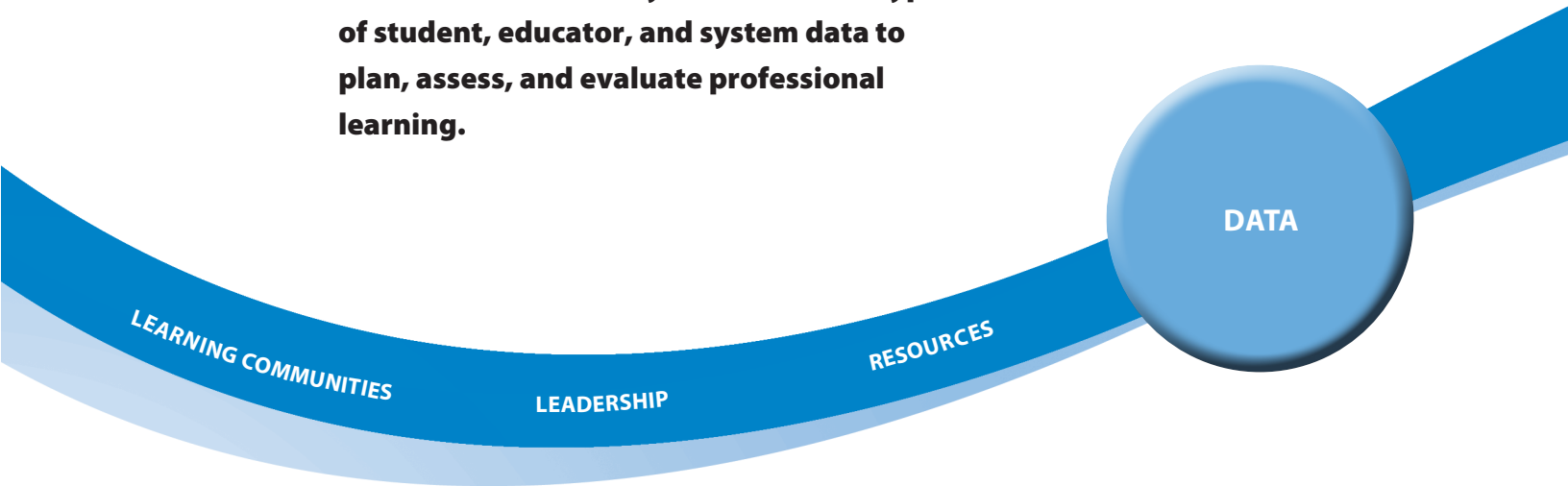Professional learning that increases educator effectiveness and results for all students **uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.**

DATA

LEARNING COMMUNITIES

LEADERSHIP

RESOURCES

D ata from multiple sources enrich decisions about professional learning that leads to increased results for every student. Multiple sources include both quantitative and qualitative data, such as common formative and summative assessments, performance assessments, observations, work samples, performance metrics, portfolios, and self-reports. The use of multiple sources of data offers a balanced and more comprehensive analysis of student, educator, and system performance than any single type or source of data can. However, data alone do little to inform decision making and increase effectiveness.

Thorough analysis and ongoing use are essential for data to inform decisions about professional learning, as is support in the effective analysis and use of data.

ANALYZE STUDENT, EDUCATOR, AND SYSTEM DATA

Data about students, educators, and systems are useful in defining individual, team, school, and system goals for professional learning. Probing questions guide data analysis to understand where students are in relationship to the expected curriculum standards and to identify the focus for educator professional learning. Student data include formal and informal assessments, achievement data such as grades and annual, benchmark, end-of-course, and daily classroom work, and classroom assessments. Other forms of data, such as those that cover demographics, engagement, attendance, student perceptions, behavior and discipline, participation in extracurricular programs, and post-graduation education, are useful in understanding student learning needs, particularly if they are analyzed by student characteristics.

Knowing student learning needs guides decisions about educator professional learning, yet student data alone are insufficient. A comprehensive understanding of educator learning needs is essential to planning meaningful professional learning. Sample data to consider for identifying goals for educator learning include preparation information, performance on various assessments, educator perceptions, classroom or work performance, student results, and individual professional learning goals.

Changes at the student and educator levels are best sustained when school and system-level learning occur simultaneously. School and system administrators also engage in data collection and analysis to determine changes in policy, procedures, fiscal resources, human resources, time, or technology, for example, needed to support school- and team-based learning. Administrators might analyze data about inputs, such as fiscal, personnel, and time allocation; outputs, such as frequency of participation, level of engagement, and type of communication; and outcomes, such as changes in educator practice and student achievement.

ASSESS PROGRESS

Data also are useful to monitor and assess progress against established benchmarks. At the classroom level, teachers use student data to assess the effectiveness of the application of their new learning. When teachers, for example, design assessments and scoring guides and engage in collaborative analysis of student work, they gain crucial

information about the effect of their learning on students. Evidence of ongoing increases in student learning is a powerful motivator for teachers during the inevitable setbacks that accompany complex change efforts.

At the school level, leadership teams use data to monitor implementation of professional learning and its effects on educator practice and student

learning. Engaging teams of teacher leaders and administrators in analyzing and interpreting data, for example, provides them a more holistic view of the complexity of school improvement and fosters collective responsibility and accountability for student results.

Frequent collection and use of data about inputs, outputs, and outcomes of professional learning reinforce the cycle of continuous improvement by allowing for ongoing adjustments in the learning process to increase results for students, educators,

and systems. Ongoing data collection, analysis, and use, especially when done in teams, provide stakeholders with information that sustains momentum and informs continuous improvement.

EVALUATE PROFESSIONAL LEARNING

Those responsible for professional learning implement and maintain standards for professional learning and use the standards to monitor, assess, and evaluate it. Well-designed evaluation of professional learning provides information needed to increase its quality and effectiveness. Evaluation of professional learning also provides useful information for those who advocate for professional learning; those responsible for engaging in, planning, facilitating, or supporting professional learning; and those who want to know about the contribution of professional learning to student achievement.

Internal and external evaluators conduct evaluations of professional learning. Some professional learning, such as programs funded through grants or other special funding, requires formal, external evaluations. Whether or not an external evaluation is required, all professional learning should be evaluated on an ongoing basis for its effectiveness and results. For example, a school system might engage in a rigorous evaluation of its mentoring and induction program every three years and collect other output data annually for formative assessment.

Questions that guide the evaluation of professional learning address its worth, merit, and effects. Evaluation questions are designed based on the goals of professional learning and the various audiences interested in the evaluation. For example, federal policy makers might want to know if the investment in professional learning contributed to changes in student achievement. School system leaders may want to know if increasing time for teacher collaboration and adding coaches result in

changes in teacher practice and student learning. Teachers might want to know if the implementation of new instructional practices increased their effectiveness with certain types of students. Evaluators design a process to answer the evaluation questions, gather quantitative and qualitative data from various sources, analyze and interpret the data, form conclusions, and recommend future actions.

Evaluation of professional learning includes examination of data related to inputs, outputs, and outcomes. Evaluation of professional learning follows a rigorous process, international standards for evaluation, and a code of ethics for evaluators.

RELATED RESEARCH

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NOTES