

***Western States Benchmarking Consortium***

**DATA-DRIVEN DECISION-MAKING**

**Using a Variety of Data Effectively**

**Using Information to Improve Instructional Practice**

**Using Data to Affect Student Performance**

**Relating Investments, Outcomes, & Improvement Strategies**

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## Western States Benchmarking Consortium

# DATA-DRIVEN DECISION-MAKING: Using a Variety of Data Effectively

Impact Question: How effectively do decision-makers use a variety of data to make decisions?

Emergent	Islands	Integrated	Exemplary
<p><b>Relevant Questions &amp; Variables</b> School and program improvement efforts are inconsistently focused. Decision-makers and stakeholders do not understand the relationships between stated goals and variables that influence student learning and school improvement.</p>	<p><b>Relevant Questions &amp; Variables</b> A few schools and programs have focused school improvement efforts. Some attempt is made to link stated goals with variables targeted for improvement and measurement. A limited number of stakeholders understand relationships between goals and variables targeted for improvement efforts.</p>	<p><b>Relevant Questions &amp; Variables</b> Most schools and programs have focused school/program improvement efforts. Some key stakeholders understand relationships between goals and variables targeted for improvement efforts.</p>	<p><b>Relevant Questions &amp; Variables</b> Decision-makers and appropriate stakeholders readily target pertinent variables related to the stated goals of school and program improvement efforts. Improvement efforts are assessed using data from multiple measures of cohort groups across time, not solely anchored to single event demonstrations.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that the measurement and monitoring of key indicators is integrated into the stated goals and improvement efforts of the District.</p>		<p><b>POSSIBLE EVIDENCE:</b>  <span style="color: red;">⇒ <u>District/school/department improvement plans reflect data-driven activities for non-cohort and cohort groups over time</u></span>  <span style="color: blue;">? Multiple success indicators are established for all key district/school functions (PRODUCT)</span>  <span style="color: blue;">? Evidence of shared goals across district, schools, departments and stakeholders (PRODUCT)</span>  <span style="color: blue;">? Report and goal documents are stated in measurable terms (PRODUCT)</span>  <span style="color: blue;">? Reports are comprehensive (cohort, subgroup, program, etc.)</span>  <span style="color: blue;">? Improvement plans employ multiple key district indicators.</span></p>	
<p><b>Measurement Knowledge &amp; Data Analysis</b> There is little or no consistent use of formal tools or methods to gather and consider the meaning of data. There is a tendency to rely on results of one assessment or from one point in time in order to evaluate programmatic needs.</p>	<p><b>Measurement Knowledge &amp; Data Analysis</b> A limited number of sites and departments within the district consistently use formal tools or methods to gather and consider the meaning of data. There is some sporadic use of longitudinal cohort data in efforts to evaluate programmatic needs. However, most evaluation efforts rely on results from the same assessment given to cross-sectional cohorts at different points in time.</p>	<p><b>Measurement Knowledge &amp; Data Analysis</b> Decision-makers from sites and departments within the district consistently use formal tools or methods to gather and consider the meaning of data. There is general understanding and use of longitudinal cohort data in efforts to evaluate programmatic needs.</p>	<p><b>Measurement Knowledge &amp; Data Analysis</b> Decision-makers possess the necessary (measurement knowledge and data analysis) skills to: (1) select/construct valid, reliable data collection tools suited to their stated purposes; (2) use information from multiple measures (and validations) to yield an accurate and reliable picture of the assessed skill or behavior; and (3) select, compile, analyze, and interpret longitudinal cohort data.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that key decision makers have the knowledge/skills to collect, analyze and use different kinds of data for improvement planning?</p>		<p><b>POSSIBLE EVIDENCE:</b>  <span style="color: red;">⇒ <u>Conclusions are validated by other data sources (IMPACT)</u></span>  <span style="color: blue;">? Evidence of systematic training in assessment literacy provided to all decision-makers (PROCESS)</span>  <span style="color: blue;">? School and departments identify and use their own data to augment district (PROCESS/PRODUCT)</span>  <span style="color: blue;">? School/department improvement plans display multiple measures and multiple forms of analysis (PRODUCT)</span></p>	

