Facilitating Data Dialogues: Strategies for Conversations

Pennsylvania High School Coaching Initiative

May, 2007

Outcomes for Our Time Together

We will explore and learn about:

- *Data literacy skills for engaging others in conversations around information analysis*

- *Strategies to increase use of data by self and others to better understand instructional effectiveness*

- *Processes for having meaningful dialogues about student learning data*

- *Collaborate with colleagues to extend knowledge, skills, and attitudes toward consistently using strategies during and after our session*

Only people who die very young learn all they really need to know in kindergarten. Wendy Kaminer

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The aim is to influence school culture to be one in which educators use data continuously, collaboratively and effectively to improve teaching and learning.

Nancy Love, 2004

Cathy Berlinger-Gustafson

1735 South Shore Drive

Crystal Lake, IL 60014

815-455-3566

815.455.3567 (fax)

cbgustafsn@cs.com

Norms for Our Work Together

- You are in charge of your own comfort needs—move, drink, eat…

- Share with each other. The expertise is in you and your peers.

- Ask if you have a question or use the question board.

- What is learned here leaves here. Apply to own situation.

Relationships are all there is. Margaret Wheatley

Data

- Data-information, especially information organized for analysis or used as the basis for a decision

Tell me what you pay attention to and I will tell you who you are.

Jose Ortega y Gasset

We live in a society that is data rich and information poor. While data are not information, translating fact to understanding means relating data to something you already know and can visualize.

Robert H. Waterman

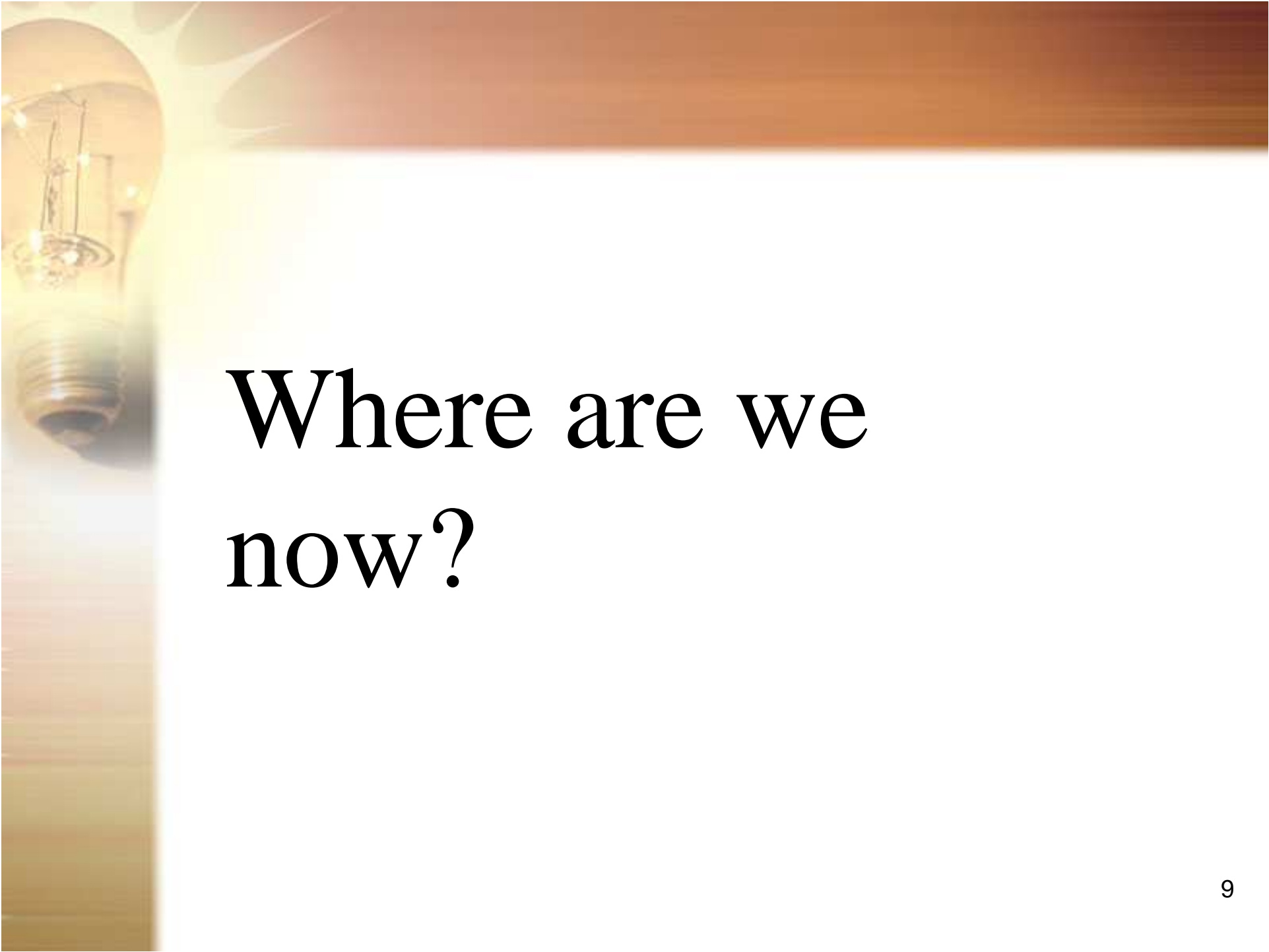None of us is as smart as all of us.

