



**Success Indicator IN13:** Each school's professional development program is guided by data collected on ELs in that school as well as by research on effective instructional practices for ELs. (5890)

**Overview:** Thoughtful data use is critical to developing a professional development (PD) program that is tailored to each school and classroom. Providing PD on data use or instructional practices alone, however, offers pitfalls for well-intentioned leadership teams. The two must be combined together within a supportive professional learning community to create a truly robust, effective program of data-based PD.

**Questions:** What data on ELs is useful and needed? Why include EL data in PD? What attitudes might teachers have towards data use? How should PD include data and research? What are some best practices for data use during PD?

#### **What data on ELs is useful and needed?**

In order to provide the appropriate modifications needed for ELs to work with grade-level content, all teachers need to draw on a number of data sources. In schools that emphasize standardized testing, administrators and teachers may hone in on test scores as the primary source of data. However, test results alone may not provide much insight into what students bring to the classroom or how best to support them. Without knowing context or student strengths, teachers may feel inadequately prepared to reach students with low proficiency and that ELs are a burden rather than an asset (Herrera, Murray & Perez, 2008).

Despite limitations, students' English language proficiency levels are still a critical source of data. In some states, this level is determined through the WIDA ACCESS and W-APT tests. While students identified as ELs should have this as part of their academic records available to their teachers, in a study of ten Pennsylvania school districts, Clark-Gareca (2016) found that most math and science teachers tended not to know the proficiency level of their ELs, highlighting the need for broader data sharing and use in PD.

Other sources of data include classroom grades, student work, attendance, family histories, teacher-developed assessments, observations, surveys and adult practice to develop more complete pictures of their students as learners (Thessin, 2015). Surveys can provide teachers with before and after information in regards to an instructional practice, as ELs may feel more comfortable filling out an anonymous survey in their native language about what is and is not working for them (Thessin, 2015). Family histories can inform teachers about the degree to which ELs speak English at home, as well as prior years of formal education, which may have been interrupted. This data can powerfully shift classroom practice.

Learning data, also called formative data, can be as important as performance data, or summative data. These data include informal classwork such as note-taking, graphic organizers, and drafts that show how students' progress towards a summative assessment, which could be a final project or test. Collecting these learning artifacts gives weight to steps in the learning process rather than adding pressure to proficiency assessments, and it allows teachers to make course corrections before administering tests.



Blended learning classrooms, where students work at their own pace through digital tools set at their own proficiency level, may provide an opportunity for students to become part of the data collection and analysis on their own learning. Students as early as sixth-grade have been able to look back at their own processes and engage in rich, data-based conversations in order to learn how they are learning (Dailey, Hillaire & Sutherland, 2016). In schools without blended learning, teachers and students alike can still treat formative data (i.e. notes, graphic organizers, reflection papers) as a valuable data point in addition to a final score. If “what matters gets measured,” then families and faculty should treat more steps in the learning process as worthy of measurement and reflection (Dailey, Hillaire, & Sutherland, 2016, p. 121). All adults play a role in deciding which types of work are valued both at school and at home, and in communicating that learning is a lifelong process rather than a one-time proficiency goal.

#### **Why include EL data in PD?**

Even when provided data on ELs, many teachers neglect it altogether, particularly if they lack training on how to use it (Clark-Gareca, 2016). One study found that teachers seldom made accommodations during routine classroom content tests, even if they might be required to do so on the standardized tests they administer. Teachers may be unaware of how they might provide language supports that allow ELs to display content knowledge (Clark-Gareca, 2016). STEM teachers may struggle to make these adjustments more than other teachers, as they are less likely to receive formal training on how to instruct students with limited English proficiency. They also participate in fewer PD opportunities and perceive them to be less useful (Li, Ernst & Williams, 2015).

Data can be used to target students with specific strategies, supports, and modifications. For example, a student with high speaking proficiency but low written proficiency in the target language may be directed to spend more time practicing their writing skills during classwork or homework. The teacher may assign different tasks compared to a higher proficiency peer. Later, the instructor can ask that same student to read aloud, giving an opportunity to show off identified strengths. Thoughtful data use can do more than highlight student deficits.

#### **What attitudes might teachers have towards data use?**

When teachers are provided with “official” or “objective” data, Atkinson (2012, p. 201) discovered that their interpretations reflected the strength of their accountability policies. In strong accountability environments, test scores were the final word and rarely questioned, which she describes as “target practice” overshadowing teaching practice (p. 206). Merely providing data is not enough. Administrators must help teachers and families figure out how to make sense of numbers and how to question commonly held ideas about objectivity, testing, and standardization, in order to value multiple types of data in their classrooms and homes. School communities should cultivate an attitude of continual improvement rather than using data only to prove the effectiveness of existing practices or to meet accountability goals (Slavit, Nelson & Deuel, 2012).