<p><b>Appropriate Information</b> Decision-makers poorly understand the different types of information needed for different types of decisions. Results often inappropriately address stated purposes (e.g., results from different groups of students at different points in time are used to evaluate student growth.)</p>	<p><b>Appropriate Information</b> Decision-makers in a limited number of sites within the district demonstrate an understanding of different data for different purposes. Throughout the district, there is sporadic and inconsistent evidence of appropriate data use to address stated purposes.</p>	<p><b>Appropriate Information</b> Most decision-makers in the district demonstrate an understanding of different data for different purposes. Multiple sources of data are generally used appropriately and consistently to address stated purposes.</p>	<p><b>Appropriate Information</b> Decision-makers understand and distinguish between the different types of information needed for: (1) instructional decisions; (2) policy/planning decisions; and (3) evaluations of school effectiveness and student learning. Multiple sources of data are consistently used appropriately to address stated purposes.</p>
<p><b>GUIDING QUESTION:</b></p> <ul style="list-style-type: none"> <li>· What is the evidence that appropriate data are collected when making key decisions?</li> <li>· What is the evidence that appropriate decisions are made from the data collected?</li> </ul>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>? Goals at different levels of the organization use appropriate data as measures (PRODUCT)</li> <li>? Multiple data sources are effectively employed for critical functions (goals, program evaluation, student promotion, textbook adoption, etc.) and are appropriate (PROCESS)</li> <li>· Type of data reflect types of goals, outcomes</li> </ul>	
<p><b>Communication</b> Communication about measurement activities and results is minimal and inconsistent. No attempt is made to tailor reports for multiple user groups.</p>	<p><b>Communication</b> A limited number of sites and departments within the district provide customization of reports for selected audiences. Throughout the district, demonstrations of these behaviors are sporadic and inconsistent.</p>	<p><b>Communication</b> Most sites and departments within the district provide customization of reports for most audiences and purposes. Throughout the district, demonstrations of these behaviors are generally consistent and tailored to the needs of the audience.</p>	<p><b>Communication</b> Decision-makers communicate measurement decisions, procedures, and results in a manner that is both timely and appropriate to the unique needs of each audience.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that decision-makers communicate with stakeholders about data?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>? Customized reports for different stakeholder audiences (PRODUCT)</li> <li>? School/departments have own assessment plan and reporting schedule (PRODUCT/PROCESS)</li> <li>? Customer satisfaction survey (PRODUCT)</li> </ul>	
<p><b>Data Use</b> Decisions about student instruction and program implementation are based on movement through curriculum, past practice, or novelty rather than on quality data collection activities and research. As a result, interventions and programs are often poor prescriptions for the current challenge.</p>	<p><b>Data Use</b> Some schools and departments use quality longitudinal data collection activities and results of research to impact the choice of student intervention and program improvement activities. Application of results for improvement efforts is inconsistent.</p>	<p><b>Data Use</b> Most schools and departments use quality longitudinal data collection activities and results of research to impact the choice of student intervention and program improvement activities. Application of results for improvement efforts is generally consistent.</p>	<p><b>Data Use</b> Decision-makers and appropriate stakeholders routinely employ the results of quality longitudinal data collection activities and research to: (1) select logically consistent instructional interventions and activities with students; and (2) identify and select high quality improvement programs.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that improvement initiatives have been accomplished and validated over time based upon data-driven decision-making?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>⇒ Record of decisions and/or conclusions based on data analysis (IMPACT)</li> <li>· Tracking/analyzing innovations data over time (PROCESS/PRODUCT)</li> <li>· Meeting notices, agendas, minutes reflect data use (PRODUCT)</li> <li>· A collection of evidence of successfully accomplished initiatives</li> <li>· A Collection of evidence of attempted initiatives</li> </ul>	

<p><b>Institutional Plan for Data Use</b> The district has no consistent, documented plan or set of guidelines for the skilled and effective use of data.</p>	<p><b>Institutional Plan for Data Use</b> The district has a documented plan or set of guidelines for the skilled and effective use of data. However, the plan is not consistently implemented across the district.</p>	<p><b>Institutional Plan for Data Use</b> The district has a documented plan or set of guidelines for the skilled and effective use of data. The plan is generally implemented consistently across the district, but updated infrequently.</p>	<p><b>Institutional Plan for Data Use</b> The district has a clear, consistent, documented plan or set of guidelines for the skilled effective use of data that addresses all of the behavioral indicators above. Such plans are reviewed as needed and revised with careful consideration for the continuity of evaluation of data over time.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that the district assessment plan, policy or guidelines are aligned with appropriate use of data?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· Review processes are employed to align with goals</li> <li>? Comprehensive assessment plan/beliefs about the appropriate use of data (PRODUCT)</li> <li>? Evidence that plan/beliefs are used to evaluate decisions (PROCESS)</li> <li>? Practices are consistent with plan (PROCESS)</li> <li>? Assessment plan/practice aligns with Board Policy (PRODUCT/PROCESS)</li> </ul>	
<p><b>Professional Development</b> District staffs have no ready or consistent access to data resources, collection and analysis tools, education on data use, or professional assistance.</p>	<p><b>Professional Development</b> Some key district staffs have access to data resources, as well as collection and analysis tools. Limited professional assistance is available for education on data use. Schools have limited access to data resources and professional assistance.</p>	<p><b>Professional Development</b> Most district and school staffs have access to data resources, as well as collection and analysis tools. Some professional assistance is available for education on data use.</p>	<p><b>Professional Development</b> District and school staffs have ready access to data resources, collection and analysis tools, education on data use, and professional assistance. A structured plan for continuous knowledge and skill building in staff understanding and use of data is implemented on an ongoing basis.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that staff have ready access to relevant data and the skills necessary to effectively use them?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· Staff have goals that employ data</li> <li>? Staff development plan/goals include assessment literacy (PRODUCT)</li> <li>? Staff survey regarding access and training (PRODUCT)</li> <li>? Comprehensive data distribution/sharing system (PROCESS)</li> </ul>	
<p><b>Data Use in Professional Development</b> Data use is not an element of supervision, personnel evaluation, reward and promotion, or hiring of new staff.</p>	<p><b>Data Use in Professional Development</b> Data use is evident in the supervision and personnel evaluation systems, but not in the hiring process or in the promotion or reward system.</p>	<p><b>Data Use in Professional Development</b> Data use is evident in supervision, personnel evaluation, and hiring systems, but not in the promotion or reward structure.</p>	<p><b>Data Use in Professional Development</b> The use of data to make informed decisions is a required element of supervision, personnel evaluation, reward, promotion, and hiring.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that the District integrates data use skills into staff development and evaluation?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>⇒ Personnel evaluations reflect data use/literacy (IMPACT)</li> <li>? Staff development goals provide adequate access to training for data use (PRODUCT)</li> <li>? Staff surveys/feedback collect data regarding professional development needs in data use (PRODUCT/PROCESS)</li> <li>? Professional standards for teachers and administrators include data use skills/knowledge (PRODUCT)</li> </ul>	

