

Data-Driven Instruction for the Classroom

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Time Frame 40 minutes

Essential Question(s)

- What is the role of Data-Driven Decision-Making in improving learner engagement, empowerment, and achievement?
- What factors contribute to the successful implementation of Data-Driven Decision-Making in schools?

Summary

This professional learning session focuses on data-driven decision-making in the context of instruction. Participants will establish a definition the data-driven decision-making, identify the steps in the data-driven decision-making process, and explore the conditions and methods for successfully using data-based inquiry to solve problems in classrooms.

Learning Goals

- Establish a definition of the Data-Driven Decision-Making (DDDM) process
- Identify the steps of the DDDM process
- Explore the conditions and methods for successfully using data-based inquiry to solve problems in classrooms

Attachments

- ABC Classroom Data—Data-Driven Instruction for the Classroom.xlsx
- Blank Classroom Data—Data-Driven Instruction for the Classroom.xlsx
- Data-Driven Instruction Practitioner's Research Brief—Data-Driven Instruction for the Classroon.docx
- Data-Driven Instruction Practitioner's Research Brief—Data-Driven Instruction for the Classroon.pdf
- Session Slides—Data-Driven Instruction for the Classroom.pptx

Materials

- Presentation Slides (attached)
- ABC Classroom Data (attached; one per participant)
- Data-Driven Instruction Practitioner’s Research Brief (attached; one per participant)
- Blank Classroom Data (attached; one per participant)
- Computer or device with internet access
- Pen/Pencil
- Sticky Notes

10 minutes

Engage

Use the attached **Presentation Slides** to guide the session. Begin by displaying **slide 3.** Let participants know they will be engaging in an Affinity Process activity, and to think about the last major financial decision they made. On sticky notes, have participants individually write down the factors they considered or the tools/information they used to help make their decision. Participants can provide more than one response, but write each response on a new sticky note.

Display **slide 4**. Instruct participants to find a partner and review their sticky notes and group similar items together. Sticky notes should be added to create categories under which items can be grouped.

Once participants have had an opportunity to group their notes with a partner, have participants review and then sort their sticky notes as a table group.

Move to **slide 5** and ask participants to share out, answering the questions on the slide.

Continue to **slide 6** and share the essential questions for this session. Then, share the session objectives on **slide 7**.

10 minutes

Explore

Facilitator's Note

The ABC Classroom Data handout can also be accessed digitally.

Display **slide 8**. Let participants know that they will be reviewing the classroom level information about the last unit in the ABC classroom.

Distribute the **ABC Classroom Data** handout to each participant, then have participants form groups of four at their tables. Let participants know they will have ten minutes to review this data and address the focus questions in the handout.

Facilitator's Note

The data in this sample handout is divided into low, medium, and high level questions. Teachers should review their own assessments to ensure they are asking questions at all levels. These areas can be aligned to Bloom's Taxonomy or Webb's Depth of knowledge.

Low level questions encompass Bloom's Understand and Remember or Webb's Recall and Reproduction.

Medium level questions encompass Bloom's Apply and Analyze or Webb's Skills & Concepts and Strategic Thinking.

High level questions encompass Bloom's Evaluate and Create or Webb's Extended Thinking.

After participants have had time to review that data and discuss the focus questions as a group, move to **slide 9** and ask participants to share their insights and proposed next steps for this group of teachers.

After discussing additional sources of data, move to **slide 10** and discuss Bernhardt's 4 areas of data. Ask participants to think of types of data they can access that would fall into each area.

5 minutes

Explain

Navigate to **slide 11** and display the Mentimeter. With their table groups, have participants create a definition of data-driven decision-making based on their experiences reviewing the data from ABC Classroom. Have one participant from each table group share this definition to the Mentimeter.

Facilitator's Note

- You will want to set up a free Mentimeter account before beginning this professional learning. To add the template to your account, select this link while logged in and select "Copy to your account." You can now find the Mentimeter on your dashboard. Then add the Menti 8-digit join code and QR code to slide 10 before presenting. Information on obtaining the Mentimeter QR code.
- You can also add a link to the results within your slide: Once the presentation is in your account, select "Share." At the top of the window that pops us, select "Results." Copy the link and paste it into **slide 12**, so that participants can access it to see the results.

10 minutes

Extend

Move to **slide 13** and introduce participants to the modified S-I-T strategy. Distribute the **Data-Driven Instruction Practitioner's Research Brief** handout. As participants read, have them mark at least one point each that they find surprising, interesting, and thought-provoking.

After participants have finished reading and annotating, invite two to three participants to share what they marked for each category or summarize their findings.

5 minutes

Evaluate

Transition to **slide 14**. Give each participant a copy of the **Blank Classroom Data** handout, or they can follow the link on the slide to save a copy to their Google Drive. Let participants know that they should record their student data from the last unit and go through the inquiry process again with their own classroom data.

Facilitator's Note

The Blank Classroom Data handout can also be accessed digitally.

Research Rationale

Data-driven decision-making is a continuous process centered on the use of data, numerical and written, to reach evidence-based conclusions (Bowers & Krumm, 2021; Love et al., 2008). This process should focus on student learning and closing the achievement gap through teacher action over student accountability (Bowers & Krumm, 2021; Love et al., 2008; Mandinach & Schildkamp, 2021). Classrooms that implement data-based practices show improved student achievement and student engagement (Albiladi et al., 2020; Debnam et al., 2022).

Resources

- Albiladi, W. S., Lasater, K., & Bengtson, E. (2020). Data use among principals and teachers: Divergent paths or common ground? Implications for the leadership preparation programs. *Journal of School Administration Research and Development*, *5*(2), 63–76.
- Bowers, A. J., & Krumm, A. E. (2021). Supporting the initial work of evidence-based improvement cycles through a data-intensive partnership. *Information and Learning Sciences*, *122*(9/10), 629–650.
- Debnam, K. J., Edwards, K., Maeng, J. L., & Cornell, D. (2022). Educational leaders' perceptions and uses of school climate data. *Journal of School Leadership*, *32*(4), 362–383.
- K20 Center. (n.d.). Affinity process. Strategies. https://learn.k20center.ou.edu/strategy/87
- K20 Center. (n.d.). S-I-T. Strategies. https://learn.k20center.ou.edu/strategy/926
- Love, N., Stiles, K. E., & Mundry, S. (2008). *The data coach's guide to improving learning for all students: Unleashing the power of collaborative inquiry*. Corwin Press.
- Mandinach, E. B., & Schildkamp, K. (2021). Misconceptions about data-based decision-making in education: An exploration of the literature. *Studies in Educational Evaluation*, *69*, 100842.