Data-Driven Decision Making for District and School Level Data Teams

INTRODUCTION

The SANBORN REGIONAL SCHOOL DISTRICT has adopted and implemented a standards and competency based accountability system to accelerate the learning of all students and to close the achievement gap in the district. The following are key components of the district's initiative to support the use of Data-Driven Decision Making:

- Data-Driven Decision Making: Ongoing review of student data by district leaders, building leaders and teachers to determine strengths and areas in need of improvement at the district and school level.
- Data Teams: Ongoing analysis of data from common formative assessments to identify strengths and weaknesses in student learning, and to identify instructional strategies that will best address student and learning objectives in the classroom.
- Engaging Classroom Assessments: Aligning district and school expectations to state standards by developing classroom-based instruction and assessments to improve student performance.
- Effective Teaching Strategies: Applying the nine research-based effective instructional categories identified in the Art and Science of Teaching (Marzano et al. 2001)and to develop lesson plans that best meet student needs.
- Improving School Climate: Collectively, administrators, teachers, para-professionals and other school staff are provided with both a context and concrete direction enabling them to gain the understanding necessary to collect appropriate data, create school climate improvement plans and implement them in their respective schools.
- Scientific Research- Based Interventions: A Re-teach & Enrich Period; a process used to determine if and how students respond to instruction and social-emotional learning. Re-teach & Enrich Period provides a framework for school teams for designing, implementing, and evaluating educational interventions in a timely manner.
- Professional Learning Community: a collaborative model for teachers to work collectively to address student learning. The PLC model provides the foundation for the data-driven decision-making process and answers the questions identified by Dufour (2004). What is it we want ALL students to know? How will we know if and when they've learned it? How will we respond when students don't learn? How will we enrich and extend the learning for students who are already proficient?

This guide provides an overview of the SANBORN REGIONAL SCHOOL DISTRICT strategies for improvement and is available to provide support in the implementation of the data-driven decisions making process.

DATA DRIVEN DECISION MAKING: DISTRICT AND SCHOOL

Data Driven Decision Making is an essential process that should be used as the basis for all district and school decisions to improve student achievement. The process generally begins with a collaborative analysis of what Douglas Reeves calls "effect" or "Student Outcome Indicators" (Reeves 2004). Effect data are system wide indicators that are required by federal and state statutes. These data points apply to every school in a district and may, for example, include state test scores, attendance figures and dropout rates.

While it is important to know where the students in your district are, it is equally important to know how they got there. Accordingly, the **Data Driven Decision Making** process not only analyzes effect data, but also analyzes "High Leverage Adult Actions" or "cause" data. High Leverage Adult Actions are measurable practices that reflect the decisions of the adults in the school. Some examples of High Leverage Adult Actions that Reeves provides are: the number of times a month teachers convene in data team meetings; the percentage of assessments that are collaboratively scored; or the time devoted to nonfiction writing. By analyzing the relationship between Student Outcome Indicators and High Leverage Adult Actions, districts and schools can determine which practices yield the greatest improvements in student performance (Reeves 2004).

Data Driven Decision Making can be used to investigate the following essential questions:

- Are all students learning?
- What do you expect students to know and be able to do by the end of the year?
- Do you know why you are getting the results you currently have?
- What practices do you want to continue, replicate or eliminate?

Data Driven Decision Making is a six-step ongoing process that should be used at the school and district level. The six steps are:

1. Find the data: conduct a "Treasure Hunt." Find three years of trend data and matched cohort data that includes such things as student achievement, discipline, expulsion, etc.
2. Analyze the data to prioritize needs: identify your strengths or needs.
3. Establish SMART goals: identify your most important objectives for student achievement based on the challenges your school. team identified through analyzing the data and the determination of your prioritized needs analysis.
4. Select specific strategies: for each goal, brainstorm the strategies that could be implemented to increase the likelihood of achieving that prioritized goal.
5. Determine results indicators: results indicators identify whether the strategy is actually being implemented. If the strategy is having the intended effect on student learning and improved performance, determine a results indicator for each of your targeted strategies. If needed for clarification, review the results indicators on the action plan example.
6. Monitor and evaluate results: to assist with engagement of the continuous improvement cycle that identifies midcourse connections where needed and adjusts strategies to assure fidelity of implementation.