## Western States Benchmarking Consortium

# DATA-DRIVEN DECISION-MAKING: Using Information to Improve Instructional Practice

**Impact Question:** How has student learning improved as a result of data-driven instructional practices?

Emergent	Islands	Integrated	Exemplary
<p><b>Program Evaluation &amp; Planning</b> Curriculum and instruction is often based on textbook approaches or perceptions instead of on student performance data. As a result, curriculum and instruction focus more on what is to be taught than what is to be learned.</p>	<p><b>Program Evaluation &amp; Planning</b> Some schools have launched formal improvement efforts, using profiles of student performance as the focal point. Pilot schools are beginning to network and share strategies for more effective use of data in instructional improvement.</p>	<p><b>Program Evaluation &amp; Planning</b> The district evaluates school plans based on their alignment with data and “best practices” research. School and district improvement plans demonstrate a “continuous progress” perspective.</p>	<p><b>Program Evaluation &amp; Planning</b> A rich array of data directly influences all planning for curriculum and instruction at teacher, school-wide, and district levels. Such planning is heavily influenced both by current research and multiple sources of student performance data across time.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that continuous improvement planning is regularly guided and supported by a rich array of data sources?</i></p>		<p><b>POSSIBLE EVIDENCE:</b>                      ↪ <b>Wide variety of data sources about student learning results is used. (IMPACT)</b>                      • Study teams regularly review research (PROCESS)                      • Systematic feedback to schools/departments regarding goals and improvement plans (PROCESS)                      • All employees have goals, critical indicators and improvement plans (PRODUCT)                      • School/department goals are based upon measurable changes in critical success indicators (PROCESS)</p>	
<p><b>Assessment Strategies</b> Standardized achievement testing occurs, but without a long-range plan. Use of test results is limited.</p>	<p><b>Assessment Strategies</b> Staff across the district debate the value of using achievement data to direct school improvement. Staff request more ambitious training in assessment for instructional improvement. Staff share examples of techniques for more “authentic” assessments (e.g. portfolios, performance assessments imbedded in daily instruction.)</p>	<p><b>Assessment Strategies</b> Most schools use multiple assessment measures that are well aligned with student learning standards. Assessment of student progress is an organized annual event at all grade levels.</p>	<p><b>Assessment Strategies</b> All schools use multiple assessment measures that are well aligned with student learning standards. Student learning is assessed on a continuous basis and is embedded into instructional practice.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that assessment plans are aligned and integrated with the full range of learning expectations for students and with on-going classroom instruction?</i></p>		<p><b>POSSIBLE EVIDENCE:</b>                      • Classroom assessment plans that align with school/goals (PRODUCT)                      • Classroom assessment practices are integrated into instructional activities                      • School assessment plans that align with district/goals (PRODUCT)                      • Plans reflect multiple measures and periodic and on-going data collection/analysis (PRODUCT)</p>	
<p><b>System Progress Reporting</b> No formalized performance monitoring checkpoints exist for teachers, schools, or the district.</p>	<p><b>System Progress Reporting</b> Pilot efforts involve systematic monitoring of the effects of school improvement efforts.</p>	<p><b>System Progress Reporting</b> Schools and the central office follow a formal schedule for progress reporting in which data are aggregated to classroom/school/district levels. Data are also disaggregated by various student factors.</p>	<p><b>System Progress Reporting</b> Formal performance checkpoints are used at classroom, school, and district levels throughout the year. There is pervasive evidence that improvement efforts are tied directly to the use of progress reports over time.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that there is regular, formalized performance monitoring checkpoints at all levels?</i></p>		<p><b>POSSIBLE EVIDENCE:</b>                      ↪ <b>Reports of learning progress for individual and aggregated groups (IMPACT)</b>                      • Annual assessment plans (PRODUCT)                      • Clearly articulated checkpoints/targets (PRODUCT/PROCESS)                      • Agendas/minutes reflect data and measurable change (PRODUCT)                      • A variety of appropriate assessment tools deployed (PROCESS)</p>	

