

CORE FUNCTION	EFFECTIVE PRACTICE	INDICATOR
Dimension C	Professional Capacity	The district develops and supports a comprehensive professional development plan centered around district wide teaching and learning initiatives. (7032)

School districts exert a significant impact on student learning and achievement in both direct and indirect ways (Chingos et al., 2013; Leithwood & McCullough, 2016; Leithwood et al., 2019). A number of research reviews have identified characteristics of high-performing districts that improve student learning (e.g., Anderson & Young, 2018a, 2018b; Leithwood, 2010; Murphy & Hallinger, 1988; Trujillo, 2013). In their research-based framework for district effectiveness, Anderson and Young (2018a) note that effective districts implement professional development (PD) for leaders and teachers that is “align[ed] with district and school improvement initiatives, [while] ensuring that development opportunities reflect the needs of individual schools, administrators, and teachers” (p. 4). An abundance of research indicates that districts must provide coherent instructional guidance to districts, and this guidance includes dedicating time and money to PD that is comprehensive, job-embedded (within the on-the-job context), and aligned with the capacities needed for district and school improvement (Anderson & Young, 2018a; Leithwood et al., 2019; Leithwood & McCullough, 2016). This brief will review evidence-based professional development and ways that districts can develop PD plans that are focused on strategies to enhance teaching and learning.

Evidence-Based Professional Development

The challenge of providing effective PD can be a daunting one for district leaders given recent changes in education policy. The Every Student Succeeds Act (ESSA) defines high-quality PD as “sustained, intensive, collaborative, inclusive of other teachers, job-embedded, data-driven, and grounded in evidence-based practices” (Pak et al., 2020, p. 3). ESSA also increases expectations for the performance of students with disabilities (SWD) and English learners (ELs), and educators are expected to prepare these students for college and/or careers. Most recently, standards emphasize college and/or career readiness in English Language Arts and mathematics, and provide guidance to educators in how to prepare all students for postsecondary education and 21st century careers (Pak et al., 2020).

Achieving these college and/or career readiness for all students requires high-quality PD and supports, and ensuring that a district’s PD plans represent evidence-based practice has never been more important. The research literature provides evidence on **five basic characteristics of professional development** that allow teachers to build their knowledge and skills in order to be able to implement new programs and strategies designed to improve student learning (see: Darling-Hammond et al., 2017; Desimone et al., 2013; Desimone & Garet, 2016; Fischer et al., 2018; Garet et al., 2001; Kennedy, 2016; Kraft et al., 2016 for additional details):

1. Coherence: Aligns with School Goals, State and District Standards and Assessment, and Other Professional Learning Activities

Alignment helps reduce confusion and uncertainty about what and how to teach, and can help build shared vocabulary and common goals that are essential to sustain instructional improvements (Archibald, et al, 2011). Teachers report greater increases in their knowledge and skills when PD activities 1) build on what teachers have previously learned in PD, 2) emphasize content and pedagogy aligned with national, state, and local standards and assessments, and 3) sup-



port teachers in developing and sustaining ongoing communication with colleagues attempting similar teaching changes (Archibald et al., 2011). It is also important to note, however, that a coherent aligned system does not translate into teachers that will implement changes to instruction in uniform ways; teachers will differentiate and integrate strategies in ways consistent with their teaching style and classroom context (Archibald, et al., 2011).

2. Focuses on Core Content and Modeling of Teaching Strategies for the Content

A wealth of research evidence has documented that improved teacher knowledge, when followed by explicit changes in instructional practice, leads to improvement in student learning. Content-focused PD is effective when it is easily linked to teachers' daily activities and coherently adapted to local needs (Allen & Penuel, 2015; Kennedy, 2016), and when it includes opportunities for collaborative knowledge sharing among teachers (Griffin et al., 2018). Research has also shown that modeling teaching strategies effectively can be accomplished through instructional coaching. Coaching is most effective when it is conducted by an experienced teacher educator, includes observation of instruction followed by discussions with a coach, and involves teachers collaborating around what they are learning from a coach (DeMonte, 2013).

