

Creating Important Conversations in Schools: Models for Data Dialogues

CSDC

September 2008

Chris Bryan

lcrsbryan@msn.com

Cindy Harrison

Harrison.cindy@gmail.com

Creating Important Conversations in Schools: Models for Data Dialogues

Essential Questions:

- ✓ How do I create a culture for data conversations that are focused on inquiry??
- ✓ What is the process for building learning teams that use data to make decisions?
- ✓ What are the different types of data conversations
- ✓ What is the role of the coach and the role of the building administrator in data conversations?
- ✓ What are the steps of the data analysis process?
- ✓ What are tools I can use with teachers as they engage in data conversations?
- ✓ How do I facilitate data conversations?
- ✓ How do I provide structures for teachers to use data to make instructional decisions?

Examining Our Assumptions about the Data Process

Assumption 1: Making significant progress in improving student learning and closing achievement gaps is a moral responsibility and a real possibility in a relatively short amount of time-two to five years. It is not children's poverty or race or ethnic background that stands in the way of achievement it is school practice and policies and the beliefs that underlie them that pose the biggest obstacles.

Assumption 2: Data have no meaning. Meaning is imposed through interpretation. Frames of reference, the way we see the world, influence the meaning we derive from data. Effective data users become aware and critically examine their frames of reference and assumptions (Wellman & Lipton, 2004, pp. ix-xi). Conversely, data themselves can also be a catalyst to questioning assumptions and changing practices based on new ways of thinking.

Assumption 3: Collaborative inquiry- a process where teachers construct their understanding of student-learning problems and invent and test out solutions together through rigorous and frequent use of data and reflective dialogue- unleashes the resourcefulness and creativity to continuously improve instruction and student learning.

Assumption 4: A school culture characterized by collective responsibility for student learning, commitment to equity, and trust is the foundation for collaborative inquiry. In the absence of such a culture, schools may be unable to respond effectively to the data they have.

Assumption 5: Using data itself does not improve teaching. Improved teaching comes about when teachers implement sound teaching practices grounded in cultural proficiency- understanding and respect for their students' cultures- and a thorough understanding of the subject matter and how to teach it, including understanding student thinking and ways of making content accessible to all students.

Love N. *The Data Coach's Guide to Improving Learning for all Students*, 2008

Process for Using Data to Drive Decision Making

- **Create a culture of inquiry**
- **Build learning teams focused on data**
 - Identify school wide leadership and department/grade level learning teams
- **Ensure learning teams utilize a data analysis process**

Creating the Culture

Necessary Cultural Shifts

<i>Shifting From:</i>	<i>Shifting To:</i>
A focus on teaching	A focus on learning
Teaching in isolation	Teaching as collaborative practice
Data dialogues as an option	Data dialogues as an understood requirement
Accountability	Responsibility
A culture of blame	A culture of inquiry

Discussion about the use of data “is not intended to blame anyone; instead it is aimed at understanding a system that avoids using precise information that can guide and inform better practice. Goal-setting that uses data to monitor progress can be a threatening endeavor. Preparation and ongoing training have often failed to provide staff with the ability or confidence to believe they can succeed. This insecurity hampers every teacher and administrator including our most talented and industrious ones. (Mike Schmoker, 1999.)

Schools that operate as professional learning communities use formative assessments on a frequent basis to ask, “Are students learning, and what steps must we take to address the needs of those who have not learned?”

Sample Norms

- Focus on what the data tells us.
- Ask the hard questions about the meaning of the data.
- Focus on what to do in the future.
- Refrain from blaming or finding fault.
- Use data to drive the team's decisions.
- Think creatively and comprehensively.
- Listen rather than prepare your response when

current practice

- Consider all possibilities

- Maintain confidentiality

Norms my group needs:

Data is used collaboratively to drive grade level/department/individual goals, professional development and curricular decisions.	5	4	3	2	1
	The staff, based on student learning data, sets goals that address students' learning needs, therefore increasing effective teaching, and increasing successful student learning.		The staff occasionally sets goals based on the student achievement data to make and implement plans to improve teaching and learning.		The staff does not set goals based on student achievement data.
	5	4	3	2	1
	ALL professional development for teachers is based on student achievement data and assessment of staff's current knowledge and skills in the areas of need.		Occasionally, professional development is based on student achievement data.		Professional development is based on what teachers want to learn and student achievement data is not considered.
5	4	3	2	1	
ALL curricular decisions, including pacing guides and essential content standards are driven by student achievement data.		Some curricular decisions are based on student achievement data.		Curricular decisions are not based on student achievement data.	
5	4	3	2	1	
ALL individual teacher goals are based on student achievement data from their own classrooms and grade level goals.		Some individual teacher goals are based on student achievement data from their own classrooms and grade level goals.		No individual teacher goals use student achievement data from their own classrooms and grade level goals.	

Ongoing use of data to monitor and adjust classroom instruction	5	4	3	2	1

	Student learning is assessed on a regular basis (8-9 week intervals at the longest) and used to drive instructional decisions.	Student learning is assessed 2 times a year and sometimes used to drive instructional decisions.	Student learning is assessed at end of year and is not used to drive instructional decisions.		
	5	4	3	2	1

Essential learning outcomes and common assessments are identified. Staff collectively examine common assessments and make adjustments in classroom instruction.	Essential learning outcomes and common assessments are identified. There is no collective examination of assessments. (Each teacher individually assesses student learning.	There is no identification of essential learning outcomes or common assessments.			
	5	4	3	2	1

Staff regularly look at student work together to adjust instruction appropriately.	Some staff examines and occasionally discusses student work.	Student work is rarely examined or discussed collectively.			

Developed by Cindy Harrison, Instructional Improvement Group.

A Framework for Looking at Data Conversations

As teachers and leaders are well aware, schools and districts across the country have invested enormous amounts of money and energy in creating data management systems so that teachers can access information about their students' performance. With these systems in place, the focus now needs to move to the structures and allocation of time that will allow teachers to engage in data conversations about student achievement and its implications for classroom planning and instruction. Such time and structures will ensure that the necessary conditions are in place for data to be used to impact student achievement.

Below and in the table on p. X, we summarize a framework that outlines a variety of types of data conversations. For each type of data conversation, we define the purpose, identify possible data sources, recommend frequency, possible foci of the conversation, and identify who should be involved.

Effective data conversations share several common characteristics, whether at the school, grade, department, or team level. Characteristics include:

- Teams need to do an analysis of the current state of student achievement and create SMART goals for student learning.
- Practitioners who can take action and monitor student learning should be the core participants in team conversations.
- Members of the data conversation should agree that the data they are examining is a good measure of student learning.
- The data used in these conversations can be from national or state tests or common assessments.
- Teams need a facilitator who keeps the conversation focused on teaching and learning, asks the hard questions, and ensures the group moves to action.
- Teams need a recorder who assists in making sure all members of the group leave with the same understanding of the discussion and next steps.

Data Conversations

Type: School Improvement Team Conversations

Purpose: Create and monitor a school wide implementation plan for continuous improvement by analyzing student /school data trends.

Possible Data Sources: Student achievement (formative and summative) assessments including disaggregation by subgroups, demographic trends, and perception/survey

Frequency: Quarterly or trimester data reviews

Possible Foci: The school improvement team analyzes and interprets data so that the whole school understands how the school is currently functioning; this is sometimes referred to as the brutal reality (Collins, J. 2001, Good to Great). These conversations include setting goals in areas identified for improvement, examining best practices to be used school wide, and identifying benchmarks to measure growth in student achievement as well as levels of implementation of the identified practice. Moving beyond using the practices to assessment of the impact of the practices assists the team in identifying where they need to make adjustments.

Who should be involved: A representative team of parents, teachers, students and administrators.

School example: Cooper Elementary School found that they were in the bottom quartile in math for the past three years. Although the school had been implementing the Investigations Math curriculum during that time, levels of implementation of the curriculum varied in individual classrooms. To assess whether the new curriculum was making a difference in math achievement the team needed to collect data and assess the level of implementation first., The team asked each staff member to complete an Innovation Configuration Map at the beginning, middle, and end of the year .In addition, a set of “Look Fors” guided the principal during her walk-throughs and was also used by instructional coaches when they worked with individuals or teams of teachers to co-plan. In order to assess gaps in implementation and teacher knowledge and skills, all of the data was examined by the school improvement team to decide on necessary allocations of resources to move the school forward.