Pogo

My Outcomes

I want to know…

Some questions that I have…

I will share…

This inherent capacity to choose, to develop a new vision for ourselves, to rescript our life, to begin a new habit or let go of an old one, to forgive someone, to apologize, to make a promise and then keep it, in any area of life, is, always has been, and always will be a moment of truth for every true leader.
Stephen Covey

Where are we now?

Please complete "The Use of Data to Drive Instructional Decisions" survey. This questionnaire concerns your perceptions about your school or department's use of data to make instructional decisions. There is no right or wrong response. Please consider where you believe your school or department is in their development of each of the categories. We will use this information tomorrow for conversations.

It is irresponsible for a school to mobilize, initiate, and act without any conscious way of determining whether such expenditure of time and energy is having a desirable effect.

Carl Glickman

Seeking to understand and acting on the best we know creates the essence of professional life.

Bruce Joyce and Emily Calhoun

An organizations' results are determined through webs of human commitments born in webs of human conversations.

Fernando Flores

What nurtures the unfolding community most is serious, active experimentation where people wrestle with crucial strategic and operational issues.

Kaufman and Senge

It is not what people do not know that's the problem. It is what they believe to be universal truths and refuse to reconsider that caused the difficulties.

Martin Bruce

The formulation of a problem is often more essential than its solution, which may be merely a matter of mathematical or experimental skill. To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance.

Albert Einstein

Discussion of Survey Responses

- Divide yourselves into teams of 4-5 people. No two people should be from the same school.

- Each person will share responses to survey for 3-4 minutes. Group members will ask probing questions or share ideas for 1-2 minutes in reaction.

- After sharing results of survey respond to following question "What have you done with looking at and examining the data from your own school or classroom?"

Role of Coach and Principal for Data Driven Dialogues

Principal

- Convenes discussion with coach on process for data driven dialogues
- Decisions on what data will be used for discussion
- Decides parameters for data dialogues
- Participates in data dialogues with teachers
- Presents actual data to individual teachers and teams
- Monitors implementation of instructional decisions and the impact on student learning
- Observes and debriefs lessons
- Ensures time is available for team dialogue on data

Coach

- Participates in discussion on process for data driven dialogues
- Input on data for discussion
- Ensures group operates within given parameters
- Facilitates data dialogues with teachers
- Works with individuals and teams to examine and analyze data for needed instruction
- Models, co-teaches, co-plans lessons with teachers
- Observes and debriefs lessons
- Facilitates team dialogue on data

Coaches Act As:

- Data coaches
- Classroom supporter
- Resource providers
- Mentors
- Learning facilitators
- School leaders
- Instructional specialists
- Curriculum specialists
- Catalysts for change

From *Taking the Lead,*
Joellen Killion and Cindy
Harrison, National Staff
Development Council

Where does *Data Coach* fit into bigger picture of coaching?

Data Coach

Purpose

- Ensure that student learning data is used to drive decisions at the classroom and school level

Responsibilities

- Identify school-wide and grade level/department trends
- Facilitate data dialogues
- Support teachers in using data to improve instruction
- Facilitate data conversations that analyze student learning and identify next steps

Catalyst for Change

Purpose

- To create disequilibrium with the current state as an impetus to explore alternatives to current practice

Responsibilities

- Introduce alternatives or refinements
- Make observations about current practice
- Ask the hard questions about current practices
- Engage teacher in "Evaluation Think"

Process Activity

How does the role of Data Coach connect with what you are already doing? How does this fit with the other instructional strategies that you are having conversations around? How do you see this contributing to improved student learning? What do you need from leadership at your buildings, from other support? Be ready to share. Please have a conversation with colleagues from your building and support personnel.

The central goal of data-drive dialogue is improved student learning. That we talk in our schools is vitally important. How we talk may be as important. Shared understanding emerges from rigorous dialogue about important things. Such dialogue is driven by high-quality data derived from internal and external sources. The data in and of itself has no meaning and leads to no action. Meaning and action result from collective processes and shared commitment to improved student learning