WHAT IS DATA?

Data is more than just numbers and test scores. Data includes any information that helps us learn about learning. Data can include:

- district student achievement
- state assessment performance
- school assessments
- graduation or promotion requirements
- content-area and grade-level requirements
- perceptions
- behavior
- attendance
- benchmarks

It is important when analyzing data to consider not only the Student Outcome Indicator (effect data), such as student achievement results, but also the High Leverage Adult Actions (cause variables), such as adult behaviors and indicators in teaching, curriculum, leadership, behavioral strategies and other factors that influence student achievement (Reeves 2004). We need to create as much data, or more, about the actions of adults as we have about students.

Examples of Student Outcome Indicators	Examples of High Leverage Adult Actions
• District student achievement • State assessment performance • Graduation or promotion requirements • Content-area and grade-level requirements	• Percentage of assessments scored collaboratively by classroom teachers with specific criteria • Percentage of time spent with small group instruction • Percentage of disciplinary actions that result in out-of-school suspension • Percentage of homework that is devoted to writing in the content area • Percentage of teachers

DATA-DRIVEN DECISION MAKING PROCESS

Process	Sample Questions/Steps	Tools/Resources
Step 1: Conduct a Treasure Hunt	• What trends, strengths and/or areas of concern do you find in the last three years of your Student Outcome Data? • How do students perform from one year to the next (cohort) and over time? • What percentages of students are meeting state standards? Has this changed? How? • Do gaps exist among subgroups (ethnicity, socioeconomic status, special education and English language learners (ELL)? • Do gender gaps exist? • What relationship, if any, exists in performance across content areas?	State, district and school achievement data Other data (e.g., atten-dance, behavior, suspen-sion, expul-sion, supple-mental service, etc.) District data technology tools PLC Data Template
Step 2: Analyze Data to Prioritize Needs	• What areas should be celebrated and what adult actions contributed to the per-formance? • Which areas have the greatest potential for growth? • Which areas are of most urgent need? • What curriculum, instruction or assessment realities may be contributing to data results? • What school practices (remediation, before/after school intervention, etc.) influ-ence the data results? • What is the root cause of data results?	Root Cause Fishbone District data technology tools PLC Data Organizer PLC Data Analysis
Step 3: Establish SMART Goals	• Specific targeted subject area, grade level and student population • Measurement instrument to be used and the element examined must be measur-able • Achievable percentage gains or increased in terms of expected change • Relevant subject areas - is the goal tending to an urgent need? • Time when the assessment will take place as well as timely in terms of identified need • Current reality or baseline data point if available	PLC Prioritize Needs Analysis Organizer
Step 4: Select Specific Strategies	• For each goal, brainstorm the strategies that could be implemented to increase the likelihood of achieving that prioritized goal. • Each strategy should be specific and measurable/accountable. • Strategies are action-oriented. They are what the teacher, school team/ department will do. • Strategies might consider and include classroom assessment practice, classroom instruction, prioritizing the curriculum, resources, staff development opportuni-ties, instructional flexibil-ity, parental support and program changes. • List of strategies in order of priority. • Identify the previous or current strategies that have been most successful in reach-ing student achievement goals. • When developing strategies to support prioritized goals, consider identifying those practices and activities that should be discontinued to increase the focus necessary to implement the most effective strategies. • SMART goal example: percentage of Grade 7 students scoring at proficiency or higher will increase from 56 percent to 66 percent by the end of the 2011-12 school year as measured by the district required mathematics assessment admin-istered in June 2012.	SMART goal format * Specific Measurable Achievable Realistic Timely District/school improve-ment plan
Step 5: Determine Results Indicators	• What results indicators can we gather and analyze on a regular basis throughout the year to determine if the strate-gies are increasing student performance? • Each strategy should contain one or more results indicators that identify: • whether the strategy is actually being implemented as designed; and • if it is being implemented as designed, is it having the desired effect on student learning?	
Step 6: Monitor and Evaluate Results	Review your work from developing questions to determining results indicators then determine how will you monitor the strategies. When you create your monitoring plan consider: teacher or administrator teams, strategies, monitoring cycles, impact on student and adult behavior, goals, ability to make midcourse corrections	