Data-Driven Dialogue:

Using collaborative inquiry to enhance instruction

Facilities Leadership Academy
October 8, 2010
Ann R. Pearce, Ph.D.

Why is this important?

In the 90's the focus was on collecting data and using technology to store it.

In the 21st Century, the organizations that excel will be those that are able to convert data into information.

Peter Drucker

In other words, we need to make meaning from data for them to be helpful.

We need to move from being "data givers" to "data users."

Nancy Love (2001)

The BIG Goals:

 Supporting teachers in using data more effectively to increase student achievement.

 Encouragement for introducing datadriven dialogue to your facility school.

Anticipated Outcomes

- Increased understanding of the power of data in making quality instructional decisions.
- Knowledge of the data-driven dialogue process.
- Skills for facilitating data-driven dialogues with PLCs.

The learning plan:

- Experiencing the model to view and dialogue about facilities data
- * Guiding assumptions for Data-Driven Collaborative Inquiry
- Overview of three-phase model for collaborative inquiry

Data

What does it tell us?

What do we think it means?

Our predictions

Based on the data set and what you know about your facilities and students,

identify your predictions about what the data might show.

Surfacing Predictions & Assumptions

Predictions	Assumptions

Preparing to view our data:

- With what assumptions are we entering?
- What are some predictions we are making?
- What are some questions we are asking?
- What are some possibilities for learning that this experience presents to us?

Look at the data:

- With a partner study the data
- Look for patterns, surprises
- Identify questions the data raises

Resist the temptation to attribute causes

Now, join others at your table:

Compare observations

Select a recorder for observations

Another person records questions

Select a reporter

Group Debrief:

- Let's capture your observations -Remember these must be observable in the data.
- What jumped out at you?
- What might be some surprises?
- So, what is the data NOT telling us that we think would be helpful?

You've just completed 2 phases of DDD:

Frequently it is helpful to pause at this point to allow:

- time to gather more information
- time for people to reflect further
- space between viewing data and forming possible causes

So, lets focus on the DDD process:

- Triple Agenda Purposes
- 1) Understand the DDD protocol
- 2) Experience the DDD process with data
- 3) Learn how to facilitate the DDD process

Our current reality:

What?	So What?	Now What?
What we know or think we know.	So, what does this mean for us?	Now what will we do differently?
What research tells us.	How does this apply to us?	Now what new questions do we have?

Resource

Wellman, B. & Lipton, L. (2004). *Data-Driven*Dialogue: A facilitator's guide to collaborative inquiry.
MiraVia

Pearce, A. (2009). *Data-Driven Dialogue Protocol.*

Data-Driven Dialogue

A Facilitator's Guide to
Collaborative Inquiry

Bruce Wellman Laura Lipton

With a partner:

 Locate the handout, "Guiding Assumptions for Data-Driven Collaborative Inquiry"

Use a "Say Something" strategy with the text

Guiding Assumptions for Data-Driven Collaborative Inquiry

- Data have no meaning
- Knowledge is a personal and social construction
- Reciprocal influence between the culture and thinking and behavior of members
- Understanding should precede planning
- Cycles of inquiry, experimentation and reflection accelerate continuous growth and learning
- Norms of data-driven collaborative inquiry generate continuous improvements in student learning

So, given those assumptions.....

Can you accept those assumptions for the basis of our shared experience today?

If not:

Can you agree to reserve judgment until we finish our data dialogue today?

Dispositions

- Open-mindedness
- Willingness to listen to other perspectives
- Willingness to trust the process
- Confidence in the collective ability of the group

The Collaborative Learning Cycle

Organizing and Integrating

Generating theory

What inferences/explanations/conclusions might we draw? (causation)
What additional data sources might we explore to verify our explanations? (confirmation)

What are some solutions we might explore as a result of our conclusions? (action)
What data will we need to collect to guide implementation? (calibration)

Activating and Engaging

Surfacing experiences and expectations

With what assumptions are we entering? What are some questions we are asking? What are some possibilities for learning that this experience presents to us?