When participating in PD sessions focused on data, teachers tend to adopt one of two stances – either an improving stance, or a proving stance. An improving stance teacher seeks to use PD on strategies and student data to improve practice. A proving stance lacks this openness; teachers instead express great certainty when working with data (Slavit, Nelson & Deuel, 2012). Proving teachers use data only to confirm their existing practice instead of using it as a tool for further questioning. Thus, teacher attitudes towards data can be more important than the type of data itself in determining the effectiveness of PD (Slavit, Nelson & Deuel, 2012).

The challenge for leadership teams is to develop an open-ended dialogue around data that focuses on long-term rather than short-term outcomes, which can be more difficult to measure. The ultimate goal of data use in PD should be to increase self-efficacy among teachers (Zonoubi, Raekh & Tavakoli, 2017). Teachers with improving stances are those who see data use as a means, not an end. They conceive of themselves as professionals and take on the burden of constantly improving their practice, and building their own self-efficacy slowly over time rather than seeking quick, quantifiable results. They provide stronger, more stable foundations for school communities and are more likely to remain in the classroom.

Much of the conversation around data-based instructional practices has shifted towards improvement science and rapid cycles of Plan-Do-Study-Act, with time frames

as short as 90 days (Byrk et. al., 2015). This practice can be rewarding, particularly in schools that have historically struggled to reach more long-term goals. However, there is a downside: teachers can start to focus on short-term, data-based objectives instead of thinking more holistically about improving their practice. “Target practice” should not overwhelm critically reflective teaching (Atkinson, 2012, p. 206). PD should aim to cultivate both types of thinking when working with data.

### How should PD include data and research?

Looking at student work has become prevalent in all forms of teacher PD. Research on instructional practice clearly indicates that while teachers may hunger for concrete strategies to teach ELs, they must consistently reflect on their own practice and the effectiveness of the strategies learned during PD (Garet et. al, 2001). Cultivating meaningful data in school use takes time but should include these five key elements: reflective dialogue, focus on learning, collaboration, shared values and norms, and de-privatization of practice (Kruse, Louis & Byrk, 1995). Professional learning communities (PLCs) are the foundation for data use to shift instruction, particularly in schools where an instructional focus on ELs has historically been neglected (Little, 2007). Recent research showed that teachers saw two-year long data-based PLCs as the most useful PD opportunity for learning and testing instructional strategies for ELs (Penner, Diaz & Worthen, 2017).

De-privatization may be the most difficult part of developing a PLC, especially for veteran teachers (Musanti, 2010; Berends et al., 2002). Creating a data-based culture from scratch requires more time and face-to-meetings, perhaps as often as weekly (Molle, 2013).

To encourage teachers to use EL data in meaningful ways, school leaders must ensure that PD incorporates strategies that appreciate the diversity of a school’s English learning population (Herrera, Murray & Perez, 2008; Garet et. al, 2001). Otherwise, school-wide PD on instructional practices may not be relevant or useful in every classroom (i.e. strategies may be better designed for low-level or high-level ELs). Classroom-level data use guards against teachers feeling that PD is not helpful to them, which could cause some to disengage and become passive rather than active learners.

### What are some best practices in data use during PD?

Evidence shows that these school-level learning communities with data-based conversations are more effective than providing instructional strategies on ELs alone (Shea, Sandholtz & Shanahan, 2017). Both are important and one should not happen without the other. But how do leaders foster robust professional development focused on data?

Gerzon (2015) offers a summary of research findings that can guide the work of the Leadership Team:

1. Principals recognize and model how data use informs instruction, and they foster shared mental models of how data use can improve teaching and learning.
2. The Leadership Team ensures access to resources that establish a data culture, such as setting aside time for data practices, ensuring a safe environment for teachers to engage in dialogue about best practices, and modeling effective data use practices.
3. Leaders report having more successful data use and inquiry practices using shared or distributed leadership models that include teacher leaders in a variety of roles.

By modeling data use behaviors during PD, the Leadership Team can cultivate an environment where data is not only about accountability but also centered on a shared commitment to improving instructional practice.

Ultimately, teachers can learn how to use data to:

1. Decide whether to move-on or re-teach concepts;
2. Identify patterns in EL student thinking;
3. Identify students for more intensive interventions;
4. Select appropriate instructional strategies;
5. Assign grades and monitor student progress over time (Reeves, Summers & Grove, 2016).

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