Quote Activity

- Choose a quote that speaks to you—positively, negatively, something that causes you to react. You will gather with others who chose the same quote and share common understandings. Be ready to share with the larger group. This activity relates to the cultural shift needed at schools so that data informs instructional decision making.
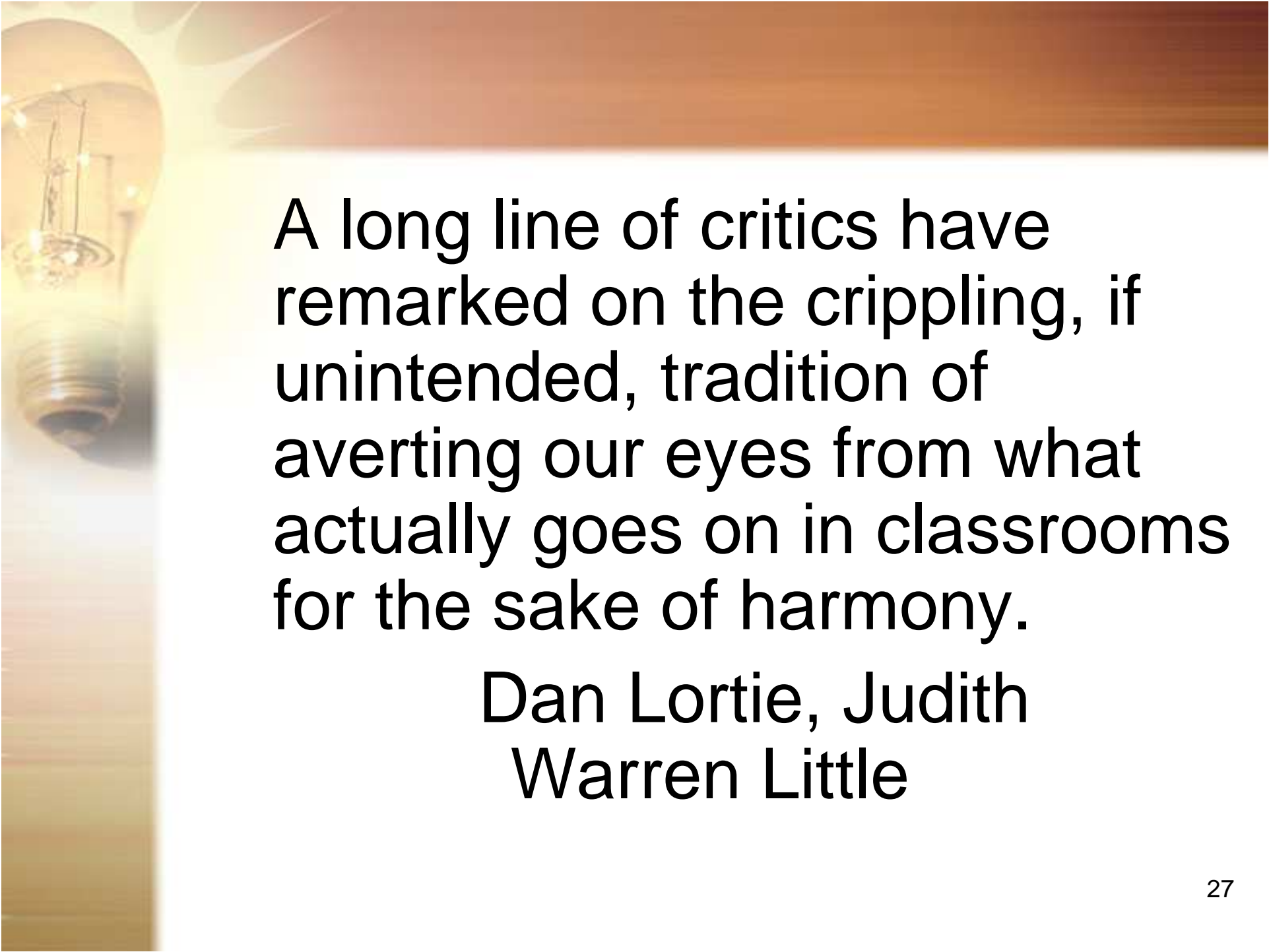
Where this kind of collaborative inquiry has taken hold as part of how a school operates, the atmosphere for teacher commitment and practice shimmers with life and growth. I believe this comes from the difference between having educators at the helm rather than as passengers.

Marjorie Larner

We have an opportunity to blow the lid off school attainment, dramatically and swiftly reduce the achievement gap and enhance the "life chances" of all children, regardless of their economic or social circumstances.

Mike Schmoker, Results Now, 2006

A long line of critics have remarked on the crippling, if unintended, tradition of averting our eyes from what actually goes on in classrooms for the sake of harmony.

Dan Lortie, Judith Warren Little

This culture of privacy and non-interference is the best friend the status quo could ever ask for.

Mike Schmoker, Results Now, 2006

Professionals do not work alone; they work in teams. Professionals begin their preparation in the university but do not arrive in the workplace ready to practice alone. They continue their preparation on the job by working in teams and giving one another ideas and feedback.

Dennis Sparks

Like no other profession we are denied the all important opportunity to study and learn from our actions and our results. Hence instructional decisions get buried in the individual decisions of classroom teachers and buffered from external scrutiny.

Richard Elmore

Even the best research is a slippery beast, of no value whatsoever until we experiment with it, until we find the right way to integrate into a lesson that gets great assessment results. Best practices don't pay off until they have been implemented and fine tuned. Such efforts need to become the norm of experimentation in schools.