Analyzing the data

What important points seem to "pop out"?
What are some patterns, categories or trends that are emerging?
What seems to be surprising or unexpected?
What are some things we have not yet explored?

Preliminary Phase

Introducing the Dialogue
Supplying Background Information

Introducing the Data Dialogue

Data that will be viewed (WHAT)

Anticipated outcomes (WHY)

Time constraints (HOW)

Phase(s) to be used (HOW)

Background Information

Pertinent background information (WHAT)

 Explain importance of information (if not self-evident) (WHY)

Explain how and when information was obtained (HOW)

Phase One:

Activating and Engaging: Surfacing experiences and expectations

Activating & Engaging: Surfacing experiences & expectations

- No data should be present for this phase.
- Invite predictions about what the data will show
- Paraphrase and record
- Inquire to surface the underlying assumption behind the prediction
- Separate predictions from assumptions

Preparing to view our data:

- With what assumptions are we entering?
- What are some predictions we are making?
- What are some questions we are asking?
- What are some possibilities for learning that this experience presents to us?

Surfacing Predictions & Assumptions

Predictions Assumptions

The Collaborative Learning Cycle

Organizing and Integrating

Generating theory

What inferences/explanations/conclusions might we draw? (causation)
What additional data sources might we explore to verify our explanations? (confirmation)

What are some solutions we might explore as a result of our conclusions? (action)
What data will we need to collect to guide implementation? (calibration)

Activating and Engaging

Surfacing experiences and expectations

With what assumptions are we entering? What are some questions we are asking? What are some possibilities for learning that this experience presents to us?



Analyzing the data

What important points seem to "pop out"? What are some patterns, categories or trends that are emerging? What seems to be surprising or unexpected?

What are some things we have not yet explored?

Phase Two

Exploring and Discovering: Analyzing the data

Exploring and Discovering: Analyzing the Data

- Heart of collaborative inquiry
- Collective understanding is the goal
- Requires self-awareness and skills for listening and paraphrasing
- <u>Describes</u> in factual terms: No attributing causality

Things to attend to in Phase 2

- Depersonalize the data to reduce emotionality
- Conscious curiosity & purposeful uncertainty guide this phase
- Groups must avoid rushing to premature conclusions
- Distinguishing, sorting, analyzing, comparing and contrasting
- Not a phase of explaining
- Visually vibrant shared displays enhance exploration
- This may be the most difficult part to do well

Look at the data:

- With a partner study the data
- Look for patterns, surprises
- Identify questions the data raises

Resist the temptation to attribute causes

With your table group:

What important points seem to "pop-out"?

- What are some patterns, categories or trends that are emerging?
- What seems to be surprising or unexpected?
- What are some things we have not yet explored?

The Collaborative Learning Cycle

Organizing and Integrating

Generating theory

What inferences/explanations/conclusions might we draw? (causation)
What additional data sources might we explore to verify our explanations? (confirmation)

What are some solutions we might explore as a result of our conclusions? (action)
What data will we need to collect to guide implementation? (calibration)

Activating and Engaging

Surfacing experiences and expectations

With what assumptions are we entering? What are some questions we are asking? What are some possibilities for learning that this experience presents to us?



Analyzing the data

What important points seem to "pop out"?
What are some patterns, categories or trends that are emerging?
What seems to be surprising or unexpected?
What are some things we have not yet explored?

Phase Three

Organizing and Integrating: Generating theory

Phase 3: Generating theories of:

Part A: Causation

Part B: Action

Organizing and Integrating: Generating Theory

- Organizes the transition to formal problem finding and problem solving
- Multiple voices and perspectives are important
- If effective, groups realize that they could benefit from additional information

Things to attend to in Phase 3

- Separate the generation of theories of causation from the generation of theories of action.
- Skillful groups develop multiple theories of causation before they move to action theories (3 at a minimum, more is better).
- Help the group avoid the temptation to come to premature closure.

