

## Inquiry: Team-Based Data Talk and Problem Solving Protocols

Title & Description	Authorship/Affiliation	Websites for Supporting Materials
<p><b>MTSS Problem Solving Process (4 step process)</b></p> <ol style="list-style-type: none"> <li>1. Define the problem</li> <li>2. Problem Analysis</li> <li>3. Plan Implementation</li> <li>4. Evaluation</li> </ol>	<ul style="list-style-type: none"> <li>▪ Colorado Department of Education (CDE) Office of Learning Supports (OLS)</li> </ul>	<p><a href="#">Data-Based Problem Solving and Decision-Making component videos and video investigation guides</a> (website)</p> <p><a href="#">Problem Solving Flipbook pages</a> (PDF)</p> <p><a href="#">Slideshow from 2014</a> (PPT)</p>
<p><b>Data Teams (5 step process)</b></p> <ol style="list-style-type: none"> <li>5. Collect and chart data</li> <li>6. Analyze strengths and obstacles</li> <li>7. Establish goals: Specific, Measurable, Attainable, Relevant, Timely (SMART) goals: set, review, revise goals</li> <li>8. Select instructional strategies</li> <li>9. Determine results indicators</li> </ol>	<ul style="list-style-type: none"> <li>▪ Doug Reeves</li> <li>▪ The Leadership &amp; Learning Center (Reeves founded)               <ul style="list-style-type: none"> <li>○ Formerly: The Center for Performance Assessment</li> </ul> </li> </ul>	<p><a href="#">Data Teams Process Description</a> (PDF)</p> <p><a href="#">Data Teams Process Meetings and Structures</a> (PDF)</p> <p><a href="#">Data Teams Process</a> (slideshow)</p> <p><a href="#">Data Teams Process</a> (Website to slideshow &amp; other files)</p> <p><a href="#">Data Teams: Desktop Reference Guide</a> (PDF)</p> <p><a href="#">District and School Data Teams Toolkit, Washington</a> (PDF)</p>
<p><b>Decision Making for Results (6 step process)</b></p> <ol style="list-style-type: none"> <li>1. Conduct a Treasure Hunt</li> <li>2. Analyze data to prioritize needs</li> <li>3. Establish SMART goals</li> <li>4. Select specific strategies</li> <li>5. Determine results indicators</li> <li>6. Monitor and evaluate results</li> </ol>	<ul style="list-style-type: none"> <li>▪ Doug Reeves</li> <li>▪ The Leadership &amp; Learning Center (Reeves founded)               <ul style="list-style-type: none"> <li>○ Formerly: The Center for Performance Assessment</li> </ul> </li> <li>▪ Used by: Connecticut Accountability for Learning Initiative (CT State Dept. of Ed.)</li> </ul>	<p><a href="#">Data Driven Decision Making: Desktop Reference Guide</a> (PDF)</p>
<p><b>Data-Driven Dialogue or Collaborative Inquiry/Learning Cycle</b></p> <ol style="list-style-type: none"> <li>1. Phase I: Activating and Engaging (Prediction)</li> <li>2. Phase II: Exploring and Discovering (Observations)</li> <li>3. Phase III: Organizing and Integrating (Inferences)</li> </ol>	<ul style="list-style-type: none"> <li>▪ On National School Reform Faculty and School Reform Initiative websites</li> <li>▪ Developed by the Teacher Development Group, 2002</li> <li>▪ Based on Nancy Love</li> <li>▪ Adapted from Bruce Wellman and Laura</li> </ul>	<p><a href="#">Protocol</a> (PDF)</p> <p><a href="#">Protocol</a> (PDF)</p> <p><a href="#">Info./presentation related to Data-Driven Dialogue</a> (Presentation Handouts PDF)</p> <p><a href="#">Protocol adapted from NSRF</a> (PDF)</p>

