

Welcome!

In this module, you and your team will learn ways to use data effectively to improve instruction.

As the facilitator, you will guide your team through this Learning Experience. Are you new to this role? If so, please don't worry. You don't need to be an expert in facilitation or in using data. All you need is the willingness to lead your colleagues, even if you are just a short step ahead of them.

To smooth your way, you'll have plenty of help. In this Facilitator Guide, and the other materials in the *Facilitator Tools* section of the website, you will find tips and ideas for success. And when you're done, you can share your own thoughts, challenges, and triumphs with other facilitators in *Facilitator Feedback*.

OUTCOME

Your leadership team will be prepared to guide your school in using data to improve instruction.

LEARNING GOALS

Your team will:

1. Develop an understanding of how the use of multiple data sources can improve instruction
2. Analyze data to trace the causes of—and find solutions to—low achievement
3. Articulate how the team can support teachers' use of data to improve instruction

BACKGROUND

Leadership Teams and Using Data Effectively

Successful teachers draw upon multiple sources of data about student learning. And they understand how best to use this information to improve instruction. By educating themselves about the effective use of data, leadership teams can help build these capacities in their staffs.

PREPARE

The following activities will prepare you for your role as facilitator and will help guarantee a successful experience for your leadership team. Complete these steps prior to gathering your team for the module’s 120-minute Learning Experience.

1. Review *About Success at the Core* on the website. It provides important background information on the structure of the Leadership Development modules and the four Elements of Quality Instruction that anchor all modules.
2. Read the *Facilitator Overview*, accessed from *Facilitator Tools*. It describes your role and tools that can help you, offers ideas on how to maximize the impact of a Learning Experience, and includes a checklist to help you prepare for facilitation.
3. Prepare materials for this module:
 - Preview the Multimedia Presentation (accessed from the *Using Data Effectively* page) to familiarize yourself with the module’s activities and how they connect to content in this Facilitator Guide.
 - (Optional) Look at the Assessment Tool for this module, accessed from the *Using Data Effectively* page. The Assessment Tool can help you gauge your team members’ knowledge and skills around the module’s three learning goals.

Note: The *Facilitator Overview* provides suggestions on using the Assessment Tool.

- Print copies of this module’s handouts: *UDE Handouts 1–5*. If you make any time adjustments to the Learning Experience, record these changes on your copy of the agenda (*UDE Handout 1*).

Note: Print only one copy of *UDE Handout 4* for every three individuals. Cut the pages along the solid lines, so that you have a stack of cause and solutions cards for each group of three. Groups will use these cards (including the provided blank cards) in Learning Goal 2.

- Create a large note-taking template titled *Supporting Data Use at Our School*. You will use this template to record responses in Learning Goal 3.

Note: Be sure that the template has ample space for your team’s ideas.

Sample template:

Supporting Data Use at Our School				
Data We Use	Data We Should Use	Processes We Use to Identify Causes and Solutions	Processes We Should Consider	Actions We Can Take

LAUNCH (5 Minutes)

Your team reviews the module's learning goals and agenda.

1. Launch the Multimedia Presentation, displaying *Slide 1* to introduce your team to the module's topic. Use *Slide 2* to review the learning goals for the Using Data Effectively module:

Your team will:

- *Develop an understanding of how the use of multiple data sources can improve instruction*
- *Analyze data to trace the causes of—and find solutions to—low achievement*
- *Articulate how the team can support teachers' use of data to improve instruction*

Note: By briefly reviewing the learning goals here, you provide your team with an overview of the entire module. The team will have the opportunity to consider the learning goals again at the start of each section (*Slides 3, 5, and 10*).

2. Pass out the agenda (*UDE Handout 1*) and share any adjustments you made to it.

Note: As you prepared to facilitate this Learning Experience, you may have adjusted the time allocated to specific activities, based on results from the Assessment Tool and/or your understanding of the team's learning needs.

AT A GLANCE

Launching the Module

TIME

5 minutes

MATERIALS

- *UDE Handout 1*
- *Slides 1–2*

What data sources should we consider?

To improve learning, teachers—and leaders—must be good scientists and detectives. They must have access to multiple sources of data. And they must be able to make sense of the clues the data provides. This learning goal’s activity builds your team’s awareness of the types and purpose of data available to schools.