Type: Teacher-Supervisor Conversation and Teacher–Coach/Mentor Conversation

There are two types of conversations that might occur here. Conversations between teachers and supervisors tend to be evaluative while those between teachers and coaches/mentors are usually conducted in a non evaluative manner .

Purpose: Identify trends in the achievement of students over time in an individual teacher’s classroom.

Possible Data Sources: State tests, common assessments, district benchmarks.

Frequency: One-two times a year for administrator-teacher and up to once a week with teacher-coach/mentor.

Possible foci of conversations: Reflection on the growth in student learning (individual, sub groups, and whole group), identification of strategies to implement, and identification of growth areas for the teacher could all be part of the discussions. These conversations often focus on the performance of teacher’s past students as well as present students and help to identify areas of high success and areas of weakness. Participants may discuss programs and classroom practices to identify and solve problems rather than to assign blame for results. These conversations can focus on data over time and can also include conversation around the teacher’s current students and their needs. The growth of students is the focus rather than current proficiency of students so that teachers consider end points and also look at the growth of individual students.

Who should be involved: Individual teacher and building level administrator or coach.

School example: Felicia, a middle-school social studies teacher, has been teaching for more than 20 years; in the last two years the social studies department has been focused on literacy in the content area. In her data conversation with the principal at the beginning of the year, she noted that the English Language Learners were not making much progress in writing or reading in her classroom. Felicia identified this as an area for growth on her improvement plan. She and her principal then looked at her current students and identified some strategies to implement with the ELL students. They agreed to meet again in three months and look at growth in writing through the examination of writing samples from the beginning of the year and three months later.

Type: Department/Grade Level Conversation Focused on the Individual Student

Purpose: Identify next steps, interventions, and necessary focus areas for additional student learning.

Possible Data Sources: Achievement and readiness data such as state, district or common assessments.

Frequency: Once a week to every six weeks.

Possible Foci: Teams agree on and administer assessments to gain information about their students in relationship to the school improvement plan. They create class profiles that identify strengths and weaknesses of individual students in a variety of areas which can then be used to differentiate instruction, provide interventions, and focus classroom instruction. Frequent progress monitoring

ensures that the makeup of the student groups remains flexible. The team identifies strategies and allows enough time to determine the student's responsiveness to the strategy.

The grade level/department team follows a problem-solving model that includes:

1. Analyze data and reach agreement on areas of need
2. Group students by strengths and areas of need, identifying similarities and differences between classrooms
3. Research/examine best practices
4. Develop grade-level/department action plans
5. Implement the plan
6. Evaluate and revise the plan based on student growth data

Who Should be Involved: Grade level or department teams.

School example: In September, an eighth-grade core team at Villa Nova Middle School administered their pre-assessment and noticed that they had a large group of students who scored low in vocabulary. They decided to address this need through grouping students for scaffolded instruction across classrooms, pre-teaching unit vocabulary, assigning students to after school intervention groups and monitoring progress through common unit assessments. After each of the structures was implemented, the eighth grade team discussed student growth and identified next steps for individuals and groups of students.

Department/Grade Level Conversations around Instructional Strategies

Purpose: Engage in deep conversations around teaching and student learning, identifying student successes and challenges and then moving to teaching strategies and approaches that are successful and those that need to be changed.

Possible Data Sources: Common assessments, district benchmarks, individual teacher-created assessments, pacing charts, or examples of actual student work.

Frequency: One or more times a month

Possible Foci of Conversations: Teachers discuss what happened for students in the learning process and what instructional practices made a difference. Sometimes the conversation may focus on success with certain types of students (special education or advanced students) or with levels of student thinking exemplified in the work. Co-planning units including assessments, teaching the units, and then discussing student learning results is a valuable way to structure these discussions. Developing team goals to support the school improvement goals with an identification of teacher learning needs as a focus fits here. Some schools have incorporated the lesson study approach into these data conversations.

