CORE FUNCTION	EFFECTIVE PRACTICE	INDICATOR
Dimsension D	Planning and Operational Effectiveness	The district supports a comprehensive assessment structure that includes implementation of common standards-aligned assessments and frameworks for collaboration and data analysis surrounding these common assessments. (7031)

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; Trujillo, 2013). While concerns for generalizability for this research have been expressed in the literature (e.g., see Anderson & Young, 2018b), several characteristics have received strong, consistent support across a variety of studies, and are presumed to be important across a variety of district contexts (Leithwood & Azah, 2016). Effective districts provide coherent instructional guidance to schools in part by implementing comprehensive assessment systems and processes that include common, standards-aligned assessment tools (Leithwood & McCullough, 2016), and by creating collaborative structures that allow for educator interpretation of these data for planning instructional improvements (Anderson & Young, 2018a). Districts and states have begun taking ownership and responsibility for assessment systems, as the Every Student Succeeds Act (ESSA) granted flexibility to design systems that meet local needs (Sigman & Mancuso, 2017). This brief will review evidence-based practice in the areas of implementing standards-aligned common assessments within comprehensive assessment structures, and the use of collaborative frameworks for school staff data analysis using results from these common assessments.

District Support for Comprehensive Assessment Structures and Standards-Aligned Common Measures

High-quality, comprehensive assessment structures within school districts provide evidence to assist practitioners and policy-makers with informed decision making to support student learning. However, multiple forms of evidence will need to be captured at different system levels, from the classroom to the district/state (Sigman & Mancuso, 2017). Comprehensive assessment structures include assessment measures that are: (see: Hart et al., 2015; CSAI, 2015 for additional detail)

- **Worth taking**: Consider the purpose of the assessment. Is it aligned to district and state learning standards or benchmarks, and not redundant with other assessment measures?
- **High-quality**: Is the measure sound technically, with established validity and reliability? Do results provide actionable information about students' knowledge and skills?
- **Time-limited**: How much time are students spending at each grade/subject area in testing-related activities? Are students spending too much time engaging in test preparation strategies that are "drill and kill?"
- **Fair and equitable**: Do all learners have equitable access to tests that measure their skill and knowledge in valid ways? Are adequate accessibility features and accommodations for English learners and students with disabilities included in assessment structures?

- **Fully transparent**: Do stakeholders know about the testing plan and the rationale for major assessments? Has the district communicated each test's purpose, the source of the testing requirement, when results will be provided, how the results will be used by school personnel, and how parents can use the information to help their child?
- **Tied to improved learning**: Does the district's assessment structure include measures with outcomes that inform and guide additional teaching, supports, or interventions to help students master content?
- **Just one of multiple measures of learning**: Does the district rely on one or two assessments as the sole factors in making educational decisions about students? What other additional sources such as class projects, attendance data, portfolios, etc., are used by educators for decision making?

Several types of assessment are commonly used by districts within their comprehensive assessment structures (Sigman & Mancuso, 2017):

1. **Formative**: Assessments that are used by teachers and students during instruction for purposes of providing feedback to modify ongoing teaching and learning to improve academic outcomes. Formative assessments provide detailed, fine-grained, and up-to-the minute information about student learning to inform real-time teaching and learning. Formative feedback has been shown to be a powerful contributor to student learning (Hattie & Zierer, 2019).
2. **Diagnostic**: Assessments generally used when students experience learning difficulties to assist with determining strengths and needs. Diagnostic assessment typically requires administration by specifically trained education personnel.
3. **Interim/Benchmark**: Assessments typically used to determine what students have learned in relation to mid-term (or other time-frame) goals and/or to predict student performance on summative assessments that measure mastery of learning standards at the end of the year. Interim/benchmark assessments can serve as an early warning signal to identify students who need targeted assistance before falling further behind, and can inform decision-making regarding curricular adjustments and needed professional learning.
4. **Summative**: Assessments that convey students' achievement of academic content standards following longer periods of instruction (e.g., final exams or state end-of-grade assessment). Results are commonly used for accountability, policy and program decisions, resource allocation, and professional development priorities.