AT A GLANCE

Learning Goal 1

TIME

15 minutes

MATERIALS

- *UDE Handout 2*
- *Slides 3–4*

EXPLORE Scaling the data pyramid (15 Minutes)

Your team gains a deeper understanding of data sources.

1. Review Learning Goal 1, *Develop an understanding of how the use of multiple data sources can improve instruction (Slide 3)*.

Note: Schoolwide leadership teams may be familiar with most of the data sources highlighted on *UDE Handout 2*. For content- or grade-level teams, plan to introduce *UDE Handout 2* by noting which levels on the Data Pyramid may be most and least familiar to your team. The purpose of this activity is to build awareness of the different kinds of data that can be helpful for making instructional decisions.

2. Pass out *UDE Handout 2*. Explain the process that your team will use to engage with the reading: as individuals read, they should place a “√” next to text that affirms a prior understanding, an “!” next to text that surprises them, and a “?” next to text that provokes a question and/or an interest in further learning (*Slide 4*).
 - “√” Affirms my prior understanding
 - “!” Surprises me
 - “?” Provokes a question and/or interest in further learning
3. When your team finishes reading, ask a volunteer to describe a question that the reading raised (i.e., text marked with a “?”). Invite others who marked the same text with a “√” (indicating prior understanding) to explain their thinking. Continue this process until each individual has shared at least one question. Jot down any questions that cannot be answered by the group. Tell your team that it will explore these questions later, either in the module or in a future meeting.

Note: If the team raises a lot of questions after reading *UDE Handout 2*, you will probably not have time to address them all. You can jot down these questions for further discussion, either in the module or in a future meeting.

Consider This: Your team may question why “data about people, practice, and perceptions” is included in the pyramid since it does not focus exclusively on student learning data. Suggest that schools should have systems to collect this data—rather than relying on anecdotes—because they are important for interpreting other student learning data that schools gather and analyze. Your team will further explore this source of data in Learning Goal 2.

EXPLORE (Continued)

4. **After you have answered your team’s questions, invite volunteers to share text marked with an “!” and ask, *What was surprising?***

Note: If the ideas presented in the reading are already familiar to your team, you may choose to skip this step because little in the reading may be surprising. On the other hand, if the ideas are quite new to your team, you may already have discussed surprising elements in the questions that team members shared in Step 3, above.

5. **Wrap up the activity by telling your team it will refer to the Data Pyramid again in Learning Goals 2 and 3.**

How can we use data to find causes of and solutions to low achievement?

To improve student outcomes, schools must mine—and act upon—many sources of data. Activities in this learning goal give your team hands-on experience in sifting and making sense of data.

VIEW (15 Minutes)

Your team observes how teachers and teams at Shaw Middle School use data to identify each student's learning needs and collaborate to improve instruction.

1. Review Learning Goal 2, *Analyze data to trace the causes of—and find solutions to—low achievement (Slide 5)*, and note that its activities use the data sources explored in Learning Goal 1.
2. Preview the video by summarizing its focus (see About the Video at right) and display *Slide 6*, the essential viewing questions: *How does Shaw's leadership team support teachers' use of data walls? What strikes you about data walls as a strategy for using data to improve instruction?*
3. After viewing, re-display and discuss the viewing questions (*Slide 7*).

Note: More Information (at right) highlights key points connected to the viewing questions.

Consider This: Your team may be tempted to focus on the construction of data walls. Work to keep the conversation focused on data walls as a tool to improve instruction.

AT A GLANCE

Learning Goal 2

TIME

40 minutes

MATERIALS

- UDE Handouts 3 and 4
- Slides 5–9
- Video: *Data Walls*
- Note-taking template

VIDEO DETAILS

Data Walls
Shaw Middle School
Spokane, Washington

ABOUT THE VIDEO

This video illustrates how leadership teams and teachers at Shaw Middle School use data walls to improve instruction.

RUNNING TIME

7:44 minutes

VIDEO SECTIONS

- Teachers and Data Walls
- Leadership Teams and Data Walls

MORE INFORMATION

The faculty at Shaw Middle School realized that its analysis of formative and summative assessments failed to surface the learning needs of individual students. In response, the school's leadership team designed data walls. Teachers and coaches use data walls to discuss each student's strengths and areas in need of improvement and to plan instructional responses.

EXPLORE Boosting achievement at Green Middle School (25 minutes)

Your team practices using data findings to reveal possible causes of low achievement and appropriate solutions.