Adapted from Bob Eaker, *Professional Learning Communities*
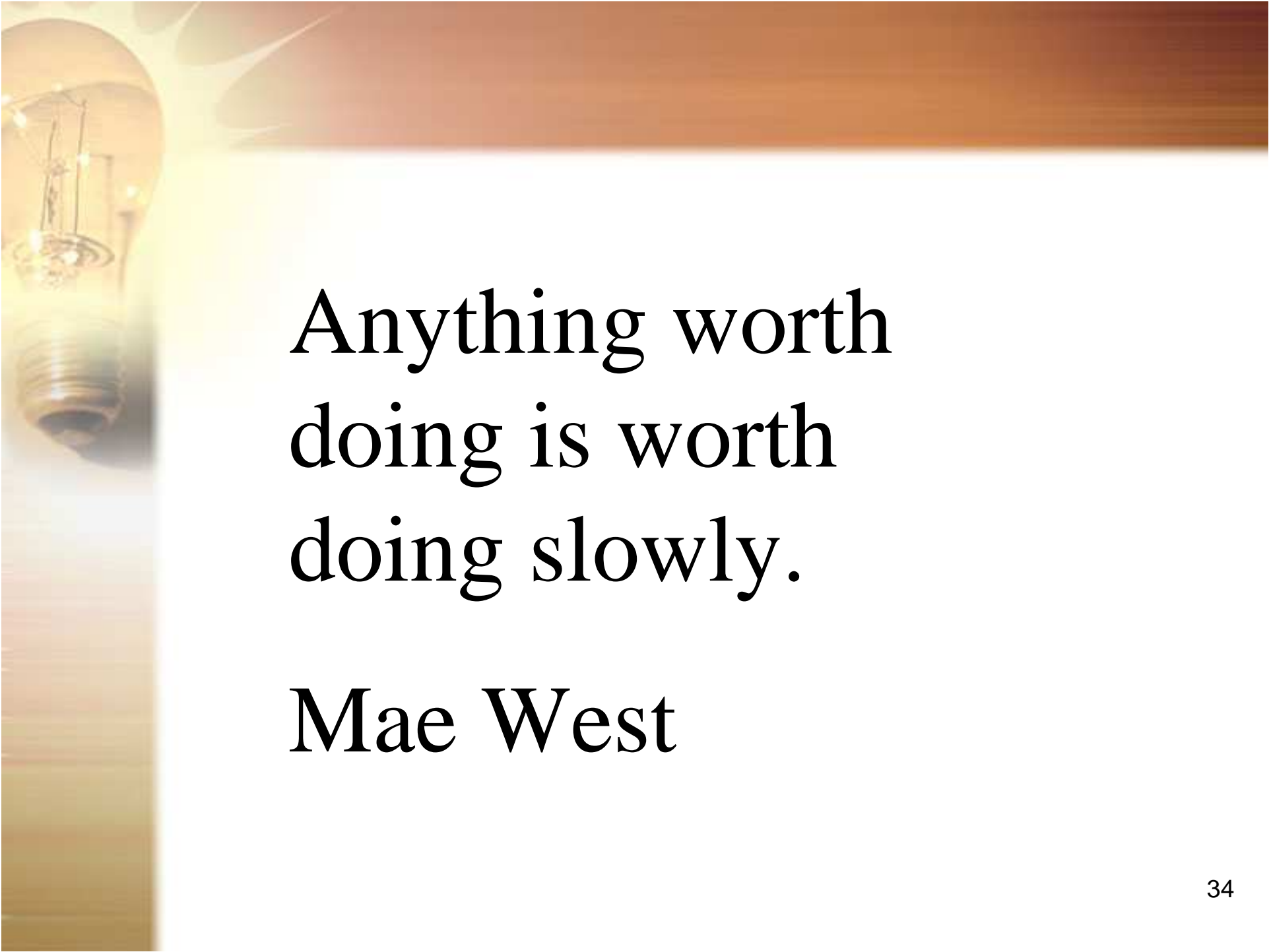
If you can dream it, you can do it.

Walt Disney

I can think of nothing so conspicuously missing in the effort to improve our schools as the continuous engagement of teachers and principals in constructing visions. The Old Testament tells us that people without vision will perish. Without a vision school people will continue to favor whatever action promises to extinguish a fire more quickly— so that they can move on to the next fire.

Roland Barth

Anything worth
doing is worth
doing slowly.

Mae West

The issue is creating multiple discourse communities for education…Keeping the environment reeking with rich ideas, keeping it stoked, keeping learning opportunities in the water supply.

Milbrey McLaughlin

The purpose of staff development is not just to implement isolated instructional innovations; its central purpose is to build strong collaborative work cultures that will develop the long-term capacity for change.

Michael Fullan

The problem with a lot of reformers is that they believe it can be achieved by group sanity.

George Bernard Shaw

People without information cannot act. People with information cannot help but act.

Ken Blanchard

Greater decision making power in an environment that is not saturated with knowledge could be troublesome…The results will be mutual reinforcement of poorly informed habits rather than the creative development of well informed choices.

Judith Warren Little.

Process of Quote Activity

What did the choices in the room tell you about the cultures of the school of the participants? What shifts in thinking and feeling are important for effective data use?

Let go of your attachment to being right, and suddenly your mind is more open. You're able to benefit from the unique viewpoints of others, without being crippled by your own judgment.

Ralph Marston

Norms

- The standards of behavior by which we agree to operate while we are in this situation or team.

Intellectuals solve problems; geniuses prevent them.

Albert Einstein

Examples of Norms for Data Discussions

- Create a focus on instruction
- Reinforce common core curriculum
- Focus on strengths as well as areas of concern
- Emphasize common learning based on standards
- Identify curriculum areas that need attention
- Provide objective indicators of effectiveness
- Promote collaboration
- Set stage for action plans to improve student learning
- Help create an "open mind"

Examples of Norms for Data Discussions

- No judgments
- No blaming
- Focus on what data tells us about current practice
- Focus on problem solving and the future
- Focus on results for students
- Consider all possibilities
- Maintain confidentiality

Examples of Norms for Data Discussions

- Be honest and share what you think and feel.
- It is your responsibility to get your voice in the room.
- Treat one another as equals
- Listen and hear one another's perspectives
- Publicly support all group decisions
- Discussion is on what to do for the future
- Data drives decisions
- When others speak, listen, don't prepare your remarks
- Test assumptions and inferences
- Disagree openly
- One's perspective is one's truth
- Say what you need to here, not in the parking lot
- Speak directly to the person with whom you need to

Activity for Developing Norms

This activity will enable a group to develop a set of operating norms or ground rules.

