2009).

Teachers' Skill Improvement

Teachers who participated in coaching in addition to traditional professional development showed skill improvement for classroom practices (Domitrovich et al., 2009; Landry et al., 2009; Peterson-Katz et al., 2023; Pianta et al., 2022; Song, 2016; Hsieh et al., 2009). Teachers who received instructional coaching demonstrated higher quality teaching that was able to be generalized with other skills in other settings (Landry et al., 2009; Domitrovich et al., 2009). In a specific literacy coaching study, teachers who participated in the professional development and active online coaching showed modest significant effects in improving students' literacy (Downer et al., 2011). Changing teachers' instructional practices is typically easier than increasing content knowledge or inquiry-oriented instruction, so if student outcomes are improving the coaches are helping teachers implement better academic content knowledge in classrooms (Kelly et al., 2022)

Looking outside of only academic improvement, teachers showed an increase in other important classroom skills. As teachers are seeing their skills improve in classroom practices, it can be motivating for them to continue to improve (Hsieh et al., 2009). Teachers in professional development and coaching perceived their classroom coping strategies as significantly improved (Song, 2016). After coaching in an SSRD study by Hsieh et al. (2009), teachers were able to maintain new instructional strategies at a level higher than their baseline. Coaching provided an additional opportunity for teachers to standardize and reflect on the content during taught in a professional development program; the coaching assisted teachers' reporting

increased confidence after the specific skills were taught again in a coaching session (Peterson-Katz et al., 2023). Moreover, coaching that traditionally targets classroom practices, not content specific, have been shown to consistently improve those teachers' practices (Pianta et al., 2022).

Why Use Coaching?

Coaching can be a secondary layer of support for teachers' professional development. The Every Student Succeeds Act mentions that coaches in schools are encouraged to develop and train coaches to work with teachers to develop assessments, interpret data, design high quality instruction, provide feedback, and evaluate performance (Desimone & Pak, 2017). In addition, coaches can work with small groups or on a one-to-one basis with teachers who are new, struggling, or seeking support. Coaches, more than a simple professional development session, can embed discussions and activities on specific content areas, support lessons, and provide feedback (Desimone & Pak, 2017). When looking back to the five key features of effective professional development: active listening, duration, collective participation, coherence, and content focus; coaches can spend additional time on each feature to fit the needs of the teacher (Desimone & Pak, 2017). Literature has shown that providing teachers with instructional materials, professional development, and coaching support has shown to have the most significant improvement (Piper et al., 2018). Coaching, in comparison to only professional development, showed earlier and easier implementation of what was taught in the professional development sessions (Fox et al., 2011).

Making Coaching Effective

Coaching must be implemented correctly to ensure that the process is effective. First, Peterson-Katz et al. (2023) explains that success of coaching implementation was dependent on

the organizational culture and leadership in the school. The relationship between the coach and teacher needed to be cohesive (Domitrovich et al., 2009). The background of the teacher including preservice training, educational background, and previous experience influenced which coaching strategies needed to be applied to seek change (Hsieh et al., 2009). Finally, there has not been a set number of hours necessary for coaching to be successful because of the wide range of variables (Fox et al., 2011). Coaches are currently spending less than 50% of their time conducting content driven professional development, this may leave teachers with less-than-ideal content knowledge (Desimone & Pak, 2017). As states and LEAs are determining the job outline for coaches, it is important to ensure that most coaches time is supporting teachers be successful and guide teachers to better instructional practices.

Literature Gaps and Implications

Most of the current literature is of early childhood teachers and students, with seldom research in K-12 settings. Future research could focus on key differences in teacher and student outcomes for specific professional development and coaching programs over a sustained period. Additionally, with the continued advancements in technology, research focusing on critical aspects of online coaching can be beneficial for the field of education.

Conclusion

Teachers who participate only in one off professional development sessions with no coaching showed the poorest quality teaching, in comparison to all other groups that received coaching (Landry et al., 2009). In the same study by Landry et al. (2009), teachers provided with professional development, a coach, and detailed feedback on children's progress related to the

professional development was associated with the highest quality teaching. Providing teachers with professional development and instructional materials resulted in a higher improvement rate than only professional development alone (Piper et al., 2018; Tragga et al., 2025). Of all groups in the Tragga et al. (2025) study, the teachers provided with professional development, coaching, and instructional materials produced the highest quality instruction. Thus, the current literature shows that teachers who receive coaching are better at implementing higher quality instruction, better instructional practices, and can implement what was taught in the professional development sessions quicker and more effectively.

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