Generating theory: Phase 3A

 What inferences/explanations/conclusions might we draw? (causation)

 What additional data sources might we explore to verify our explanations? (confirmation)

Generating Theories of Causation

Possible inferences/explanations/conclusions **Additional Data Sources**

The Collaborative Learning Cycle

Organizing and Integrating

Generating theory

What inferences/explanations/conclusions might we draw? (causation)
What additional data sources might we explore to verify our explanations? (confirmation)

What are some solutions we might explore as a result of our conclusions? (action)
What data will we need to collect to guide implementation? (calibration)

Activating and Engaging

Surfacing experiences and expectations

With what assumptions are we entering? What are some questions we are asking? What are some possibilities for learning that this experience presents to us?



Analyzing the data

What important points seem to "pop out"?
What are some patterns, categories or trends that are emerging?
What seems to be surprising or unexpected?
What are some things we have not yet explored?

Moving to solutions- Phase 3B

- Generate theories of action
- Leads to problem solving, planning, and action research projects
- Uses ongoing formal & informal data
- Completes the cycle and leads back to phase 1

Generating theory of action: Phase 3B

 What are some solutions we might explore as a result of our conclusions?

 What data will we need to collect to guide implementation?

So What does this mean for us?

Find a partner as directed.

- Partners dialogue:
 - Connections I'm making thus far.

Questions that are arising for me.

Group Debrief

• What good questions are arising?

• What new insights are developing?

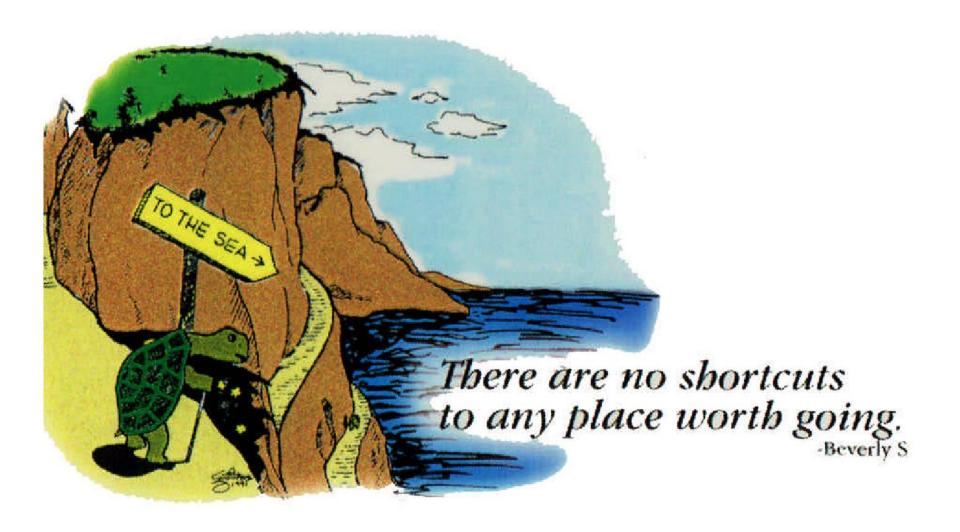
• What might be some next steps?

Some facilitation tips

- Modeling the process is very important
- Use the what-why-how strategy when first using the model
- An effective facilitator makes the process seem easy by giving clear directions
- It is important to help the group resist the urge to push ahead too quickly
- There is seldom time to do all 3 phases in one meeting- space the phases across meetings
- How data is presented is important

So, what's next?

- Identify:
 - Existing opportunities for data dialogues
 - Need for adding collaborative inquiry opportunities
 - When/How you will model data-driven dialogues



NSDC's Standards for Staff Development Trainer's Guide Stephanie Hirsh, 2001

Ann R. Pearce, Ph.D. 51