Who should be involved: Impacted teachers and instructional coaches, when available. Some schools include the administrators in these discussions, however teachers can be brutally honest about their own strengths and weaknesses when there is no threat of information being used in evaluation. In this case, the role of the administrator is to allocate time and ensure that these sessions focus on the importance of reflecting on student learning and teacher practices.

School example :Jorge, a high school physics teacher, is meeting with four of his peers who teach physics. They look at student results for a unit they co-planned and taught. As they compare results, they notice patterns of high achievement and a high level of growth for students from the pre-test to the final assessment for the classrooms where Jorge was the primary instructor.. He shares strategies he used and the team agrees to incorporate the strategies into their next unit.

Type: Individual Student Goal-Setting Conversations

Purpose: Provide students with an understanding of their current level of achievement in order to set goals with action strategies so that students are actively engaged in the learning process.

Possible Data Sources: Student work, grades, state assessments, common assessments, district benchmarks

Frequency: Beginning of year and after individual units

Possible Foci of Conversations: Students look at their own performance and may compare results to the defined proficiency level and/or other students' performance. This is usually a one –one conversation between teacher and student but could be small-group or whole-class conversation. Teaching students strategies for success is an integral part of this conversation. Often data walls are used to inform and motivate students to reach higher levels of performance. Celebrating success needs to be a part of this practice.

Who should be involved: Classroom teacher and individual student

School example: In Aisha's high school algebra class, students set learning goals based on data. Students take an exam or quiz and then analyze their results on an analysis spreadsheet that includes an action plan. The teacher asks students to write a summary of the learning at the end of each unit. Students identify key math concepts, their areas of strength for the unit, a problem they still struggle with, what they have done to monitor their progress towards proficiency, and what they will do to move themselves further towards proficiency. Mr. Tubman reads each summary and conducts a brief student conference.

You can contact them at Harrison.cindy@gmail.com and lcrsbryan@msn.com

Cindy Harrison is an independent consultant who works with schools and districts across the world. Her work focuses on instructional coaching, teacher leadership, organizational change, school improvement and professional learning communities.

Chris Bryan is an educational consultant . Her work focuses on standards based planning and instruction, school improvement, and instructional coaching.

Types of Data Conversations

Type of Data Dialogue	Data Used	Who is involved	Conversation Topics	Frequency
School improvement team conversations	State Assessments District benchmarks	School improvement team Entire staff	<ul style="list-style-type: none"> • Patterns of student achievement • Needs for school wide programs (instructional, curricular, Professional Development) • Needs for additional knowledge and skills for staff 	2 times a year
Teacher-supervisor conversation Teacher-coach conversation	State Assessments Benchmark exams End of course assessments Classroom assessments Common assessments	Teacher and administrator and/or coach	<ul style="list-style-type: none"> • Growth of students • Overall proficiency of students • Instructional strategies to meet student learning needs 	2 -3 times a year
Department and/or grade-level teams with focus on individual student interventions	Student performance on classroom and common assessments Discipline records Student work	Core teams Grade-level teams	<ul style="list-style-type: none"> • Diagnosis of individual knowledge and skills • Next steps for students • Grouping of students for instruction and intervention • Pyramid of interventions 	Once a month or more often
Department and/or grade-level teams with focus on instructional strategies	State Assessments Benchmark assessments Common assessments Unit assessments	Grade-level or content area groups	<ul style="list-style-type: none"> • Growth of students • Patterns in proficiency • Instructional strategies • Assessment strategies 	Once a week to once every 6-8 weeks
Student goal-setting conversations	Student work Grades State assessments Common assessments Benchmark assessments	Teacher and individual students	<ul style="list-style-type: none"> • Goal setting • Strategies for success • Celebrations of learning 	Once a week to once a month

Harrison, C & Bryan, C. *A Framework for Looking at Data Conversations*, Journal of Staff Development, Fall, 2008. In Press

Data Analysis Process

1. Collect and disaggregate data.
2. Identify patterns in the data- just the facts.
3. Generate theories of causation with assumptions (use fishbone analysis).
4. Write a SMART goal.
5. Examine “best practice” and decide on intervention(s).
6. Implement/measure results/ revise goals and interventions.