	<p>Lipton</p> <ul style="list-style-type: none"> <li>Also used in CDE UIP by trainers from: The Center for Transforming Learning and Teaching (CTLT)</li> </ul>	
<p><b>Data Driven Dialogue</b></p> <ol style="list-style-type: none"> <li>Phase I: Predictions</li> <li>Phase II: Observations</li> <li>Phase III: Making Meaning <ol style="list-style-type: none"> <li>School Level Data (optional)</li> </ol> </li> <li>Now What? <ol style="list-style-type: none"> <li>What does our district look like? (optional)</li> </ol> </li> </ol>	<ul style="list-style-type: none"> <li>Adopted from Bruce Wellman and Laura Lipton and text: <i>Data-Driven Dialogue: A Facilitator's Guide</i></li> </ul>	<p><a href="#">Protocol</a> (Word)</p>
<p><b>30-minute Data-Driven Dialogue</b></p> <ol style="list-style-type: none"> <li>Ensure roles are clarified: Facilitator, Recorder, and Timekeeper</li> <li>Introduction (purpose of meeting; norms; identify critical question for the group that relates to the data)</li> <li>Make Predictions and Explore Assumptions</li> <li>Exploring the Data</li> <li>Acting on the Data</li> <li>Coming to Consensus: Strategy of One</li> <li>Debrief</li> </ol>	<ul style="list-style-type: none"> <li>Center for Healthy Kids &amp; Schools</li> <li>Adapted from Robert Garmston and Bruce Wellman: "Data-Driven Dialogue Protocol"</li> <li>Thinking Collaborative: formerly, Adaptive Schools</li> </ul>	<p><a href="#">Thinking Collaborative</a> (website)  <a href="#">Presentation</a> (slideshare)</p>
<p><b>Data Dialogue</b></p> <ol style="list-style-type: none"> <li>Analyze the data</li> <li>Clarify the problem</li> <li>Create your action plan</li> <li>Implement your action plan</li> <li>Monitor progress</li> <li>Act on needed changes</li> </ol>	<ul style="list-style-type: none"> <li>Maryland Classroom Focused Improvement Process (CFIP)</li> </ul>	<p><a href="#">CFIP Website</a> (website)  <a href="#">CFIP Index of Resources</a> (website)  <a href="#">Template</a> (PDF)</p>
<p><b>Data Dialogue</b></p> <ol style="list-style-type: none"> <li>Introduction (prepare group for dialogue; identify specific data to be viewed &amp; analyzed; frame the specific task)</li> <li>Background Information: Provides pertinent information in an efficient manner; ensures group members have shared understanding; allows team to begin new dialogue without</li> </ol>	<ul style="list-style-type: none"> <li>Ann Pearce, a CDE 2010 meeting website</li> <li>Also used in CDE UIP by trainers from: the Center for Transforming Learning and Teaching (CTLT)</li> <li>Adapted from Bruce Wellman and Laura</li> </ul>	<p><a href="#">Protocol</a> (PDF)  <a href="#">Thinking Collaborative</a> (website)</p>

<p>repeating; focuses attention of team members on purpose of dialogue)</p> <ol style="list-style-type: none"> <li>3. Phase One: Activating and Engaging: Surfacing experiences and expectations</li> <li>4. Phase Two: Exploring and Discovering: Analyzing the Data</li> <li>5. Phase Three: Organizing and Integrating: Generating Theory <ul style="list-style-type: none"> <li>o (a) Generation of theories of causation;</li> <li>o (b) generation of theories of action</li> </ul> </li> </ol>	<p>Lipton</p> <ul style="list-style-type: none"> <li>▪ Also in: Robert Garmston and Bruce Wellman</li> <li>▪ Thinking Collaborative: formerly, Adaptive Schools</li> <li>▪ Also referenced by: Nancy Love</li> </ul>	
<p><b>Data Mining</b></p> <ol style="list-style-type: none"> <li>1. Get Started</li> <li>2. Examine Data Set # 1</li> <li>3. Describe Data Set # 1</li> <li>4. Interpret Data Set # 1</li> <li>5. Examine Data Set # 2</li> <li>6. Describe Data Set # 2</li> <li>7. Interpret Data Set # 2</li> <li>8. Identify Intersections and Dissonances</li> <li>9. Debrief</li> </ol>	<ul style="list-style-type: none"> <li>▪ Educators in City Schools (Decatur, Georgia)</li> </ul>	<p><a href="#">Protocol</a> (PDF)</p>
<p><b>ATLAS: Looking at Data</b></p> <ol style="list-style-type: none"> <li>1. Selecting data to share</li> <li>2. Sharing and discussion of data</li> <li>3. Getting Started</li> <li>4. Describing the Data</li> <li>5. Interpreting the Data</li> <li>6. Implications for Classroom Practice</li> <li>7. Reflecting the ATLAS-Looking at Data (Presenter reflection; Group reflection)</li> <li>8. Debrief the process</li> </ol>	<ul style="list-style-type: none"> <li>▪ On National School Reform Faculty website</li> <li>▪ Developed by Eric Buchovecky</li> <li>▪ Based on Leadership for Urban Mathematics Project and the Assessment Communities of Teachers Project</li> <li>▪ Also based on Steve Seidel and Evangelina Harris-Stefanakis; revised 2004</li> </ul>	<p><a href="#">Protocol</a> (PDF) “Learning from Student Work”</p> <p><a href="#">Protocol</a> (PDF) “Looking at Data”</p>
<p><b>Data-Driven Analysis Meeting</b></p> <ol style="list-style-type: none"> <li>1. Praise</li> <li>2. Probe</li> <li>3. Action Step</li> <li>4. Follow-up</li> </ol>	<ul style="list-style-type: none"> <li>▪ Paul Bambrick-Santoyo</li> </ul>	<p>Text: <i>Driven by Data: A Practical Guide to Improve Instruction</i></p> <p><a href="#">Paul Bambrick-Santoyo and Uncommon Schools</a> (website)</p> <p><a href="#">Results Meeting Protocol from Driven by Data</a> (website)</p>