3. Includes Opportunities for Active Learning of New Teaching Strategies

Not surprisingly, active participation and engagement with PD activities leads to larger changes in instructional practice. Active learning strategies include practicing learned strategies in the classroom, observing other teachers, conducting demonstration lessons, and reviewing student work with colleagues. Other examples include teachers developing curricular products aligned to standards, and district staff modeling standards-based instruction while teachers act as students (Pak et al., 2020). These active learning methods typically take longer than passive learning activities such as seminars, lectures and workshops, but are more likely to result in improved instruction and student learning (Blank & de las Alas, 2009; Pak et al., 2020).

4. Provides the Chance for Teachers to Collaborate

Teacher collaboration is a necessary feature to maximizing the benefits of PD, according to Hill et al (2010): "Teachers develop expertise not as isolated individuals but through job-embedded professional development, and as members of collaborative, interdisciplinary teams with common goals for student learning" (p. 10). Professional learning communities (PLCs) offer a collaborative setting for teacher professional growth. PLCs are lauded as a positive reform in PD where "through collaborative inquiry, teachers explore new ideas, current practice, and evidence of student learning using processes that respect them as experts on what is needed to improve their own practice and student learning" (Vescio et al., 2008, p. 90). PLCs provide an arena where teachers can elicit feedback on ways to improve their instruction, while acting within a safe and stable support structure for trying new teaching approaches (Archibald et al., 2011). Evidence suggests that PLCs can positively benefit instruction and student achievement at struggling schools (Saunders et al., 2009), and result in higher teacher efficacy levels (Ronfeldt et al., 2015). Furthermore, collaboration between general education teachers and intervention teachers (e.g., SWD/EL) has been shown to positively impact pedagogy, understanding of content, and beliefs about the learning capacities of students (Babinski et al., 2018; Griffin et al., 2018).

5. Includes sustained, embedded follow-up and continuous feedback

PD that includes follow-up and feedback will be more likely to result in significant changes to teaching practices. In addition, longer-term PD programs that provide between 30 and 100 hours of contact are more likely to impact student achievement than those providing fewer hours (Yoon et al., 2007). These longer-term programs likely provide more opportunities for teachers to practice what they have learned and receive continuous feedback on what is, and is not working. However, longer PD on its own does not guarantee positive learning outcomes; this increased duration must be used to integrate active, job-embedded learning activities into the extended PD time (Pak et al., 2020; Sun et al., 2013). PD activities are considered to be job-embedded when they are authentically related to the work of the teachers involved and are informed by what teachers are doing and need to do (DeMonte, 2013). Teacher work within PLCs and instructional coaching serve as examples of job-embedded contexts optimal for PD (Kraft et al., 2016).

North Carolina has adopted the [Learning Forward Standards for Professional Learning](#), that incorporate much of this research on evidence-based PD, and translate the research into PD standards for districts and schools.



School District Development of Evidence-Based Professional Development Plans

While districts play a significant role in providing PD to foster educator effectiveness, some research has suggested that this PD often fails to live up to its intentions of enhancing teaching and learning (Letithwood et al., 2019; Wei et al., 2009). Leithwood's (2019) most recent analysis of how school districts influence student achievement found that district-provided PD, which often consumes significant resources, and in some cases represents a district's primary improvement strategy, had little to no effect on student achievement. Anderson and Young (2018b) found that district-provided PD only received moderate research support in their research-based framework of effective district practice. While the reasons for these findings vary across district context, a contributing factor may be that districts often struggle to provide coherent PD plans that reveal how PD efforts are connected to, and compatible with each other (Tooley & Connally, 2016). Incoherent PD implementation is often due to: 1) an excess of competing PD priorities and 2) a failure to coordinate PD locally so that educators are working within an integrated system with clear objectives and pathways to improvement (Connally & Tooley, 2016). Furthermore, districts often struggle to 1) identify PD needs adequately; 2) select approaches most likely to be effective; 3) implement PD with quality and fidelity; and 4) assess PD outcomes that inform about the quality and impact of PD (Darling-Hammond et al., 2017).