- Using the examples in the materials think about the categories that could be helpful to you as you as you engage in data conversations. Consider the ideal behaviors that you would like in your coaching conversations around data. What expectations do you have of each other?

- Write your norms on a piece of chart paper. Share the norms with your coaching partners and determine how they will be helpful to your dialogue.

Writing norms helps create groups that are able to have honest discussions that enable everyone to participate, grow and be heard.

This is not easy…

Group discomfort within the context of safety is an important learning resource. Learning develops cognitive structures. As groups make meaning of their experience, they construct structural shifts in perspective. This learning often requires the undoing or reorganizing of earlier conceptions. Dialogue enhances further thinking.

Bruce Wellman

Social and relational trust is a key element in improving schools.

Tony Bryk and Barbara Schneider *Trust in Schools*

Relational Trust

- Relationships among teachers are being held out as important indicators of a school readiness for reform and the ability to sustain it.

Principal Teacher Trust
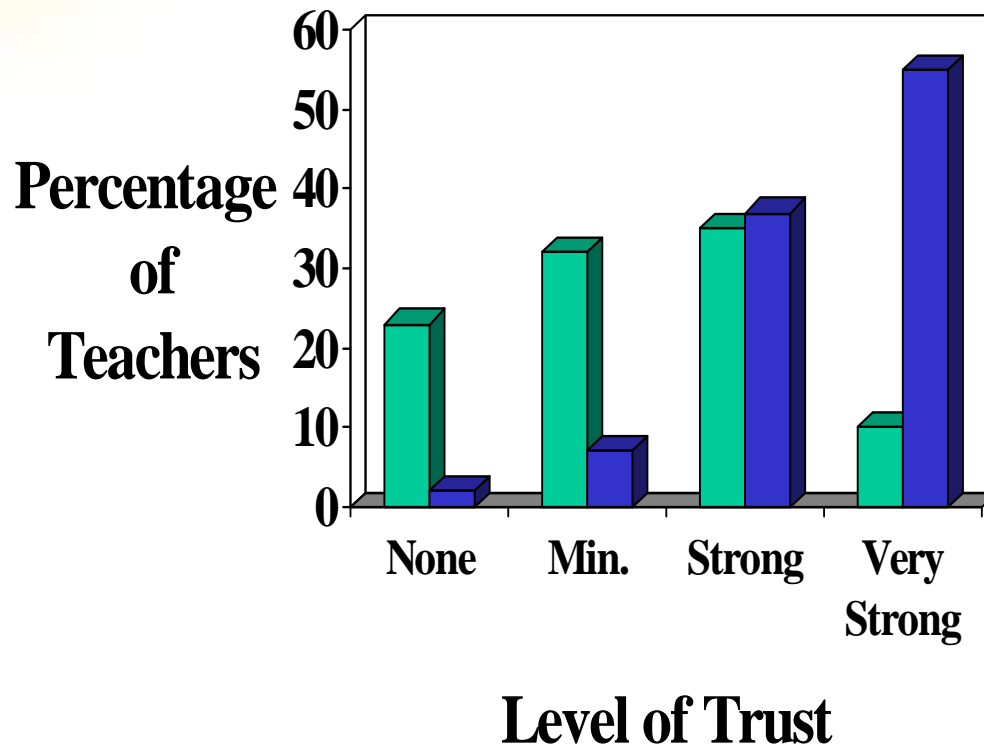
Implications for School Reform

- Collective Decision Making with broad teacher buy in occurs more readily in schools with strong relational trust.
  - The absence of relational trust provokes sustained controversy around relatively simple organizational concerns.

When relational trust is strong, reform initiatives are more likely to be deeply engaged in by school participants and to diffuse broadly across the organization. Relational trust reduces the risks associated with the change.

- When school professionals trust each other and feel supported by parents, it feels safe to experiment with new practices.
- Teachers learn together, learn from one another as they implement new practices.
- Honest conversation about what's working and what's not working means exposing one's ignorance and making oneself vulnerable.
- Shared control with internal accountability
  - » Ideas adapted from Bryk and Schneider

Strategies to Build Relational Trust

- Build an organizational culture that supports a professional community for collective decision making with accountability that supports teacher learning.

- Focus the work of the school on conversations that influence improvements in student engagement and learning.

Trust is when people:

- Do what they say they will do.
- Consider the needs of one another.
- Respect and value one another's skills and ideas.
- Share a commitment to achieving a common goal.

Five Considerations

1. **Benevolence**

2. **Reliability**

3. **Competence**

4. **Honesty**

5. **Openness**

Everyone thinks of changing the world, but no one thinks of changing himself.