Districts should strive for balance among assessments, and not overemphasize one type of testing over another. Considerations such as the cost-benefit and value of each assessment versus the testing burden, and consensus building among all stakeholders to establish buy-in are critically important (Sigman & Mancuso, 2017). Assessments also should be aligned, both with each other so that measures assess learning along a continuum from fine-grained, formative measures to end-of-year summative measures, and to learning standards that convey what students should know and be able to do. As the Center on Standards and Assessment Implementation (2018) notes:

> Through the administration of assessments that are carefully aligned to standards and curriculum, educators are able to gain an understanding of how student learning is progressing. Like curriculum, assessments must be aligned to content and to grade-specific standards, in order to assess whether or not a student has gained the knowledge, skills, and abilities described in the standards. It is important to note that if curriculum is aligned to standards, and if assessments are aligned to standards, then the assessments—not only large-scale summative assessments, but also classroom formative assessment and any other assessments that may be administered—must also be aligned to the curriculum. This comprehensive alignment ensures that educators will be able to gather information related to the specific area(s) of the curriculum that students are engaging with.

Collaborative Frameworks for Data Analysis of Common Assessments

Data-based decision making in schools generally has received positive research support in the literature in terms of improving student achievement (Carlson et al., 2011; Poortman & Schildkamp, 2016). However, many schools struggle with implementing data use effectively (Mandinach & Gummer, 2013). For example, often educators use data cycles which can be lengthy, complex and time consuming (Pham & Rabbitt, 2019). As noted previously, effective school districts "provide schools with relevant data, assist them in using it effectively, and create collaborative structures and opportunities for the interpretation of data" (Anderson & Young, 2018b, p. 4). Evidence-based leadership practices include providing training for educators on assessment literacy and the use of data to inform decision-making along with coaching and support for implementation (e.g., Data Quality Campaign, 2014; The Learning Accelerator, n.d.), modeling evidence-based decision-making to school staffs, ensuring adequate dedicated time for data analysis, and encouraging collaboration in the interpretation and uses of data (Leithwood, 2013; The Learning Accelerator, n.d.). Research has also consistently demonstrated that a collaborative school culture, with educators working together in teams, is linked to higher levels of student achievement (DuFour, 2011; Hitt & Tucker, 2016), and a key role of these teams is analyzing student learning data for instructional planning (Ronfeldt et al., 2015; Schildkamp et al., 2019; Wayman & Stringfield, 2006).

District leaders must take the lead to ensure that every school has the supports in place to analyze the results of common assessments with collaborative structures. Districts are recommended to: (see The Learning Accelerator, n.d.)

1. **Help school leaders establish dedicated time for data analysis and collaboration**. Protected time "should be built into schedules in various ways throughout the day and year (e.g., during daily planning blocks, weekly staff meetings, regular in-service staff days, or through additional blocks and days for teacher planning." District leaders should assist school leaders in thinking through questions such as how to rearrange schedules to allow for planning time, who should be present and what is needed to optimize team collaboration, and how to schedule data time/activities based on needs, such as when influxes of data arrive from common assessments.
2. **Encourage the use of data inquiry cycles that structure data analysis**. District and school leaders should guide educators through data collection stages, organization, analysis, and action phases that make up data inquiry cycles which help structure assessment processes. These cycles may be: *daily or weekly* (e.g., use of formative assessments and ongoing progress monitoring to determine daily instructional shifts that may be needed as well as individual student interventions); *every 3-5 weeks in unit of study cycles* to plan for reteaching and to tweak plans for upcoming units based on summative assessment data; *every 6-8 weeks based on data from interim/benchmark assessments* to inform changes to the pace of learning and interventions needed; and, in *term cycles (end of a semester or school year)* using summative data to reflect on instructional design and effectiveness in order to improving teaching practice.
3. **Support educators through coaching structures and team processes**. Coaches can assist educators throughout the data cycle by providing guidance, building educator skills, and providing additional capacity if needed. So that educators can focus on instructional planning, district leaders should streamline the beginning stages of the data collection cycle by ensuring that data are easily accessible and readily translated into insights by coaches or data tools. Professional Learning Communities (PLCs) also can help teachers across a common grade level or subject area to analyze assessment data, engage in instructional planning, and reflect on practice. PLCs can serve as a vehicle to spread the use of effective data practices in schools.