To assist with these challenges, districts are recommended to create PD plans to guide and support the teaching and learning process. PD plans are defined as "a set of purposeful, planned actions and the support system necessary to achieve the identified goals. Effective [PD] programs are ongoing, coherent, and linked to student achievement" (Killion, 2008, p.1). High-quality PD plans help districts avoid an incoherent system composed of PD events that are occasional and disconnected to one another within a logical framework (Killion, 2013). Developing an evidence-based PD plan includes the following key steps (see: [Professional Learning Plans: A Workbook for States, Districts, and Schools](#) by Killion, 2013, for additional detail, and a questions and tools to guide districts to develop, implement, and evaluate high-quality PD plans):

Step 1: Analyze student learning needs by gathering multiple sources of student data.

Step 2: Analyze the data to pinpoint trends, patterns, and areas of needed improvement. Identify important features of the district context that influence student and educator learning, gather educator data, and write SMART goals for student learning.

Step 3: Develop improvement goals and specific desired student outcomes. Review research on evidence-based PD programs or practices, and identify PD of relevance to current goals and objectives.

Step 4: Identify educator learning needs and develop goals and objectives. Develop educator SMART objectives and educator KASABS (Knowledge, Attitudes, Skills, Aspirations, Behavior/Practices) that are aligned with what students are expected to know and be able to do.

Step 5: Study research on specific PD programs identified in Step 3, strategies, or interventions related to goal area(s) and district/school context features. Identify evidence-based practices (in part by ensuring that PD includes many of the components of effective practice noted above). The [Observation Checklist for High-Quality Professional Development \(Version 3\)](#) (Gaumer et al., 2020) helps PD observers/evaluators determine the inclusion of evidence-based adult learning indicators of effective PD.

Step 6: Plan PD implementation and evaluation, including developing a logic model and/or theory of action for specific PD programs.

Step 7: Implement PD, monitor progress (adjusting as needed periodically), evaluate progress and results, and sustain support to achieve implementation to fidelity over time.

Having a coherent and organized PD plan that monitors teaching and learning, analyzes the data, and determines next steps in supporting the teaching and learning process, contributes to strengthening district capacity in this area, as described by Leithwood (2013):



Strong districts approach PD as a key function of their improvement efforts and craft forms of PD for both teachers and administrators consistent with the best available evidence about PD. The close monitoring of progress toward improvement goals by strong districts creates an indirect but powerful means of holding staff accountable for actually applying the capacities acquired through PD; this goes some distance toward solving arguably the thorniest challenge facing PD: transferring learning into practice. (p. 16)

Connecting the Research to Our Practice: Assessing Your District's Needs Related to This Indicator

Assessing your district's needs is a critical first step in identifying evidence-based practices appropriate for your district's schools and planning for improvement. The suggested needs assessment questions below encompass three areas: data review; programs, policies and procedures; and implementation of programs, policies and procedures. You can adapt the questions to fit your district's context as needed, and/or add or remove questions as desired. *This tool may be useful as you identify supports in your district, determine where things are working, and what needs to be improved.*

<i>I. What Data are Currently Being Provided?</i>	
<i>Questions to Consider</i>	<i>Discussion of Data/Responses</i>
1. What evidence does the district have about the effectiveness of the current district-provided PD? Changes to instruction, improvements in student learning, and/or educator reports of satisfaction/usefulness?	
2. What does this information say about the degree to which this PD is evidence-based (consistent with the 5 basic characteristics of effective PD?	
3. If data are lacking on PD effectiveness, what steps can be taken to acquire this data?	
<i>What needs can you identify based on the responses?</i>	



II. What Programs, Policies, and Procedures Are Already Being Implemented Regarding Teacher Immediacy? How Well Are They Being Implemented?

