# PaSLP Guiding Principle 4

Guiding Principle 4: Evidence-Based Decision Making

Decision making about literacy programs, practices, and policies must be evidence-based; that is, it must be grounded in reliable and valid research results and informed by experiential and contextual evidence. Evidence must come from multiple sources and provide information about the many factors that influence student learning.

Making decisions about educational programs, practices, and policies requires consideration of the following dimensions: the best available empirical evidence, experiential evidence from the field (professional wisdom), and evidence about the local context (Understanding Evidence: Non-Regulatory Guidance: Using Evidence to Strengthen Education Investments, September 16, 2016) www2.ed.gov. Department of Education: Washington, D.C.)

Figure 3. Guidance for District Decision Making
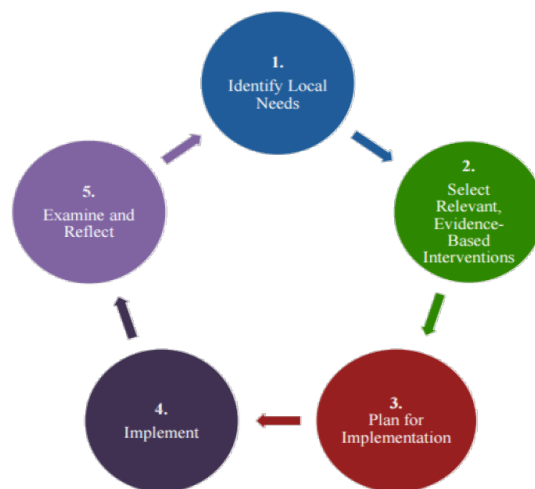
The U.S. Department of Education (September 2016, p. 3) suggested the following five steps as guidance to states and districts involved in decision making (Figure 3):

1. Identify Local Needs
2. Select Relevant, evidence-based Interventions
3. Plan for Implementation
4. Implement
5. Examine and Reflect

The Every Student Succeeds Act (ESSA, 2015) describes three levels of evidence-based interventions: those supported by strong evidence, moderate evidence, or promising evidence. A fourth level, in which the evidence demonstrates a rationale, is also described; specifically, any intervention in this category must be accompanied with ongoing evaluation efforts. A

complete description of each of these levels is provided in the plan, "Non-Regulatory Guidance: Using Evidence to Strengthen Education Investments" (September 2016). These definitions of evidence-based decision making provide more flexibility than the more narrowly defined "scientifically based research" definition of the No Child Left Behind (NCLB) legislation (Whitehurst, 2002).

Evidence-based decision making must occur at every level—the state, district central administration, literacy leaders, and classroom teachers all have roles in using evidence to support the decisions they make. Further, educators must be data literate; that is, they must have "the ability to collect, analyze, communicate, and use multiple measures of data to continuously improve all aspects of the learning organization, especially teaching and learning" (Bernhardt, 2013, p. 5). As described in the Bernhardt framework, four categories of data can be collected that allow schools to assess their needs, inform a vision, and create a plan for improving literacy learning (See Figure 4). These categories include:
- Demographics – Who are the students we serve, their parents, our staff?
- Perceptions – What do our stakeholders think about our schools, its values, beliefs, attitudes, practices?
- School Processes – What is going on in our classrooms?
- Student Learning – How are our students doing?

Figure 4. Categories of Data (Bernhardt, 2013)
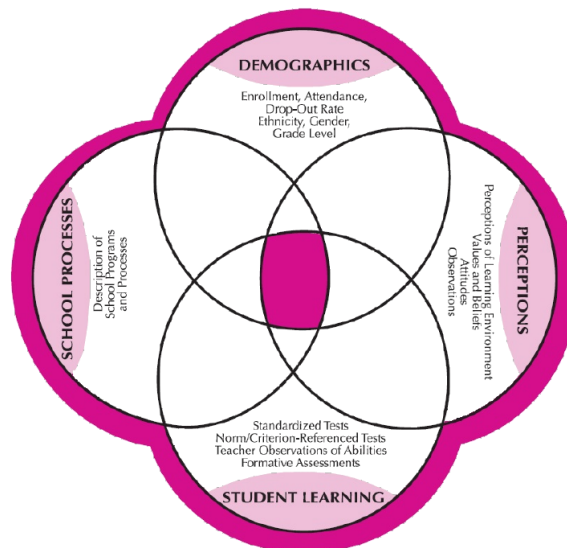
By analyzing the results provided by these data sources as well as the interactions between and among all four data sources, schools can make better decisions about how to improve student learning, especially literacy learning. Not only do schools need data about the four categories described above, but they need various types of data that can answer the questions being asked. Observations, for example, can be useful in providing evidence about classroom practices or processes. Questionnaires and interviews are useful in determining perceptions of

stakeholders. Types of data that can address the question about student learning may be summative, formative, benchmark, or diagnostic. School leaders who analyze these multiple measures will be better able to guide and support teaching staff as they plan both district and school plans, as well as plans for individual classrooms and students.

By looking at multiple measures, teachers can gain a more comprehensive and personalized profile of the literacy needs of the students they serve. Such a profile can lead to decision making that matches individual student needs to evidence-based literacy practices (International Reading Association, 2002). Once appropriate practices have been identified and employed, teachers must continue to gather relevant and specific assessment data that reflects the ongoing effectiveness of the practices. In doing so, teachers must answer crucial questions: How do I know if it's working? If so, what's next? If not, how can I remedy it? Continual monitoring and adjusting are essential to this process. This recursive process must include three essential elements: (a) collecting and analyzing assessment data to determine students' level of functioning and need; (b) matching student needs to evidence-based practices; and (c) monitoring progress and continually adjusting the match between need and evidence-based practices.

The success of this process requires several important considerations. Primarily, those responsible for planning and delivering instruction must not only have access to relevant data regarding their students, but they also must be "data literate." While schools today are often data-rich, responsible use of data requires guidance and instruction on the value, analysis, and interpretation of information gleaned from data. Therefore, carefully designed learning for teachers is essential, beginning with those in teacher preparation programs. It is in these programs that teachers must be prepared to think like scientists and begin to be reflective about their actions and observations. Therefore, specialized and contextually relevant professional learning about the interpretation and use of data must be provided for practicing teachers and administrators.

According to Stanovich and Stanovich (2003), "scientific thinking in practice is what characterizes reflective teachers – those who inquire into their own practice and who examine their own classrooms to find out what works best for them and their students" (p.4). Equally important to knowing how to interpret student assessment data is the understanding of what it means to employ "evidence-based practices" and where to find information on practices that have stood the test of rigorous research. As Stanovich and Stanovich (2003) indicated:

> *"One factor that has impeded teachers from being active and effective consumers of educational science has been a lack of orientation and training in how to understand the scientific process and how that process results in the cumulative growth of knowledge that leads to validated educational practice" (p. 5).*

The following are among the many resources that educators may use to obtain information about evidence-based practices:

- International Literacy Association
- National Reading Panel
- The Literacy Research Initiative (LRI)
- The Promising Practices Network
- Doing What Works
- National Center for Education Research (NCER)
- The What Works Clearinghouse
- The International Dyslexia Association
- Institute of Education Sciences
- IDEAS that work: Research in special education
- PA Department of Education ESSA
- All for Education

To acknowledge evidence-based decision-making in Pennsylvania schools, the Pennsylvania State Literacy Plan identifies Recommendations for Action for those involved with decision-making.