DuFour (2015) suggests that a defining characteristic of PLCs are that they use data to improve student learning. PLCs using data to analyze results from common assessments ask four questions as they review evidence of student learning:

1. **Which students were unable to demonstrate proficiency on this assessment?** For example, teachers in PLCs can review results from exit tickets, classroom tasks, and common assessments, looking beyond just whether a student's answer was correct to the nature of the error so that appropriate intervention can be provided.

2. **Which students are highly proficient and could benefit from extended or accelerated learning?** For example, PLCs can develop common formative assessments and establish time for both intervention and acceleration based on identified individual student needs.
3. **Did one or more colleagues get excellent results in an area where my students struggled?** What can I learn from colleagues to improve my individual teaching? For example, a teacher whose students dramatically outperform others on math problem solving had her students act out problems in small and large groups, a practice that was replicated by colleagues, leading to increased student performance across the school.
4. **Is there an area in which none of us achieved the desired or expected results?** What do we need to learn together as a team to be able to teach this skill/concept more effectively? For example, districts can provide a data-management system that allows every school access to achievement data from other teachers, teams and schools, so that struggling teams can make arrangements to learn from high-performing ones.

Districts should ensure that PLCs or other collaborative teams have the training and supports necessary to engage effectively with data, using "evidence of student learning to inform and improve the professional practice of its members" (DuFour, 2015).

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. What Data are Currently Being Provided?	
Questions to Consider	*Discussion of Data/Responses*
1. What evidence does the district have that its assessment structure is comprehensive to adequately measure student performance at each grade/subject area, easy to implement, equitable, and not a burden to quality instructional time?	
2. What if any evidence is available regarding the quality of assessment measures used and the degree to which they are standards-aligned?	
3. If the district has conducted a Student Assessment Inventory, what did the results show? Note: District leaders may wish to use a tool such as the Student Assessment Inventory for School Districts to evaluate the assessments students are taking.	
What needs can you identify based on the responses?	

I. What Data are Currently Being Provided?	
Questions to Consider	*Discussion of Data/Responses*
4. Do educators feel they have the resources and skills needed to analyze student learning data effectively within collaborative teams?	
What needs can you identify based on the responses?	

II. What Programs, Policies, and Procedures Are Already Being Implemented Regarding Teacher Immediacy? How Well Are They Being Implemented?	
Questions to Consider	*Responses*
1. What training and supports are provided by the district to educators to assist with data analysis in collaborative teams? Evidence of implementation fidelity of these trainings and support?	
2. What does a district review reveal about the breadth, quality and balance of types of assessment used? Does the district ensure that formative, summative, interim/benchmark, and diagnostic assessment are used to inform instruction?	
3. Do all teams use student learning data to guide their planning? If not, why?	
4. How do instructional teams identify and support students who are struggling as well as those that need instructional enhancement?	
5. What if any supports, expertise, and professional development have been provided by the district to help teachers collaborate together effectively to use student learning data?	
6. Do instructional teams analyze multiple types of student data within a continuous cycle to determine what is working and what is not? How frequently is this data examined?	

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?

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?

Begin Date	*End Date*	*Action*	*Monitoring Process/Data Collected*	*Desired Outcome/Need Met?*

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