Guiding Principle 5: Professional Learning
Educators must be prepared to teach effectively in the schools of the 21st century. Practicing teachers will benefit from ongoing, job-embedded learning opportunities that promote lifelong learning and reflective teaching.

Quality teaching has been identified as the most significant variable associated with student learning (Darling-Hammond et al., 2009; Hanushek, 1992; Rivkin, Hanushek, & Kain, 2005). Yet, research findings indicate that the least qualified, least knowledgeable teachers are found in poorer school districts, often teaching students of color (Darling-Hammond, 2010). Given the importance of teacher expertise in all schools, new teachers, at all levels from pre-kindergarten to grade 12, must be prepared to be successful educators. Likewise, recognizing that new teachers are not finished products, but rather highly qualified novice educators, there must be opportunities in schools to help beginning educators grow professionally. At the same time, experienced or veteran teachers must also have the opportunity to learn—to continue to develop their knowledge and skill sets, to serve as models for those entering the profession, and to become teacher leaders in their schools. Moreover, given teacher turnover or attrition, job-embedded professional learning should be an integral part of every school’s comprehensive planning. In other words, teachers must be given opportunities to self-reflect, to be lifelong learners who can work collaboratively with others to develop high level, educational experiences and learning outcomes for the students they serve.

Connor, Alberto, Compton, and O’Connor (2014) in a recent report, reviewed the results of IES-funded research that focused on ways to prevent and remediate reading difficulties in students with or at risk for reading disabilities. They found that teachers’ delivery of evidence-based instruction was related to their specialized knowledge, beliefs, and consistent long-term implementation support. In other words, the disciplinary knowledge base of the teachers matters; when coupled with effective instruction, it was predictive of student gains in foundational skills in the early grades. In this report, the researchers also found that teachers’ beliefs in their ability to make a difference, and time for implementation, were important. Finally, as stated in the report, “although coaching is more expensive than providing workshops, it appears to be a critical component of effective professional development “(p. 55).

Preparing Preservice Teachers: Although much has been written about teacher education in general, research about the preparation of teachers for teaching reading had not been a priority of literacy researchers (Anders, Hoffman, & Duffy, 2000; Roller, 2001). In Risko et al.’s (2008) comprehensive review of empirical research about literacy teacher preparation, the following findings were highlighted: teacher education candidates need to have opportunities to apply what they are learning, see demonstrations of practice, and receive explicit explanations and examples of effective literacy instructional practices. Those learning to teach must be given opportunities to practice what they are learning in simulated and real classroom situations. In a
recent International Literacy Association (ILA) white paper (ILA, 2016, p.4), two key recommendations were made that support and extend the findings of the Risko et al.’s (2008) work:

- **Address literacy at every level of study during coursework and clinical practice.** Specifically, practical experiences should be included at every stage, not just as a capstone student teaching experience. This requires teacher preparation programs to work as partners with school districts so that teacher candidates have opportunities to work in classrooms where there is high quality teaching. They also need experiences in varied situations (i.e., urban, rural, and suburban). Likewise, literacy instruction, where appropriate, should be embedded in courses addressing pedagogy and assessment (e.g., candidates taking a course on teaching science would be introduced to the notion of disciplinary literacy and the use of various strategies to improve how students learn the content).

- **Provide preservice teachers with the knowledge, skills, and dispositions to teach the 21st-century literacy strategies needed for all students to become effective readers and writers.** Given the potential value and impact of technology on the students’ literacy learning, teacher candidates must be provided with experiences that help them to use technology effectively in designing and implementing learning experiences for the students they teach.

Lacina and Block (2011) studied six literacy teacher preparation programs identified as distinguished by ILA, to unpack the factors that were critical to the effectiveness of their programs. Three key factors were identified:

- Importance of relevant field experiences;
- Development of teacher candidates’ abilities to teach and assess children through a wide variety of instructional strategies and assessment instruments; and
- Integration of literacy and language strategies throughout the curriculum.

As stated by Moats (1999, 2009), teaching reading is rocket science, and those responsible for preparing teachers have a great responsibility to develop programs that will produce highly qualified individuals who can work effectively with their students in ways that address the diverse needs of students in 21st century classrooms. Indeed, a lack of knowledge of the mechanisms of reading acquisition has been a concern for several years (Moats, 2014). Although, the most recent National Council on Teacher Quality (2016) study revealed that undergraduate elementary teacher programs, showed positive signs of growth, especially regarding the teaching of reading; for example, more programs now include all five research-proven elements of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. The percentage of programs that require each element individually also has increased.