<i>Questions to Consider</i>	<i>Responses</i>
1. How well are district teaching and learning PD initiatives being implemented?	
2. What is the current district process for identifying, implementing, and evaluating educator PD?	
3. If the district has a PD plan, to what degree is it consistent with the 7 steps listed above? (see the Workbook referenced above by Killion, 2013)	
4. Identify the current plan's strengths and challenge areas.	
5. What is needed from #4 to make the district's PD plan more consistent with evidence-based practice?	
<p><i>Consider the data and needs identified from Table I, and responses to these questions. What is needed for effective decision-making for instructional placement and differentiation? What gaps (if any) can be identified between what we're implementing and evidence-based practice?</i></p>	

What actions, customized for your school's needs, will ensure that this Success Indicator will be fully met? How will the team monitor implementation and success?

<i>Begin Date</i>	<i>End Date</i>	<i>Action</i>	<i>Monitoring Process/Data Collected</i>	<i>Desired Outcome/Need Met?</i>



REFERENCE AND RESOURCES

- Allen, C. D., & Penuel, W. R. (2015). Studying teachers' sensemaking to investigate teachers' responses to professional development focused on new standards. *Journal of Teacher Education*, 66(2), 136–149.
- Anderson, E., & Young, M. D. (2018a). A research-based framework for district effectiveness. *UCEA Review*, 59(3), 2–12. <http://www.ucea.org/wp-content/uploads/2018/10/UCEAReviewColor1002.pdf>
- Anderson, E., & Young, M. D. (2018b). If they knew then what we know now, why haven't things changed? An examination of district effectiveness research. *Frontiers in Education*, 3(87). <https://www.frontiersin.org/articles/10.3389/educ.2018.00087/full>
- Archibald, S., Cogshall, J. G., Croft, A., & Goe, L. (2011). High-quality professional development for all teachers: Effectively allocating resources. National Comprehensive Center for Teacher Quality. <http://www.gtlcenter.org/sites/default/files/docs/HighQualityProfessionalDevelopment.pdf>
- Babinski, L. M., Amendum, S. J., Knotek, S. E., Sánchez, M., & Malone, P. (2018). Improving young English learners' language and literacy skills through teacher professional development: A randomized controlled trial. *American Educational Research Journal*, 55(1), 117–143.
- Blank, R. K., & de las Alas, N. (2009). Effects of teacher professional development on gains in student achievement: How meta-analysis provides scientific evidence useful to education leaders. Council of Chief State School Officers.
- Chingos, M. M., Whitehurst, G. J., & Gallaher, M. R. (2013). School districts and student achievement. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2016/06/Districts_technical_paper_final.pdf
- Connally, K., & Tooley, M. (2016). Beyond ratings: Re-envisioning state teacher evaluation systems as tools for professional growth. <https://files.eric.ed.gov/fulltext/ED570894.pdf>
- Darling-Hammond, L., Hyster, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf
- DeMonte, J. (2013). High quality professional development for teachers: Supporting teacher training to improve student learning. Center for American Progress. <https://cdn.americanprogress.org/wp-content/uploads/2013/07/DeMonteLearning4Teachers-1.pdf>
- Desimone, L., Smith, T. M., & Phillips, K. J. R. (2013). Linking student achievement growth to professional development participation and changes in instruction: A longitudinal study of elementary students and teachers in Title I schools. *Teachers College Record*, 115(5).
- Fischer, C., Fishman, B., Dede, C., Eisenkraft, A., Frumin, K., Foster, B., ... & McCoy, A. (2018). Investigating relationships between school context, teacher professional development, teaching practices, and student achievement in response to a nationwide science reform. *Teaching and Teacher Education*, 72, 107–121.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915–945.
- Gaumer Erickson, A. S., Noonan, P. M., Ault, M., Monroe, K., & Brussow, J. (2020). Observation Checklist for High-Quality Professional Development [Version 3]. Center for Research on Learning, University of Kansas. <http://www.researchcollaboration.org/page/high-quality-professional-development-checklist>
- Griffin, C. C., Dana, N. F., Pape, S. J., Algina, J., Bae, J., Prosser, S. K., & League, M. B. (2018). Prime Online: Exploring teacher professional development for creating inclusive elementary mathematics classrooms. *Teacher Education and Special Education*, 41(2), 121–139.
- Hill, D., Stumbo, C., Paliokas, K., Hansen, D., & McWalters, P. (2010). State policy implications of the Model Core Teaching Standards (InTASC draft discussion document). http://www.ccsso.org/Documents/2010/State_Policy_Implications_Model_Core_Teaching_DRAFT_DISCUSSION_DOCUMENT_2010.pdf
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, 86(4), 945–980.
- Killion, J. (2008). Assessing impact: Evaluating staff development. (2nd ed.) Corwin Press.