1. Pass out *UDE Handout 3*. Ask your team to read the first page and then check for understanding by asking: *What makes using data to improve instruction challenging? (Slide 8)*

Note: This is meant to be a brief discussion. You will likely return to this question throughout the activity.

2. Tell your team that it will consider data findings from a fictional school, Green Middle School, to practice identifying possible causes for low achievement and appropriate solutions. Read aloud the directions on page two of *UDE Handout 3*. Provide individuals with a few minutes to read the *Simulation Overview* and *Table 1: Key Data Findings*. (This is Step 1 in the directions, found on page two of the handout.)

Consider This: Link this activity to the work your team has done so far. Point out that the data findings in Table 1 draw from data sources noted on the Data Pyramid.

Consider This: Some team members may question the usefulness of the simulation. Others may ask why you are looking at fictional data rather than data from your school. A few may feel that the focus on ELL has nothing to do with the work of your team. If these or other concerns arise, remind your team that the simulation is designed to help it practice: analyzing data, considering causes of data findings, and identifying solutions. This practice will allow the team to more competently use data from your school to improve instruction. You can also point out that the final APPLY activity in this module offers a potential next step related to analyzing your school's data.

3. Break your team into groups of two or three and pass out a set of the *Cause and Solution cards (UDE Handout 4)* that you prepared earlier to each group. Give the small groups 10 minutes to:
 - Discuss specific causes that might contribute to the data findings, referring to the Cause cards for ideas
 - Discuss possible solutions to the causes they identified, using the Solution cards for some ideas

This is Step 2 in the directions, found on page 2 of *UDE Handout 3*.

Note: In this activity, your team moves from reviewing data findings, to thinking about causes, to discussing possible solutions. The goal is for your team to have rich discussions about why ELL students at Green Middle School struggle and how the school can enhance their learning. To that end, encourage your team to draw on its own experiences during the discussion. For example, if your team knows that the curriculum your school uses does not equitably address ELL learning needs, urge them to explore the specific curriculum causes and solutions.

Consider This: As small groups work, encourage them to generate their own causes and related solutions, and record these on the blank cards. This is particularly important if your team has a lot of previous data analysis experience.

Consider This: If this sort of discussion is new to your group, there may be some discomfort with it. Focusing on causes of low achievement and solutions, no matter how much data you have, is challenging. It calls on teams to name gaps in practice in a respectful and professional manner. It may be useful to make this point to the group.

EXPLORE (Continued)

4. **After 10 minutes, engage your whole team in a discussion by asking each small group to share one of its identified causes and corresponding solution(s). As groups share their ideas, encourage them to connect their causes and solutions to the data findings.**

Consider This: Teams may generate multiple possible causes. Remind the team that identifying the roots of data findings is complex work. There is no one right answer.

Consider This: Discussing the possible causes of learning difficulties can surface beliefs and attitudes about students who can and cannot learn. Should this occur, shift the focus from blaming students, their cultural backgrounds, or their families back to the causes highlighted on the cause cards that relate to the school environment. Remind the group that you need to focus on the factors that you, as educators, can influence.

5. **Wrap up by stressing the point of the activity: to practice connecting documented student learning problems with possible causes and solutions in order to improve instruction. Ask: *What was easy about this activity? What was challenging? (Slide 9)***

Consider This: During this reflective discussion, remind the team that when they use this strategy “in real life”—guided by in-depth knowledge of what teachers teach, how they teach it, and the structures in place to support teaching and learning—they can find it a powerful tool in guiding instructional decision-making. The simulation can be good preparation for engaging with your own school’s data findings.

How can our leadership team support teachers' use of data to improve instruction?

Effective leadership teams work within their schools to help gather and analyze multiple sources of data. As a team, they can identify the causes of and solutions to achievement gaps. This learning goal's activities give your team a chance to apply what it has learned to your own school. In doing so, your team prepares to model the effective use of data for colleagues.

VIEW (15 Minutes)

Your team observes how the faculty at Mount Baker Middle School uses data to identify and address instructional problems in classrooms throughout the school.

1. Review Learning Goal 3, *Articulate how the team can support teachers' use of data to improve instruction (Slide 10)*, and tell your team that a video will launch the exploration of this learning goal.

Consider This: As you review the learning goal, tell your team that it will apply learnings from the Data Pyramid and the Green Middle School simulation to identify ways to support teachers' use of data.