Moats (1999) suggested the following components as important in any core curriculum for preparing teachers: understanding reading psychology and development, understanding the
structure of the English language, applying best practices in all aspects of reading instruction, and using validated, reliable, efficient assessments to inform classroom teaching. The International Dyslexia Association has developed a list of Knowledge and Practice Standards for Teachers of Reading (2010) that outline the content knowledge necessary to teach reading and writing to students, including those who are at risk for reading difficulty, and practices of effective instruction. Likewise, the International Literacy Association’s updated Standards for Preparing Literacy Professionals, released in January 2018, highlight the following areas as important for all literacy professionals: foundational knowledge, curriculum and instruction, assessment, diversity, knowledge about the learners and the literacy environment (print and digital), and the teacher as a learner.

In a recently released research advisory document published by ILA and National Council of Teachers of English (NCTE) (2017), four recommendations for high-quality teacher preparation programs were identified:

1. Development of a deep conceptual pedagogical and content knowledge base that is coherent across coursework and field experiences and highlights the importance of teaching diverse learners.
2. Opportunities for candidates to apply their knowledge and skills in authentic contexts that include structured guidance and monitoring of their work.
3. Continual teacher development that reinforces the importance of self-critique, reflection, on-going learning, and opportunities for networking.
4. Assessment at several points in the program: admissions, program monitoring, benchmarking, and the determination of teaching success.

Where PA Stands
Recognizing the importance of pre-service education, Pennsylvania has developed guidelines for institutions preparing teachers. These guidelines require that teacher candidates have additional coursework related to addressing the needs of English Learners and those students who might qualify for special education services. The guidelines incorporate the recent research findings about early literacy in the guidelines for Teachers of Young Children. Pennsylvania’s General Standards and Specific Program Guidelines for State Approval of Professional Educator Programs.

Professional Learning
As mentioned, the novice teacher arriving at the school is not a finished product. According to Snow, Griffin, and Burns (2005), learning to teach is a developmental process, with teacher development a progression through the stages of pre-service, apprentice, novice, experienced, and master teacher. Teachers at each of these stages must be actively engaged in learning and reflecting about their work. Indeed, the change in language from “professional development” to “professional learning” was made to signify the importance of teachers as agents of their own learning, with a major responsibility for directing their own growth (Calvert 2016). Professional learning, then, is the cornerstone for strengthening the capacity of educators to deliver effective
literacy instruction for all. The path to sustainable literacy outcomes for all students rests on an investment in quality and shared professional learning based on both personal and system-wide goals. Professional learning must become a school’s top priority, as schools redefine themselves as places of learning for both teachers and students (Bean & Swan Dagen, 2012; NCLE, 2013, 2014).

The shift in instructional practices in teaching literacy, especially as reflected in the demand for more rigorous, higher expectations for all students, has led to the need for increased attention for professional learning for teachers. In a 2012-2013 National Center for Literacy Education (NCLE) Report, *Remodeling Literacy Learning: Making Room for What Works*, the following findings were identified: teaching literacy is not just the job of the English teacher; collaboration is key to professional learning. It was also reported that districts aren’t generally structured to provide support for such collaboration even though in some schools, there are grade level teams, data meetings, and academic teams. Making certain that those involved understand how to participate effectively in such teams, however, calls for a more systemic approach, requiring district support and leadership.

In a follow-up study (NCLE, 2013-2014) in which 3,000 teachers were surveyed about their efforts to implement instruction that addresses high level state standards, a majority indicated they were not prepared to implement those standards. The seven major findings of the study are summarized below.

- Nationwide, more teachers do not feel prepared to implement the new literacy standards, especially with high-need students.
- Teachers report that working with other educators is the most powerful form of preparation.
- Time for teachers to collaborate is brief and shrinking, and they aren’t substantially involved in planning for implementation efforts.
- When teachers are significantly involved in renovating literacy instruction, positive changes occur.
- Purposeful professional work that draws on the talents of everyone is associated with progress in standards implementation.
- Teachers in all disciplines are actively engaged in shifting literacy practices and those who are collaborating are making the biggest shifts.
- When given the opportunity, teachers are owning the change by designing appropriate lesson and materials.

The findings above as well as those of other researchers (Fixsen, Naoom, Blasé, Freedman, & Wallace, 2005; Jaquith, Mindich, Chung Weis, & Darling-Hammond, 2010; Moursheed, Chijioke, & Barber, 2010) strongly suggested that teachers would benefit from more effective professional learning experiences to support their instructional efforts. Such experiences, to be effective, must be job-embedded, ongoing, authentic, collaborative, and aligned to school and district goals (Dagen & Bean, 2014; Learning Forward, 2011). Current professional learning approaches encourage teacher engagement in formal and informal leadership roles, in which
they facilitate the learning of their peers and collaborate with them and the administration to improve the school literacy program. They may lead or participate in data team meetings, design curriculum, or participate in problem-solving meetings to modify and adapt instruction for the students in their classrooms and the school. Such learning provides for a focus on developing a common language and vocabulary about literacy learning and enables the school to establish a vision or set of goals to which all can commit. The Learning Paths for literacy learning available to PA teachers provide the knowledge and understandings essential to implementing a local literacy plan.