Leo Tolstoy

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Benevolence

- Having confidence that another party has your best interest at heart and will protect your interest is a key ingredient of trust

Reliability

- The extent to which you can depend upon another party to come through for you, to act consistently, and to follow through

__Competence__

- The belief in another party's ability to perform the tasks required by his or her position.

__Honesty__

- A person's integrity, character and authenticity are all dimensions of trust. The degree to which a person can be counted on to represent situations fairly is honesty.

Openness

- This refers to how freely another party shares information with others. Guarded communication provokes distrust.

Trust Traps

- Making Assumptions
- Breaking Promises
- Covering Yourself
- Spreading Rumors
- Bypassing People

Activity on Relational Trust

- Look at the *Survey on Relational Trust (T-Scale)*. Complete items 2, 5, 8, 11, 14, 17, 19, 20, 23,

- Share your responses with other people from your school.

- What does this instrument say about relational trust among teachers at your school?   How will this impact your data dialogues? Use the matrix and graph to create a visual to look at information.

Kinds of Data

- Demographics
- Student Learning
- School Processes
- Perceptions

Victoria Bernhardt

Demographics

- Who are our students?
- Race
- Gender
- Language spoken
- Time in school
- Ethnicity
- Birth order
- Living in poverty
- Discipline indicators

What are demographics that are significant for your school?

Because trends have clear direction, instead of causing turbulence, they actually help reduce it because they have a significant amount of predictability.

Joel Barker

Student Learning

- Tests
- Common assessments
- Student work
- Scores
- Grades
- Rubrics and scoring guides

The way in which a local school assesses student outcomes accurately represents the educational outcomes that the school cares most about.

Lawrence Lezotte and Beverly Bancroft

School and Classroom Processes

- Programs
- Practices
- Instructional strategies
- Course of study
- Instructional time
- Organization of instructional components

Not everything that is faced can be changed, but nothing can be changed until it is faced.

James Baldwin

Perceptions

- View, opinions, reflections
- Observation
- Person-to-person interview
- Surveys
- Focus groups
- Questionnaires

Not to understand another person's way of thinking does not make that person confused.

Michael Quinn Patten

Process Activity Around Kinds of Data

- Sort the cards at your table into the 4 categories of data-***Demographics, Perceptions, School and Classroom Processes, Student Learning***. Add examples of other data at your school that you utilize. Is there one area that you use more than others? Do you need to use other areas more often?

Activity

- What kinds of data are you using as you coach and visit classrooms?

- What could you consider using to help inform your conversations? Think about the types of data.

- Share with other individuals from your school.

Analyzing Formative and Summative Student Achievement Data

Act/instruct and assess

Understand data

Analyze and interpret data

Identify root causes

Generate theory

Plan action/ instruction
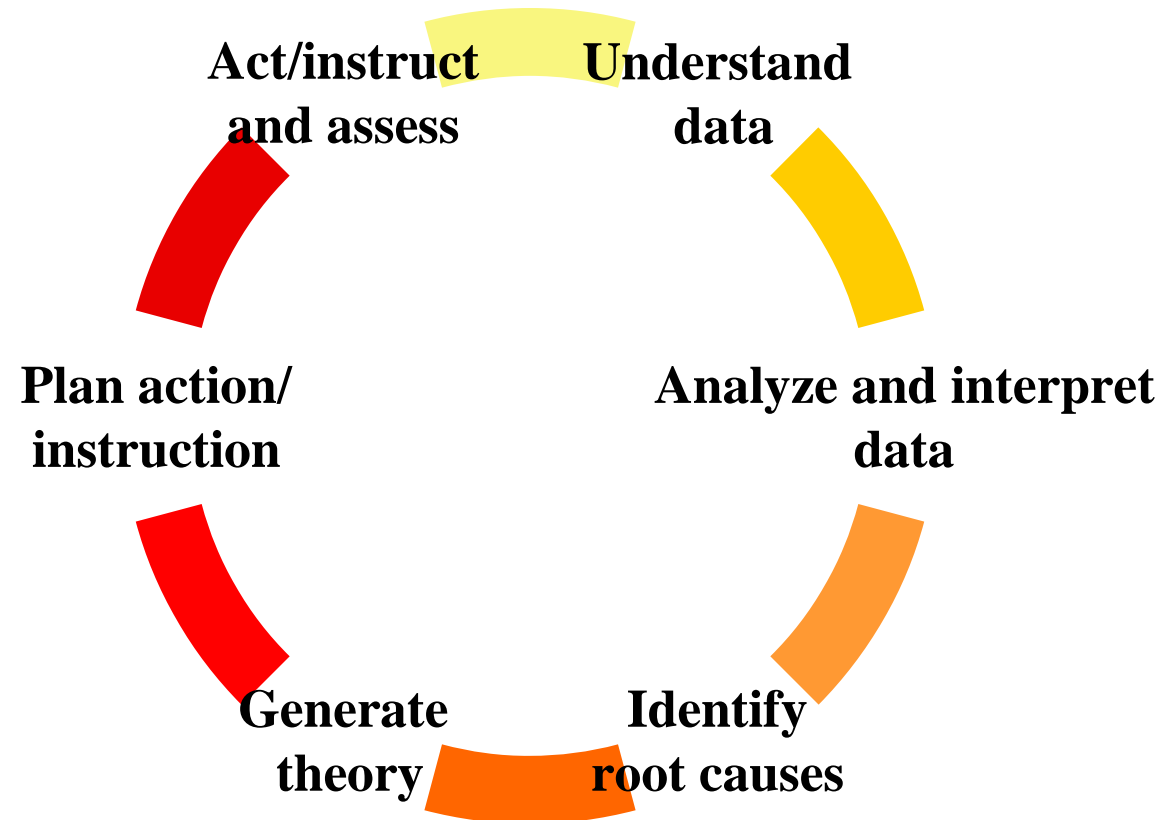
Cindy Harrison and Joellen Killion, *Taking the Lead,* National Staff Development Council