2. Preview the video by summarizing its focus (see About the Video at right) and display *Slide 11*, the essential viewing questions: *How does Mount Baker's schoolwide leadership team support teachers' use of data? What strikes you about data carousels as a strategy for using data to improve instruction?*
3. After viewing, re-display the viewing questions (*Slide 12*) and discuss them.

Note: More Information (at right) highlights key points connected to the viewing questions.

AT A GLANCE

Learning Goal 3

TIME

40 minutes

MATERIALS

- Slides 10–13
- Video: *Data Carousels*
- Note-taking template

VIDEO DETAILS

Data Carousels

Mount Baker Middle School
Mount Vernon, Washington

ABOUT THE VIDEO

This video shows how the schoolwide leadership team at Mount Baker Middle School uses a data carousel activity to support the use of data to improve instruction.

RUNNING TIME

6:28 minutes

VIDEO SECTIONS

- Analyzing Data
- Responding to Data
- Impact on Instruction

MORE INFORMATION

Using a data carousel activity, the schoolwide leadership team at Mount Baker Middle School guides teachers to consider and discuss WASL data from the past five years. The activity surfaces students' struggles with specific concepts in statistics, and teachers across the content areas work to integrate these concepts into their instruction. In one year, trend data documents statistically significant improvement.

APPLY Supporting data use at our school (25 Minutes)

Your team reflects upon and applies what it has learned in Learning Goals 1 and 2. Together, your team identifies how it can support teachers in using multiple sources of data to improve instruction.

1. Show *Slide 13* to summarize the key ideas that your team has explored so far:
 - *The importance of using multiple sources of data*
 - *Analyzing data findings to identify causes of and solutions to low achievement*
 - *Data walls and data carousels as two tools that can engage staff in using data to improve instruction*
2. Tell your team that it will use these key ideas to choose appropriate next steps in using data about low achievement to improve instruction. Direct their attention to the large note-taking template, *Supporting Data Use at Our School* (which you prepared before the Learning Experience). You will chart your team's ideas on the template.

Note: In this activity, schoolwide leadership teams should focus on schoolwide uses of data to improve instruction. Content or grade-level teams should focus on the use of content or grade-level data.

3. Ask your team to discuss the data about low achievement that the school currently gathers and analyzes (student learning data and data about people, practices, and perceptions). List these data points in the *Data We Use* column, noting the specific source of the data (e.g., "WASL results") rather than the category of data (e.g., "Summative state assessments"). Next, brainstorm and record additional types of data that your team now recognizes as important. List these ideas in the *Data We Should Use* column, again noting the specific source of the data rather than the category.

Note: You may want to make this activity more specific by focusing on low achievement related to a particular population or instructional issue.

Note: Your team may find it helpful to refer to *UDE Handout 2* to remind them of different sources and categories of data.

4. Move to the third column of the template, *Processes We Use to Identify Causes and Solutions*. Ask your team to identify processes or approaches that teachers at the school currently use to pinpoint the causes of low achievement and to devise instructional responses. For example, if teachers use data walls and systematically analyze student work in grade-level or content teams, you can write "data walls" and "frequent analysis of student work" in the third column.
5. Pause to reflect on the items in the third column and ask: *Are these processes used by some teachers or by all teachers? What additional processes could our teachers use to enhance their use of data? As your team identifies additional processes, write them in the Processes We Should Consider column.*
6. Finally, ask your team to use the template to choose one or two actions it might take to support teachers' use of data to improve instruction. For example, your team might want to engage teachers who need help in an activity using the *Cause and Solution cards* from Learning Goal 2. As your team mentions actions, write them down in the *Actions We Can Take* column.

Note: In this last step, content- or grade-level teams might identify support or resources they need in order to use new data sources and/or protocols for analyzing data, toward the goal of improving instruction.

Now What?

This module sets the stage for your team’s ongoing support of effective data use. Now, reflect on what you have accomplished and plan next steps. Doing so helps ensure that your hard work in this module will impact instruction at your school.

AT A GLANCE

Now What?

TIME
20 minutes

MATERIALS
• *UDE Handout 5*
• *Slide 14*

APPLY Next steps (20 Minutes)

Your team reflects on its progress in meeting the module’s learning goals, agrees upon appropriate next steps, and identifies actions it will take.