<p><b>Data for Personalization</b> The instructional approach is “one size fits all,” with underperforming and accelerated students “pulled out.” As a result, there is little or no integration between remedial, accelerated and ongoing instruction. The concept of personalized instruction for all students is foreign.</p>	<p><b>Data for Personalization</b> Some schools provide examples of new approaches to accelerated or extended learning that are driven directly by examination of data.</p>	<p><b>Data for Personalization</b> Evidence shows that most enhancements in accelerated and extended learning programs flow directly from examinations of performance data.</p>	<p><b>Data for Personalization</b> Teachers routinely use imbedded performance data to personalize learning for all students. Instructional targets are continuously refined using applied performance measures, while striving to attain benchmarked standards.</p>
<p><b>GUIDING QUESTION:</b></p> <ul style="list-style-type: none"> <li>· <i>What is the evidence that data are used to personalize learning for all students?</i></li> <li>· <i>What is the evidence that the measures and measurement data include assessment of applied performance as well as attainment of benchmarked standards?</i></li> </ul>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>⇒ <i>Individual learning plans based on performance data (IMPACT)</i></li> <li>· <i>Selective use of assessments based on performance levels (PROCESS)</i></li> <li>· <i>Established entry/exit criteria based upon performance measures (PROCESS)</i></li> <li>· <i>Professional goals and evaluations address performance data (PROCESS/PRODUCT)</i></li> </ul>	
<p><b>Profiling &amp; Monitoring Student Performance</b> The district has not organized a formal student performance database. As a result, schools are left to their own devices to track performance over time. Teachers have great difficulty in determining the performance level of students who move from school to school. Traditional grade-based report cards provide parents with information on student progress.</p>	<p><b>Profiling &amp; Monitoring Student Performance</b> The student performance database is still non-existent, but more people are demanding that it be designed and implemented to improve curriculum and instruction. Schools are struggling with the inadequacy of the performance information base regarding timeliness, validity, reliability, and comprehensiveness. The formal report card is still grade-based and remains the primary mode of communication with parents regarding student progress.</p>	<p><b>Profiling &amp; Monitoring Student Performance</b> The district provides a profile of student performance for each school. All schools use these profiles to set annual and longer range improvement targets. Student progress reporting is based on a continuum of progress in achieving well-defined content and performance standards. More schools are providing parents with specific suggestions regarding techniques for family reinforcement of these standards.</p>	<p><b>Profiling &amp; Monitoring Student Performance</b> Data are aggregated/disaggregated to classroom/school/district levels to determine necessary improvements in instructional practice. Heavy evidence of reliance on student performance data from multiple sources exists. The system maintains a performance profile for every student, integrating all information about the student’s performance over time. Parents receive continuous (frequent) progress reports of growth on the standards continuum, accompanied by suggestions for home reinforcement.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that student performance information allows monitoring of individual student and identified student groups’ learning over time?</i></p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>⇒ <i>Aggregated/disaggregated reports of student performance over time (IMPACT)</i></li> <li>· <i>Multiple measures of key points (PRODUCT)</i></li> <li>· <i>Individual student performance profile or assessment information over multiple years (PRODUCT)</i></li> <li>· <i>Distribution of student profile/assessment information to parents (PROCESS)</i></li> <li>· <i>Immediate access to profile/assessment updates (PROCESS)</i></li> <li>· <i>Calendars reflect continuous data collection and reporting (PRODUCT)</i></li> </ul>	
<p><b>INFRASTRUCTURE and RESOURCES</b></p>			
<p><b>Alignment Between Data Systems &amp; Standards</b> The data systems that exist are not integrated, nor are they aligned with the student learning standards.</p>	<p><b>Alignment Between Data Systems &amp; Standards</b> While standards for student learning have been adopted, the data systems have not yet been aligned with the standards. Work is underway to accomplish this.</p>	<p><b>Alignment Between Data Systems &amp; Standards</b> The student reporting system has been revamped to report students’ progress on the standards continuum. However, other data are not integrated with above.</p>	<p><b>Alignment Between Data Systems &amp; Standards</b> Data systems are integrated and aligned with student learning standards. Additionally, they are supported by a common relational data warehouse structure.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that the data system supports the monitoring of student learning standards?</i></p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· <i>Standards-based reporting system (PRODUCT)</i></li> <li>· <i>Relational data warehouse or data management system (PRODUCT)</i></li> </ul>	