## Supplemental Resources and Additional Resources

- [Colorado Department of Education \(CDE\) Colorado Multi-Tiered System of Supports \(CO-MTSS\) Data-Based Problem Solving and Decision-Making](#) (website)
- [CDE Unified Improvement Planning](#) (website)
- [Interview with Doug Reeves](#) (website)
- [The Power of Protocols, Learning Forward Ontario](#) (PDF)
- [Effectively Facilitating Data Talks, NAESP slideshow](#) (PDF of slides)
- [Student Work Analysis Protocol, Rhode Island Department of Education](#) (PDF)
- [Five Steps for Structuring Data-Informed Conversations and Action in Education, IES REL](#) (PDF)
- [White Paper: “Data-Driven Decision Making: A Powerful Tool for School Improvement”](#) (PDF)
- [Plan Do Check Act](#) (PDF)
- [Take the 10-Day Data Team Challenge](#) (PDF)
- [Data-Informed Leadership in Education, Wallace Foundation](#) (PDF)
- [Data-Driven Decision-Making: Facilitating Teacher Use of Student Data to Inform Classroom Instruction, Contemporary Issues in Technology and Education](#) (website)
- [Tips on Sharing Data with Families, Harvard](#) (website)
- [Guiding Questions for District, School, and Instructional Data Teams](#) (Word)
- [Data Teams: Implementation Configuration Map](#) (Word)
- [Oakland Unified School District Data Protocols](#) (website)
- [Connecticut \(Dept. of Ed.\): Resources for Data-Driven Decision Making and Data Teams](#)
- [Rtl Action Network article: “What’s Your Plan? Accurate Decision Making within a Multi-Tier System of Supports: Critical Areas in Tier 2”](#) (website)
- [Data Talks and Documentation with Ease, Principal’s Blog](#) (website)
- [The RTI Data Analysis Teaming Process](#) (website)
  - See sidebar for resource: *Data Analysis Team Script* (revised Feb. 2008); Pennsylvania Department of Education. Adapted from Kovalski, J.F., & Pedersen, J. (2008). Best practices in data analysis teaming. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology*, V. Bethesda, MD: National Association of School Psychologists.
- Solution Tree Resources:
  - [Mike Mattos, author materials](#) (website)
  - [Solution Tree website](#) (website)
  - [Reproducibles for several texts, including: \*Got Data? Now What\*](#) (website)
  - [All Things PLC](#) (website)
  - [All Things PLC: Articles & Research under “Focusing on Results” category](#) (website)
- [Robert Marzano’s Nine Essential Instructional Strategies](#) (PDF)
- *BOOK (excerpt): [Leading with Data: Pathways to Improve your School](#) [Ellen Goldring & Mark Berends]; Ch. 1 excerpt* (PDF)
- Books from Corwin Press, authored by [Nancy B. Love](#) (website)