1. **Display the *Take Stock Survey (Slide 14)*. Ask everyone to take a few minutes and quickly rank the team’s current status related to each learning goal using the 1–5 ranking system. This will help your team reflect on where it stands at the end of this module. Each individual can write the score for each question on a piece of scrap paper.**

Note: Each individual should fill out the survey based on his or her view of the team’s current status.

2. **Ask each individual to share her or his score, and write the scores on a piece of chart paper or the white/blackboard. Aggregate the scores to a simple majority (i.e., if three of five individuals assigned one learning goal a “3,” then “3” is the aggregate score).**

Note: Do not spend time seeking consensus on a 1–5 ranking for each learning goal. It is more important to agree on the team’s general status: Have you more or less mastered the learning goal or does the team have more learning to do? This part of the activity should take no more than five minutes.

Note: As an alternative to taking the survey, the team could review the handouts and notes from the module to remind it of what it has accomplished and to identify where more work is needed. This option might be a good one if your team divided the Learning Experience into more than one meeting. If your team is running short on time, you could also suggest a learning goal for the team to pursue further, based on your understanding of the team’s progress in this module.

Consider This: If anonymity is important, collect the responses, tabulate, and post the aggregate scores on the board.

3. **Distribute *UDE Handout 5*. Using the survey results, identify one learning goal from the module that your team plans to pursue further. Ask team members to record this under the *Reflect* section of the handout.**

Note: If your team chooses to focus on Learning Goal 1, it will continue to study how instruction improves when schools regularly consult multiple sources of data. If your team chooses Learning Goal 2, it will further analyze data to identify causes of and solutions to low achievement. If your team chooses Learning Goal 3, it will consider how your team can support teachers’ use of data to improve instruction at your school.

APPLY (Continued)

4. **Ask individuals to read through the “Suggested next steps” (pages 2 and 3 of *UDE Handout 5*) for the learning goal your team selected. After a couple of minutes, draw the team back together to discuss potential next steps. Select one step to which the team can commit. Team members can record this step in the *Commit* section of their handouts.**

Note: To preserve time for identifying actions (the *Plan* section of the handout) take no more than five minutes to list next steps.

Consider This: If your team struggles to identify a next step, suggest one based on your assessment of the team’s progress and needs. If none of the suggested steps resonate with your team, feel free to create one.

5. **As a team, identify and record two or three actions that the team will take to pursue its identified next step. For each action, indicate who on the team will be responsible for making it happen and dates related to the action’s execution. Encourage team members to record agreed upon actions in the *Plan* section of *UDE Handout 5*.**

Note: For example, if your team selected “Share the Data Pyramid (*UDE Handout 2*) with your colleagues at the school to build a shared understanding of the multiple sources of data that your school should use” as its next step, your actions might include:

1. Identify other leadership teams at your school who could benefit from ideas in the Data Pyramid (*UDE Handout 2*).
2. Designated members of your team share *UDE Handout 2* with the identified teams.
3. Your team reconvenes to debrief progress made in building a shared understanding among your colleagues of multiple sources of data to inform instruction and to strategize about next actions.

Note: Asking individuals to record agreed upon actions on their copies of *UDE Handout 5* helps keep everyone accountable to moving your team’s instructionally-focused work forward.

6. **Congratulate the group on a productive session!**

Bibliography

- Bernhardt, V. (1998). *Data analysis for comprehensive schoolwide improvement*. Larchmont, NY: Eye on Education, Inc.
- Love, N. (2002). *Using data/getting results: A practical guide for school improvement in mathematics and science*. Norwood, MA: Christopher-Gordon Publishers, Inc.
- Love, N., Stiles, K. E., Mundry, S., & DiRanna, K. (2008). *The data coach's guide to improving learning for all students: Unleashing the power of collaborative inquiry*. Thousand Oaks, CA: Corwin Press.
- Schmoker, M. (1999). *Results: The key to continuous school improvement* (2nd ed.). Alexandria, VA: Association for Supervision & Curriculum Development.
- Stiggins, R. J., Arter, K. A., Chappuis, K., & Chappuis, S. (2004). *Classroom assessment for student learning: Doing it right—using it well*. Portland, OR: Assessment Training Institute.
- Wellman, B., & Lipton, L. (2004). *Data driven dialogue: A facilitator's guide to collaborative inquiry*. Sherman, CT: MiraVia.
- WestEd, & WGBH Foundation. (2003). *Teachers as learners: A multimedia kit for professional development in science and mathematics*. Thousand Oaks, CA: Corwin Press.