<p><b>Staff Evaluation Policies</b> Staff evaluation policies focus on teacher behaviors, many of which are not instructional in nature. The policies define the evaluation form that should be used, but are silent on the purpose of staff evaluation.</p>	<p><b>Staff Evaluation Policies</b> Flexibility in staff evaluation processes exists. Alternative approaches piloted include peer coaching, teacher portfolios, and methods for documenting evidence of effective use of data in making instructional decisions.</p>	<p><b>Staff Evaluation Policies</b> Staff evaluation shifts focus to priority expectations for the staff's skillful use of student data to improve student performance. Comprehensive staff development supports this endeavor.</p>	<p><b>Staff Evaluation Policies</b> District policy establishes "skillful and effective use of data about student performance" as a priority evaluation criterion. Policy also establishes "use of information from research in making instructional improvements" as a criterion in the evaluation system.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that the skillful use of student performance data is incorporated in district policies?</i></p>		<p><b>POSSIBLE EVIDENCE:</b> · <i>Policy exists that stipulates skillful use of student performance data</i></p>	
<p><b>Instructional Improvement Policy</b> District policy statements about curriculum and instruction focus heavily on requirements for materials acquisition processes rather than learning expectations.</p>	<p><b>Instructional Improvement Policy</b> As a result of pilot school improvement efforts, the board and central office are heavily engaged in work sessions and discussions regarding the need to revamp policy and practice to improve the use of data for instructional improvement.</p>	<p><b>Instructional Improvement Policy</b> Major policy revisions have been made to establish a clear "continuous improvement" philosophy for strategic improvement (e.g., standards, developmental levels, annual targets.)</p>	<p><b>Instructional Improvement Policy</b> Formal district policy establishes critical checkpoints throughout the school year to use data to determine needs for instructional improvement and progress toward established performance standards.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that district policies establish and support continuous improvement processes that include critical checkpoints throughout the year?</i></p>		<p><b>POSSIBLE EVIDENCE:</b> · <i>Policies/procedures specify measures, checkpoints and expectations (PRODUCT)</i> · <i>Reports reflect progress in relation to expectations (PRODUCT)</i></p>	
<p><b>Communicating Results</b> Communication is often reactive to negative stories in the press.</p>	<p><b>Communicating Results</b> Discussions at the district and school levels focus on how data can be used to impact student performance.</p>	<p><b>Communicating Results</b> The district shares information with the community, holding frequent parent meetings to address strategies for improving student learning.</p>	<p><b>Communicating Results</b> Regularly scheduled board progress reports and community forums address results and use of data to improve instruction, with information presented from multiple sources and (several perspectives) disaggregated for diverse populations</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that the district communicates student improvement data reflecting the various student groups and multiple points of view to district staff and community?</i></p>		<p><b>POSSIBLE EVIDENCE:</b> · <i>Reports tailored to key stakeholder groups (PRODUCT)</i> · <i>Board reports – ongoing (PRODUCT)</i> · <i>Schedule/minutes of public forums (PRODUCT)</i> · <i>Press releases – continual (PRODUCT)</i></p>	
<p><b>Professional &amp; Community Development</b> Virtually no training is provided in skillful use of student performance data for instructional improvement. Policy debates address inequities in resources for "slow" and "gifted and talented" learners, but do not address the need for a systemic approach to personalized instruction.</p>	<p><b>Professional &amp; Community Development</b> The district is searching for expertise to aid in the design of improved professional development. Some district support is provided to network the pilot schools involved in using student profiles with other schools to expand the practice.</p>	<p><b>Professional &amp; Community Development</b> The district has launched a vigorous program of professional development and parent education aimed at improved understanding of student performance data.</p>	<p><b>Professional &amp; Community Development</b> The staff and community are engaged in frequent and ongoing education regarding the interpretation and use of student performance data, including disaggregation of multiple sources of data to reflect unique student population progress to well articulated performance standards.</p>
<p><b>GUIDING QUESTION:</b> <i>What is the evidence that the district educates staff and community in the skillful use of student performance data?</i></p>		<p><b>POSSIBLE EVIDENCE:</b> · <i>Trainings and attendance for key stakeholder groups (agendas, fliers, minutes) (PRODUCT)</i> · <i>Surveys of stakeholder groups (PRODUCT)</i></p>	

Consider narrowing this indicator to community, only.

## Western States Benchmarking Consortium

# DATA-DRIVEN DECISION-MAKING: Using Data to Affect Student Performance

**Impact Question:** How is the current data collection and analysis process organized and utilized to maximize student achievement gains?

Emergent	Islands	Integrated	Exemplary
<p><b>Belief About the Importance of Data</b> Few demonstrate an understanding of the importance of data and how to use it to direct instruction and student learning.</p>	<p><b>Belief About the Importance of Data</b> The prevalent belief among administrative staff is that data should be used to inform instruction and improve student learning. However, this belief is inconsistently applied.</p>	<p><b>Belief About the Importance of Data</b> Staff members believe that data should guide instruction and be used to improve student learning. However, other stakeholders inconsistently support this practice.</p>	<p><b>Belief About the Importance of Data</b> For appropriate stakeholders, there is a pervasive belief that effective use of student performance data impacts instructional practice and improves student learning.</p>
<p><b>GUIDING QUESTION:</b> What evidence indicates that stakeholders believe the effective use of achievement data will improve student learning?</p>		<p><b>POSSIBLE EVIDENCE:</b>                      ? Stakeholder surveys regarding use of data (PRODUCT)                      ? Professional standards for teachers include use of data and assessment to inform instruction (PRODUCT)                      ? Use of data in department goals and school improvement plans (PROCESS)                      ? Professional development plans and budget include training on data use/analysis (PROCESS)                      ? Annual reports to the public, school board reflect data-driven behaviors (PRODUCT)</p>	
<p><b>Participation in Data Use</b> Few stakeholders engage in the process of data collection or analysis. Little communication takes place regarding the importance of student performance data results.</p>	<p><b>Participation in Data Use</b> Administrative staff members typically engage in only a portion of data collection, analysis, or the communication process, leaving others to perform these functions in isolation.</p>	<p><b>Participation in Data Use</b> All staff members engage in data collection, analysis, and discussion of the results in an effort to promote continuous improvement. Some staff members make a conscious effort to include students in the analysis and use of data to improve student learning. Other key stakeholders inconsistently participate in this practice.</p>	<p><b>Participation in Data Use</b> Student performance data are continuously and routinely collected, analyzed, and discussed by all. Other stakeholders have ready access to and routinely use these data to support learning improvement.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that staff are engaged in the collection, analysis and use of data?</p>		<p><b>POSSIBLE EVIDENCE:</b>                      ⇨ Stakeholder survey (IMPACT)                      ? School and district plans describe data analysis procedures (PRODUCT)                      ? Calendars and schedules of data collection, analysis and reporting are year round (PROCESS)                      · District Assessment Plan/schedule (PRODUCT)                      ? School and District planning documents define success in terms of student learning gains (PRODUCT)                      ? Responsibility for data analysis, collection and reporting is decentralized. (PROCESS)                      ? Evidence of continuous data collection (PRODUCT)</p>	