Multiple pathways exist for developing and implementing such professional learning (e.g., book clubs or study groups, lesson studies, data meetings, classroom learning walks, and developing communities of practice focused on inquiry (Bean & Ippolito, 2016, p. 128-132). These are focused on teachers working together to solve problems specific to their context and students. In other words, the importance of social capital (Leana & Pili, 2006), that is, the ability for teachers to work together to enhance student learning is recognized as a key factor for school improvement. Further, such collaborative practices require that districts think “long-term,” given this major shift in how professional learning is defined and operationalized. As stated in Calvert (2016), “Harnessing teachers who have operated as solo fliers into collaborative communities will not happen overnight” (p. 19). Below, two major approaches to collaborative, job-embedded professional learning are discussed; they include the development of professional learning communities and coaching.

Professional Learning Communities
Although there are many different definitions of professional learning communities (PLCs), Vescio, Ross, and Adams (2008) identified the following as essential characteristics of such learning groups: (1) collaboration, with opportunities for reflection and open dialogue about teaching and learning; (2) an emphasis on student learning; (3) teacher decision-making; and (4) opportunities for continuous teacher learning. To be effective, PLCs must be organized to address issues related to student learning, and not just as opportunities for teachers to meet. Effective PLCs require time in the school schedule for teachers to meet, support from district and school level administration, and effective facilitation with an emphasis on solving authentic tasks that relate to improving student literacy learning. DuFour, DuFour, & Eaker (2008) described ways in which schools can develop professional learning communities where teachers not only recognize the importance of working collaboratively with their peers to support the learning of all students but understand how to participate effectively in professional learning communities.

Coaching
Another form of professional learning is that of coaching, defined by Bean and Ippolito (2016) as “a process of facilitated inquiry…. a set of coaching behaviors that support adult learning, collaboration, and design work, all in service of the continual improvement of literacy instruction in a school” (p. 5). Bean and Ippolito (2016) viewed coaching as a set of activities rather than a role. In other words, many educators within a school may coach (e.g., teacher peers, teacher
leaders, reading specialists); districts will need to decide, given their goals, the strengths and needs of their teachers and students, as well as their resources, how to structure their coaching program (Steinbacher-Reed & Powers, 2011/2012). Districts might also investigate ways they can use technology in the implementation of their coaching program (Matsumura, Bickel, Zook-Howell, Correnti, & Walsh, 2016).

Coaching can be an effective tool for improving instruction and student learning, but it is a complex intervention and success will depend on multiple factors, including the quality of the coach, the school context, the content of the coaching and the amount of coaching (Bryk, Gomez Grunow, & LeMahieu, 2015). The following factors should be considered when discussing the possibility of coaching as a professional learning tool.

### Factors to Consider when Implementing a Coaching Program

(Adapted from: Bean & Ippolito, 2016; Bryk, Gomez, Grunow, & LeMahieu, 2015)

- **Selecting a coach.** Who would be a good coach – for a specific school or context? What does the coach know about literacy? About adult learning? About system change?
- **Allocation of time.** How would coaches focus their time (working with individuals? With small groups?) With which teachers would they work?
- **Coach-principal relationships.** How should they work together? In what ways can they work together to have an impact on student literacy learning school wide?
- **Activities of Coaching?** What does good coaching look like—in this specific context? What is the content of coaching?
- **Professional learning for coaches.** How will coaches learn to do the work of coaching and how will they be supported?

Coaching has had a major impact in Pennsylvania schools, given the statewide efforts of the Pennsylvania Institute for Instructional Coaching (PIIC). The PIIC website has many resources that districts can use to develop and implement an effective coaching program in its schools (piic.pacoaching.org).

Developing a professional learning plan that will create results requires districts to set strategic goals, based on a comprehensive needs assessment that identifies problems and needs, sets goals, identifies a plan of action, and a plan for monitoring and evaluating the effects of the professional learning plan (Bean & Ippolito, 2016; Risko & Vogt, 2016).
Where PA Stands
Pennsylvania has a system of robust supports that can be used by schools to guide systems change and transform teaching and learning to enhance student growth and achievement. With the adoption of its Standards Aligned System (the what) and Multi-Tiered System of Supports (MTSS-RtI) (the how), Pennsylvania is nicely poised to scale research-based literacy instruction, curriculum, and assessment practices to new and improved levels. However, we continue to need intensive, effective, and ongoing professional learning opportunities for teachers to enable them to understand how to use these systems as a means of enhancing assessment and instructional efforts. The goal is to provide the focused, intensive, and ongoing professional learning that will result in improved literacy outcomes for all students, regardless of race, class, or disability status.

The Pennsylvania State Literacy Plan identifies Recommendations for Action for professional learning to transform teaching and enhance student growth and achievement.