Data Analysis Process

1. Collect and disaggregate data
2. Analyze all data for patterns and identify additional data to collect-look at data for patterns over time, related to a specific content area, etc., examine disaggregated data to fully understand the issues)
3. Create data summary statements
4. Examine possible causes/factors impacting the data-use tools to identify what factors may be impacting the issue so that you can write an effective goal and carry out a realistic implementation plan
5. Collect additional data as needed.
6. Write a SMART goal.
7. Examine "best practice' and decide on interventions.
8. Implement/measure results/revise goals and interventions

Summary Statement

- Examples

    67% of the students achieved proficient or above on the math test in May, 2007.

    47% of the girls and 34% of the boys performed at or above grade level in the non-fiction reading items on our common assessment.

- Things to consider before writing a data summary

    Who are the lowest performing students? Highest performing? How are the various subgroups performing? In what specifc skills/sub skills are students struggling?

Disaggregate!

- Looking at how sub-groups perform
- Uncovering problems
- Disaggregation is a problem finding strategy not a problem solving strategy.
- "You cannot fight what you cannot see." Mike Schmoker

What are some of the ways that you might disaggregate information with the teachers you work with?

Organizing Data

Quantitatively-Using Numbers

   Count instances, events, products, etc.

   Display in simple tables and charts

   Organize based on frequency distributions, central tendencies
   and or variability or dispersion

Qualitatively-Using Description

   Review data holistically

   Examine anecdotes, artifacts, documents, etc.

   Create categories or topics

   Search for patterns

Activity for Processing Information

- Jot down key ideas for you on purple page. Be ready to share and reflect with other participants.

- Share your understandings, applications, and curiosities with participants. Talk to people that you do not work with.

Reflections

- Significant Ideas

- Practical Applications

- Curiosities

Walk About Review

Significant Ideas

Practical applications

Curiosities

Put name of person in box as you share ideas

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Formats for Dialogues-How are we going to get there?

Discussing the Data

- Describe what you learned when you looked over your student learning information:

What do you see?

What does the data say?

What are the facts?

What are some of your students' areas of strength?

What are your areas of concern?

What are your questions?

Discussing the Data

- Describe what you discovered in the ***group*** data:

  What surprises you or jumps out at you?

  What patterns do you find among teachers?

  What do you think might explain these patterns?

  What information will you share and what questions will you ask?

Discussing the Data

- What might we include in an action plan to support the learning of our students and teachers?

Schools with the greatest gains in student achievement consistently used common assessments. Common assessments, collaboratively developed and scored by every teacher at a grade level…because these assessments are used to improve teaching and learning, not merely to evaluate students and schools. Doug Reeves

Activity

- Look over the graph of grade points on the yellow sheet.
- Answer the following questions at your table.
  - What does the data seem to tell us?
  - What do they not tell us?
  - What else would we need to know?
  - What good news is there for us to celebrate?
  - What need for classroom or school improvement might arise from these data?

Be ready to share your responses with another table.

Write your responses on chart paper.

Activity

- Examine the data you brought.
- Identify patterns in the data using the questions in the materials.
- Patterns need to be more than one instance.
- Record patterns you see.
- Describe in a statement what the data tells you. Try to identify the problem in the statement not solve it.
- Share your findings with job-alike individuals. Form groups of 3. Time for this activity is 20 minutes. Be ready to share insights with one other group.

Tools for Dialogue and Meaningful Conversation

Underlying Cause

- **Is this a condition or a problem?**

    – **ONLY work on the issue if it's a problem!**

- **What *ah-ha*"s did you have when analyzing the data or discussing the problem?**

- **What is/are the UNDERLYING reason(s) (root causes) of the problem?**

- **What will you do when you return to school to address this underlying cause?**

Visuals

- Fishbone
- Matrix
- Mapping

I was brought up to believe that the only thing worth doing was to add to the sum of accurate information in the world.

Margaret Mead

Tools for Analyzing Data

Facilitating the Dialogue

Analyzing Formative Assessment Information

- Look at the next set of questions and choose other questions that might be useful to guide <u>your</u> conversations.

Without analyzing and collecting data, schools are unlikely to identify and solve the problems that need attention, identify appropriate interventions to solve those problems, or know how they are progressing toward achievement of their goals. Data are the fuel of school reform.

Joellen Killion

Analyzing Data: Guiding Questions
Data analysis is the process of collecting data with the purpose of improving practice.

ENGAGING THE GROUP/INDIVIDUAL

- What predictions will you make about the data?
- With what assumptions are we beginning this process?
- What questions do you want to ask about the data?
- What can we learn as a result of analyzing the data?