Role of Coach and Role of Principal Data Driven Conversations

Principal	Coach
Convenes discussion with coach on process for data driven dialogues.	Participates in discussion on process for data driven dialogues.
Decides on what data will be used for discussion.	Asks for input on data for discussion.
Decides parameters for data dialogues.	Ensures the group operates within given parameters.
May participate in data dialogues with teachers.	Facilitates data dialogues with teachers.
May presents actual data to individual teachers and teams.	Works with individuals and teams to examine and analyze data for needed instruction.
Monitors implementation of instructional decisions and the impacts on student learning.	Models, co-teaches, co-plans lessons with teachers
Observes and debriefs lessons.	Observes and debriefs lessons.
Ensures time is available for team dialogues on data.	Facilitates team dialogues on data.

Guidelines for Data Conversations

- You can have data discussions with the school-wide leadership team or learning teams (grade levels or departments).
- The first data discussion should occur within the first or second month of the school year. In this first conversation, teams set their big goals for the year.
- There needs to be 8-9 week benchmark data discussions. In these discussions, teams discuss specific assessments and student performance on these assessments.
- An administrator or coach can be an active participant in all data discussions.
- Teachers on each team should agree on which data to bring to the discussion.
- Focus should be on actions to take in individual classrooms and the school based on the data.



Include in the Data Conversations. . .

- Conversation about overall student levels of performance.
- Conversation on the performance of students as disaggregated by gender, ethnicity, ELL level, etc.
- Conversation about patterns in individual student growth.
- Conversation on patterns across classrooms and across teachers.
- Discussion about students or groups of students not making growth, interventions that have been used, and possible next steps. Include conversation on successes as well.
- If common assessments are used, there can be discussion of instructional strategies used that resulted in different outcomes.

Questions for Consideration

- What patterns do you notice in the data? Successes? Areas of need?
- What are the patterns in strands or standards across all of the classrooms? Across each of the teacher's classrooms?
- What do you notice about subgroup performance? What differences, if any exist among all the subgroups?
- What instructional strategies or teaching ideas do we have to address areas of need?
- What will each /all of us do to increase the level of student proficiency in the targeted areas?
- When will we assess student learning? What common assessment will we use?

Department/Grade Level Team Goals

Department: _____

Date: _____

Data Examined:

Goal Area	Current State	Desired Outcome/ Smart Goal	Actions and needed resources	Measures of student progress	Timeline

TMS MIDYEAR DATA REPORT

Subject: _____

Staff Members: _____

Please be aware we know this is the first time we are doing this. You may not have written good benchmarks, you may not have assessed the goal you were supposed to, you may find the goal you wrote was not appropriate or able to be measured. We understand that this may happen – this is our first attempt and we are a work in progress. Please fill out the data you have and be able to answer the questions below and explain your answer. Please fill in the data needed to support your SMART goal.

		Class Avg.	Class Avg.				
Class (list if Honors, block, etc)	Period	Pre Test Date _____	Mid –year assessment Date _____	Post Test Date _____	Percentage of growth from pretest to mid- year or post test	Proficiency on dept. essential question – SMART goal	Other
Class (list if Honors, block, etc)	Period	Pre Test Date _____	Mid –year assessment Date _____	Post Test Date _____	Percentage of growth from pretest to mid- year or post test	Proficiency on dept. essential question – SMART goal	Other

Reviewing your data from above – please be able to answer the following questions.

What improvements are you making toward your end-of-year (post-test data) SMART goal?

What are your students' areas of growth and areas of need now?

What data do you have to support/explain whether students are/are not learning? In your discussion, please be able to explain in detail.

What are your next steps? (Do you need to re-evaluate your SMART goal? What is your focus for the remainder of the year?)

**Sierra Vista Middle School
Professional Learning Community
Meeting**

Date: _____

Grade: _____ **Content Area:** _____

Facilitator: _____ **Time Keeper:** _____

Recorder: _____ **Other:** _____

Principles for Collaborative Meeting

Are our behavior and practices consistent with these principles?