<p><b>Reliance on Student Performance Data</b> Performance data are seldom used to guide critical interventions and supports for student learning.</p>	<p><b>Reliance on Student Performance Data</b> Administrative staff members consistently rely on student performance data to attain system goals. Other stakeholders inconsistently rely on data to direct efforts to improve student learning.</p>	<p><b>Reliance on Student Performance Data</b> All staff members rely on student performance data to measure improvements in learning. Other stakeholders inconsistently rely on data to direct their efforts to improve student learning.</p>	<p><b>Reliance on Student Performance Data</b> Appropriate stakeholders throughout the organization and community are informed and depend on the use of valid and reliable performance data to guide their activities in support of appropriate student learning.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that there is pervasive data use by all stakeholders?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· <i>Formal requests for student performance data</i></li> <li>· <i>Individual and group goals reflect the use of data</i></li> <li>· <i>Stakeholder survey</i></li> <li>? <i>Publications inform specific stakeholder group activities (PRODUCT)</i></li> <li>? <i>Meeting agendas include student achievement data analysis as part of decision-making (PROCESS)</i></li> <li>? <i>Evidence of validity and reliability studies on key data (PRODUCT)</i></li> <li>? <i>Decisions can be tracked back to key data (IMPACT)</i></li> </ul>	
<p><b>Continuous Improvement</b> Data are not used to support an organizational model of continuous improvement. Rather, they are used to periodically benchmark performance with little regard for student improvement over time.</p>	<p><b>Continuous Improvement</b> Some components of a continuous improvement model are in place, such as high expectations with frequent review and analysis of data.</p>	<p><b>Continuous Improvement</b> All components of a continuous improvement model are in place, but not all staff in the organization consistently support/practice its application.</p>	<p><b>Continuous Improvement</b> The organization engages in continuous improvement by setting high student performance benchmarks and gauging student progress over time through the use of multiple measures.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that high student performance expectations are in place and multiple measures are used to gauge student progress?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>⇨ <i>Decisions can be tracked back to key data (IMPACT)</i></li> <li>? <i>Goals stated in measurable terms (PRODUCT)</i></li> <li>? <i>Systems are well defined and employ feedback loops (PROCESS)</i></li> <li>? <i>Goals and performance indicators employ multiple measures (PROCESS)</i></li> <li>? <i>Correlations of district benchmarks with state/national norms validate high achievement and expectations (PROCESS)</i></li> <li>? <i>Cohort analysis (PRODUCT)</i></li> <li>· <i>Improvement activities are driven by on-going data collection and analysis</i></li> <li>· <i>Policies/procedures set specific measurable performance expectations (PROCESS)</i></li> </ul>	
<p><b>System Support</b> Board policy may specify that educational practice be governed by data-based decision-making. However, the necessary systems and training are not in place to ensure implementation.</p>	<p><b>System Support</b> Board policy specifies that educational practice be governed by data-based decision-making. Systems are in place but poorly integrated, often due to inadequate allocation OF either human or electronic resources.</p>	<p><b>System Support</b> Board policy specifies that educational practice be governed by data-based decision-making. infrastructure support systems are in place and integrated.</p>	<p><b>System Support</b> Both human and electronic support systems provide for effective data collection, ubiquitous and informed use of data, and <b>(support)</b> application throughout the organization.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that data collection, analysis and support systems effectively support the work of the organization?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>? <i>Staff/stakeholder surveys</i></li> <li>? <i>Procedures for decision-making are clearly defined and employ data (PROCESS)</i></li> </ul>	