- Killion, J. (2013). Professional learning plans: A workbook for states, districts, and schools. Learning Forward. <https://learningforward.org/wp-content/uploads/2017/09/professional-learning-plans.pdf>
- Kraft, M. A., Blazar, D., & Hogan, D. (2016). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547–588.
- Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective in closing the achievement gap. *Leadership Policy in Schools*, 9, 245–291.
- Leithwood, K. (2013). Strong districts and their leadership: A paper commissioned by The Council of Ontario Directors of Education and The Institute for Education Leadership. <http://www.ontariodirectors.ca/downloads/Strong%20Districts-2.pdf>
- Leithwood, K., & McCullough, C. (2016). Leading high-performing school districts. Education Canada. <https://www.edcan.ca/articles/leading-high-performing-school-districts/#footnote-261-1>
- Leithwood, K., Sun, J., & McCullough, C. (2019). How school districts influence student achievement. *Journal of Educational Administration*, 57(5), 519–539.
- Murphy, J., & Hallinger, P. (1988). Characteristics of instructionally effective school districts. *The Journal of Educational Research*, 81(3), 175–181. https://www.academia.edu/481802/Characteristics_of_instructionally_effective_school_districts
- Pak, K., Desimone, L. M., & Parsons, A. (2020). An integrative approach to professional development to support college-and career-readiness standards. *Education Policy Analysis Archives*, 28(111), 1–27. <https://files.eric.ed.gov/fulltext/EJ1265332.pdf>
- Ronfeldt, M., Farmer, S., McQueen, K., & Grissom, J. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, 52(3), 475–514.
- Saunders, W. M., Goldenberg, C. N., & Gallimore, R. (2009). Increasing achievement by focusing on grade-level teams on improving classroom learning: A prospective, quasi-experimental study of Title I schools. *American Educational Research Journal*, 46(4), 1006–1033.
- Sun, M., Penuel, W., Frank, K., Gallagher, H., & Young, P. (2013). Shaping professional development to promote diffusion of instructional expertise among teachers. *Educational Evaluation and Policy Analysis*, 35(3), 344–369.
- Tooley, M., & Connally, K. (2016). No panacea: Diagnosing what ails teacher professional development before reaching for remedies. <https://files.eric.ed.gov/fulltext/ED570895.pdf>
- Trujillo, T. (2013). The reincarnation of effective schools research: Rethinking the literature on district effectiveness. *Journal of Educational Administration*, 51(4), 426–452.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of the research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24, 80–91.
- Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession: A status report on teacher development in the United States and abroad. National Staff Development Council. <http://learningforward.org/docs/pdf/nsdcstudytechnicalreport2009.pdf?sfvrsn=0>
- Yoon, K. S., Duncan, T., Lee, S. W., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007-No. 033). U.S. Department of Education. http://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/rel_2007033_sum.pdf