- The rigor of the CA standards are reflected in our instructional practice.
- We analyze assessment data and use research on best practices to drive our instruction.
- We reflect on our instructional practice and revise it to improve student performance.
- We intervene when students are not achieving at a proficient level and challenge those students who are.

1. Review Norms: (2 min)

2. Reflections from Previous Meeting's Notes/Minutes (10 min)

a. How did our actions since the last meeting improve instruction?

b. Share ideas and strategies that worked.

c. What evidence supports improvement of student achievement?

3. Today's Meeting Focus (5 min)

4. Share data brought by all members of grade level.

a. What data is being analyzed?

b. Which standards did the students meet or exceed?

c. Which standards should be areas of focus?

5. Brainstorm, List, and Discuss Possible Strategies and Actions (30 min)

a. What strategies did teachers use whose students met or exceeded weak standards?

b. Identify what you will put into place before the next meeting

Action	Resources Needed and People Responsible	Evaluation-How will we evaluate if this is successful?	What do we need to complete and bring to the next meeting?

6. Parking Lot- Any off-topic questions that need to be addressed

(5 min)

**District Writing Assessment (Cause/Effect)
Seventh Grade
May 29, 2007**

Developed by 8th Grade Language Arts Team, Westlake MS

Six trait strengths:

Organization

- Jaime and Anne developed word lists of events and words that might be appropriate for the paper. This gave students strong direction in their writing. Emotionally packed vocabulary provides connotation and tone for the paper.
- Donna and Nick used a common graphic organizer. Students had practiced with this prior to this assessment, and it helped students organize their thoughts.
- This was a structured “academic” paper, so organization was more formulaic.
- Students did a good job restating the prompt in their essay.

Style (word choice and voice):

- Students are creating strong leads, using quotes and rhetorical questions.
- We are seeing a great deal of application from formative practice.
- Many 3’s in this area (proficient).
- The prompt didn’t lend to creativity, so not many advanced in style.

Sentence Fluency:

Formative practice on complex/varied sentence patterns paid off.

- High fives were evident in writing.
- Students used appropriate vocabulary for an academic style.
- Conventions.
- Warm ups and mini lessons, as well as practice in incorporating proper mechanics in writing shows through improved efforts in writing by the students.
- Punctuation practice has a direct correlation to fluency in writing.

Best Practice Instructional Strategies

- This assessment was an **authentic embedded assessment** based upon literature the seventh grade teachers were using at the time. (*Twilight Zone: Monsters on Maple Street*)
- Teacher **modeling**.
- **Modeling** with strong literature.
- Teach students the **rules** before they are allowed to break the rules in writing.
- Teach students how to determine to write in **academic style vs. creative style**.
- **Formative** assessments for this test were instrumental:
 1. Similar practice prompts were used from the Twilight Zone.
 2. All formative practice came from the unit being taught at the time.
 3. The assessment was embedded.
 4. Students practiced with word lists for understanding, tone, and connotation.
 5. Students participated in peer editing.

For next year:

- We would like to learn Robin's peer editing method as a group.
- We would like more time to discuss revision strategies.
- We really need a COMMON conversion method if we are going to apply the 6 point rubric to per cent for IGPRO. All teachers were using a different conversion chart.
- We need to remember to save prompts from the first assessment to show student growth.
- We would like students to do more comparison of their own growth in a portfolio of their work, or at least with the fall and spring assessment.
- We like going off site to grade. It helps focus.
- We would like more time to collaborate, study about, and develop lessons on how to write with voice in an academic piece.

Criteria: Effective Goals

- **S** pecific, Data Driven
- **M** easurable and Observable
 - Answers the questions **who, what, how measured, by when**
- **A** ttainable, Realistic, Focused
- **R** esults Oriented, Focused on Student Achievement
- **T** imebound

The annual goal statements that emerge from school improvement efforts typically have two chronic deficiencies: the proposed activities are rarely linked to student achievement and they seldom challenge the basic elements of established practice.

(Grady McGonagill)

Barriers To Using Data May Include:

- Lack of training
- Lack of time allocated for data dialogues
- Feast or famine
- Fear of using data for teacher evaluation
- Fear of exposure
- Adapting and revising instruction based upon data

Holcomb, E. *Getting Excited About Data*, 2004.