<p><b>System Development</b> The district has a high-maintenance, legacy system. Data are not readily accessible and cannot be easily aggregated/disaggregated on important marker variables.</p>	<p><b>System Development</b> The district has a legacy system. Certain data are readily accessible through Web applications. Available data can be aggregated/disaggregated on important market variables.</p>	<p><b>System Development</b> The district has a legacy system. Mission critical data are accessible via the Web. Data files are relational and allow flexible end-user query. Available data can be aggregated/disaggregated on important marker variables.</p>	<p><b>System Development</b> The system is designed with systemic use in mind; it is easy to use, easy to manage, and readily accessible to vested stakeholders. Data accurately reflect the work of students and education professionals. All available data can be aggregated/disaggregated by marker variables related to important program outcomes and critical interventions.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that the data collection and analysis system is easy to use, easy to manage and readily available to stakeholders?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· <i>Comprehensive data management/delivery system deployed (PROCESS/PRODUCT)</i></li> <li>· <i>Customer surveys (PROCESS)</i></li> <li>· <i>Evidence of feedback and continual improvement of data management system (PROCESS AND PRODUCT)</i></li> </ul>	
<p><b>Data Types</b> Data are gathered primarily for annual administrative/board reports. As such, they are not appropriate or readily available to guide classroom activities. Data elements target process accountability and do not readily lend themselves to analyses of student achievement accountability.</p>	<p><b>Data Types</b> Administrative data are augmented by selected classroom performance data. These data are not sufficiently integrated to allow for real-time analysis. Certain routinely gathered data elements are targeted for student achievement accountability.</p>	<p><b>Data Types</b> Data are from multiple sources and of multiple types and are gathered at multiple times during the year. Certain data are available for real-time access and analysis.</p>	<p><b>Data Types</b> The system is designed to harvest different types of data on a continuous basis, providing real-time analyses that can affect decisions at different levels of the organization. Student data include continuously harvested authentic performance assessments as well as externally referenced standardized measures.</p>
<p><b>GUIDING QUESTION:</b> What evidence indicates that a variety of data types are continuously collected to serve the critical information needs of the organization?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>? <i>Comprehensive Assessment Plan employs a variety of data types (PRODUCT)</i></li> <li>? <i>Decision-making practices require multiple measures (PROCESS)</i></li> <li>? <i>District/school goals employ multiple measures (PRODUCT)</i></li> <li>? <i>Some data sources are collected continuously and are immediately available (PROCESS)</i></li> <li>? <i>Individual student performance profiles are up-to-date (PRODUCT)</i></li> </ul>	
<p><b>Data Over Time</b> Longitudinal data are not available to measure progress over time. Follow-up data on graduate/"leaver" populations are not available.</p>	<p><b>Data Over Time</b> Longitudinal data are not available to measure progress over time. Follow-up data on graduate/"leaver" populations are periodically available. Analysis tools to address external validation of exit outcomes are not available.</p>	<p><b>Data Over Time</b> Longitudinal data are not consistently available to measure progress over time. Follow-up data on graduate/"leaver" populations are available. Analysis tools to readily address exit student outcomes (e.g., employer surveys, drop-out studies, post-secondary education follow-up studies) are being designed.</p>	<p><b>Data Over Time</b> Data sets include longitudinal data to measure progress over time. The system includes regularly harvested follow-up data on graduate/"leaver" populations and analysis tools to address external validation of exit outcomes.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that quality longitudinal data are readily available?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>↔ <i>Individual student achievement shows growth over time (IMPACT)</i></li> <li>? <i>Cohort analysis (PRODUCT)</i></li> <li>? <i>Graduate and post graduate data are harvested and analyzed (PROCESS)</i></li> </ul>	

**Western States Benchmarking Consortium**

**DATA-DRIVEN DECISION-MAKING: Relating Investments, Improvement Strategies & Outcomes**

**Impact Question:** How does the data collection and analysis process relate to investments, improvement strategies and outcomes?

<b>Emergent</b>	<b>Islands</b>	<b>Integrated</b>	<b>Exemplary</b>
<p><b>Cost/Benefit Analysis</b> Decisions are frequently based on opinions, fads, or personal preference instead of data.</p>	<p><b>Cost/Benefit Analysis</b> In key areas, decisions at the highest levels are often based on understandings of cost/benefit.</p>	<p><b>Cost/Benefit Analysis</b> Decisions are usually driven by analysis of relationships between investments, outcomes, and improvement strategies. This most frequently occurs at the administrative level.</p>	<p><b>Cost/Benefit Analysis</b> All organizational decisions are informed by a relationship between investment, appropriate outcome measures, and necessary improvement strategies. These relationships are comprehensive in scope and specifically address identified and emerging needs with consideration for other efforts and investments.</p>
<p><b>GUIDING QUESTION:</b> How are organizational decisions made, supported and justified based upon the relationships between investments, outcomes and improvement strategies?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· Evidence of cost:benefit analyses (PRODUCT)</li> <li>· Relationship between decision and critical success indicators (PROCESS)</li> <li>· Zero-based budget process/document (PRODUCT)</li> <li>· Improvement decisions result from cost:benefit analysis. (PROCESS/PRODUCT)</li> </ul>	
<p><b>Data-Informed Decisions</b> Data collected are often insufficiently connected to key outcomes to inform critical decisions and are not maintained over time.</p>	<p><b>Data-Informed Decisions</b> Data are connected to key outcomes to inform decisions at certain levels, with some data maintained over time.</p>	<p><b>Data-Informed Decisions</b> Data are warehoused and analyzed across areas and over time. Data are connected to key outcomes to inform decisions at all levels.</p>	<p><b>Data-Informed Decisions</b> Data needs are clearly articulated and provided for in all stages of planning, design, (and) implementation and outcome evaluation.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that data needs are identified and provided for all stages of improvement projects?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>⇒ Clear definition, communication and use of mission critical data throughout implementation (IMPACT)</li> <li>· Access to mission critical data (PROCESS)</li> <li>· Performance charts/flow charts that reflect data utilization of initiatives/pilots (PRODUCT)</li> <li>· Budget allocations based upon needs/goals/priorities</li> </ul>	