ANALYZING THE DATA

- What important points seem to "pop-out" from the data?
- What patterns or trends are appearing?
- What are some similarities and differences between data from various sources?
- What are we seeing at the school level? the grade level? the class level?
- What seems to go together -- what associations or connections can we make?
- What seems to be surprising or unexpected?
- In what other ways can the data be viewed?
- What are some things we have not yet explored? What other data do we need?

(Based upon the work of Ann Delehant, Laura Lipton and Bruce Wellman)

Analyzing Data: Guiding Questions

GENERATING THEORY

- What inferences, explanations or conclusions can we make about the data?
- What are the data telling us about the current conditions?
  - Student performance/attitude?
  - Learning Environment?
  - Curriculum/Instruction/Assessment/Staff Development?
- How does the data compare with what we expected to see in these areas?
- What conclusions can we draw?
- How does the data compare with our standards/success indicators?
- How does the data compare with the current literature on the topic?
- How does the data inform future action?
- What does the data mean in terms of current student performance and attitude? What do these data mean in terms of student performance behaviors and attitudes we would like to see?
- What do these data mean in terms of the current learning environment (instruction, curriculum, technology) and students' responses to it? What do these data mean in terms of designing the learning environment?

    (Based upon the work of Ann Delehant, Laura Lipton and Bruce Wellman)

Analyzing Student Achievement Data: Guiding Questions

Key questions:

- What is being measured with the assessment?
- Which students were involved in the assessment?
- What areas of student performance are at or above expectations?
- What areas of student performance are below expectations?
- Do patterns exist in the data?
- How did various sub-populations (e.g., gender, race, socio-economic) of students perform?
- What are other data telling us about student performance in this area?
- How are the data similar or different in various grade levels, content areas and individual classes?
- What confirms what we already know? What challenges what we thought before?

  The data analysis should result in knowing 1) specific areas of deficit; 2) specific knowledge and skills students need in order to overcome the deficit; and 3) specific students or groups of students for whom the deficit is most prevalent or pronounced.

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Analyzing Student Achievement Data: Guiding Questions

1. What specific areas are students having the most difficulty with?
2. Is this same area a need for different grade levels?
3. Is this same area a need in different parts of school?
4. Is this same area a need across various groups?
5. What are the weakest areas for students in Q1, Q2, Q3, Q4?
6. What specifically do students need to know and do to perform better on the various measures of achievement?
7. What is the connection between existing staff development and areas of need ?

Analyzing Student Achievement Data: Guiding Questions

Planning for Our School

- What data do we currently use when setting our school goals/priorities? What is the whole picture as determined by the student learning, demographic, perceptual and process data?
- What are the areas of greatest need? How do you know?
- How do we know we are making a difference for students?
- Why is student performance the way it is?
- What new data could we use to refine our goal setting?
- Would setting targets help us keep our eye on the goals?
- How could we promote a culture that supports school wide assessment?

A Place to Start

- **Instructional practices**
  - Did you teach it?
- **Curriculum development**
  - Did the curriculum, materials help you teach the concept?
- **Assessment**
  - Did the assessment accurately test the concept?
- **Professional development**
  - What do the adults need to know and be able to do to teach this concept?

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Planning Activity

- Discuss and plan where you might begin with data conversations. Identify who might be involved and what data you might discuss.

- Identify your next steps in data analysis and conversations as you work with your staff/clients.

The tragedy in life doesn't lie in not reaching your goal. The tragedy lies in having no goal to reach.
Benjamin Mays

Roll up your sleeves!
Just remember the data
doesn't provide all the
answers, rather it
promotes the integral
questions.

Ways to Use Data for Change

- Data can uncover problems that might otherwise remain invisible.

- Data can convince people of the need for change.

- Data can confirm or discredit assumptions about students and school practices.

- Data can get to the root cause of problems, pinpoint areas where change is most needed, and guide resource allocation.

Ways to Use Data for Change

- Data can help schools evaluate program effectiveness and keep the focus on student learning results.

- Data can provide feedback to teachers and administrators need to keep going and stay the course.

- Data can prevent over reliance on standardized test scores.

- Data can help build a culture of inquiry and continuous improvement.

Resources

- National Staff Development Council, nsdc.org
- *Taking the Lead*, Cindy Harrison and Joellen Killion, National Staff Development Council, 2006.
- *Using Data to Improve Student Learning in High School*, Victoria Bernhardt, Larchmont, NY, Eye on Education, 2005.
- *Data Driven Dialogue: A Facilitator's Guide to Collaborative Inquiry*, Laura Lipton and Bruce Wellman, Sherman, CT. Mira Via, 2004.
- *Asking the Right Questions: Techniques for Collaboration and School Change*, Edie Holcomb, Corwin Press, 2001.
- *Comprehensive Data Retreat Workbook*, Judy Sargent, Cooperative Education Agency 7, Green Bay Wisconsin, 2006.
- *Using Data/Getting Results: A Practical Guide for School Improvement in Mathematics and Science*, Nancy Love, Christopher Gordon, 2002.

<u>Resources</u>

- Just for Kids, just4kids.org

__Reflection__

Key ideas…

Thoughts to hold on to…

Questions raised for me

Implications for action…

Success, real success, in any endeavor demands more from an individual than most people are willing to offer-not more than they are capable of offering. James Roche

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.

Margaret Mead