<p><b>Integration of Data Systems</b> Analyses are performed within, but not across areas. The organization's data management system consists of a collection of separate flat file systems that are poorly integrated and inflexible, with data accessible to only a few users.</p>	<p><b>Integration of Data Systems</b> Data are collected in mission critical areas on separate systems that are not designed to interface. Some elements are reconstructed in a separate database to allow analyses across certain key variables. The organization's data management system consists of separate legacy flat file systems. A separate limited data warehouse is constructed to allow for relational analysis in some key areas.</p>	<p><b>Integration of Data Systems</b> Data are collected in mission critical areas on integrated systems that are designed to interface at all levels. The organization's data management system consists of an integrated, open, relational file structure across most mission critical applications – including fiscal, human resource and student information systems.</p>	<p><b>Integration of Data Systems</b> Analysis may also include assessment of organizational impact, fiscal impact, community impact, goal attainment, and relationships to other initiatives. The data management system provides district linkages and relationships between organizational and data entities including business, human resources, facilities, student services, student information, assessment, and curriculum.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that the data management system facilitates access to and analysis of all organizational data between and among departments?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· Availability of wide access</li> <li>· Report of customer survey data (PRODUCT)</li> <li>· Integrated relational data management system (PROCESS)</li> </ul>	
<p><b>Policy &amp; Procedure</b> The organization has not adopted policy or articulated a process to assure that critical decisions are supported by analysis of the relationship between relevant outcome and cost data.</p>	<p><b>Policy &amp; Procedure</b> The organization has adopted policy, but not articulated a process to assure that critical decisions are supported by analysis of the relationship between relevant outcome and cost data.</p>	<p><b>Policy &amp; Procedure</b> The organization has adopted policy and articulated a process to assure that decisions at the administrative level are supported by analysis of the relationship between relevant outcome and cost data.</p>	<p><b>Policy &amp; Procedure</b> Data-driven decision-making processes and policy are in place at all levels of the organization.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that policy requires that decisions be supported by analysis of cost and outcomes?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· Policies/procedures regarding continuous improvement and use of data (PRODUCT)</li> <li>· Evidence that policy/procedure applied at all levels of the organization (PROCESS)</li> <li>· Employee survey data (PRODUCT)</li> </ul>	
<p><b>Professional Development</b> No structured plan exists to systematically require, fund, and deliver training to staff regarding the effective use of outcome/cost data.</p>	<p><b>Professional Development</b> No structured plan exists to systematically require, fund and deliver training to staff regarding the effective use of outcome/cost data. Staff members are generally aware of the relationships between outcomes and associated costs.</p>	<p><b>Professional Development</b> A structured plan systematically requires, funds and delivers training to administrative staff regarding the effective use of outcome/cost data.</p>	<p><b>Professional Development</b> All appropriate staff members are trained and can make effective use of data for decision-making. An implemented plan systematically acquires funds and delivers training to all staff regarding the effective use of cost/benefit data.</p>
<p><b>GUIDING QUESTION:</b> What is the evidence that the organization ensure that all appropriate staff can use cost:benefit analysis when making decisions?</p>		<p><b>POSSIBLE EVIDENCE:</b></p> <ul style="list-style-type: none"> <li>· Articulated skills continuum for each job description (PRODUCT)</li> <li>· Record of employee training over time (PRODUCT)</li> <li>· Personal growth plans that address data use skills (PRODUCT)</li> <li>· Employee survey data</li> </ul>	

<p><b>Ease of Access &amp; Use of Data</b>  Disparate systems suffer from a significant delay between the organization's daily activity and data updating, often due to a dependency on paper document recording and transfer. The system is intensely labor-dependent, frequently requiring substantial re-keying of data and cross-checking to verify accuracy across systems. Data are not available or may be archived separately in a structure that makes them accessible only through the investment of significant staff time.</p>	<p><b>Ease of Access &amp; Use of Data</b>  Systems require intensive labor due to redundant data entry and verification. Substantial paper documentation continues to create information delays, and data are not easily accessible.</p>	<p><b>Ease of Access &amp; Use of Data</b>  The system is flexible, and data are accessible to all staff. Data are entered once and populate all mission critical applications instantly. Paper-based applications are not necessary to harvest system data.</p>	<p><b>Ease of Access &amp; Use of Data</b>  Sophisticated aggregation and disaggregation of data, analysis of multiple criteria, ease of use, universal access, and flexibility characterize the system. Data structures are designed for ongoing development across organizational entities.</p>
<p><b><i>GUIDING QUESTION:</i></b>  <b>What is the evidence that data management systems are designed to assure flexible, easy input, output and use of data?</b></p>		<p><b><i>POSSIBLE EVIDENCE:</i></b></p> <ul style="list-style-type: none"> <li>· <i>Surveys of data users (PRODUCT)</i></li> <li>· <i>Evidence of user feedback and continuous improvement (PROCESS/PRODUCT)</i></li> <li>· <i>Multiple ways to access data (PRODUCT)</i></li> <li>· <i>Data warehouse design (PROCESS/PRODUCT)</i></li> </ul>	