



Teaching Students to Examine Their Own Data

January 2010

Topic: Using Student Achievement Data to Support

Instructional Decision Making Practice: Student Use of Data

Highlights

- It's important for students to learn how to understand and use their own data.
- Students can learn to set goals and gain a sense of ownership over their learning when they analyze their data.
- Teachers need to provide tools to help students understand their data and timely and specific feedback on their progress.



Full Transcript

Slide 1: Welcome

Welcome to the overview on Teaching Students to Examine Their Own Data.

Slide 2: Students' role in data analysis

As schools develop a schoolwide vision and culture for data use, and teachers engage in regular collaborative data analysis as part of their instructional decision-making process, it is important for students to learn how to understand and use their own data.

Slide 3: The case for self-monitoring

When teachers provide students with data on their progress and help them understand these data in order to set personal learning goals, students gain a sense of control over their learning and become more motivated.

Slide 4: Clear communication

Teachers need to clearly communicate the skills and content knowledge that students are expected to master during the school year. Students have to understand the goals for individual lessons and assignments, as well as unit and end-of-year expectations, if they are going to use their data to interpret their progress toward those goals.

Slide 5: State standards

Students also need to understand the *state* standards that they are expected to meet. Teachers can show the connections between the standards and the concepts addressed in classroom activities and assignments.

This is not the same as engaging students in regular practice exercises that are designed to mirror the state assessments.

Slide 6: Understanding criteria

Teachers also need to provide students with criteria for assessing their performance.

A rubric is a useful tool for outlining the specific criteria for assessment. For example, before students begin a science lab experiment, the teacher can provide a rubric that lists each standard that is represented in the lab activity, such as "Students need to draw and label three stages of chemical change."



In this way, students know what is expected of them before beginning the activity. They understand that their work will be assessed according to the rubric and that the teacher will note where they do, or do not, meet the criteria. With this knowledge, students can monitor their own progress in specific areas.

Teachers can also provide opportunities for students to take sample, completed assignments and assess them against the rubric to further their understanding of the expectations.

Slide 7: Characteristics of feedback

Teachers need to provide more feedback to students than putting a letter or number grade on an assignment. Thoughtful feedback can help students understand their own strengths and weaknesses, explain why they received the grades they did, and identify which skills and concepts they need to focus on in the future.

Useful feedback is **timely**. Students should receive feedback within a week of turning in the assignment. The sooner the better, so that the task and skills in question are still fresh in their minds.

Feedback should be **specific and constructive**. This can take the form of explanations, examples, and suggestions for additional practice. Vague comments like "Could do better" or "Well done" should be avoided. Teachers need to be specific in both critique and praise.

For example, "You're having difficulty spelling words when a suffix is added" is more helpful than "You need to work on your spelling." With this kind of feedback, the student knows exactly where to focus additional practice and attention for the next writing or spelling assignment.

Slide 8: Time to analyze feedback

When class time is set aside for feedback, students can be carefully guided through the process of analyzing their progress and setting goals.

Teachers can help them interpret their data, identify specific strengths and weaknesses, decide on strategies to improve performance, and make data-based decisions about their own learning goals. All this should be done in a way that emphasizes students' responsibility for improving their own learning.

This can take place in small groups to provide feedback on shared areas of growth or one-on-one with students for specific, individualized feedback.

Slide 9: Feedback tools

Teachers will need to provide students with tools to help them interpret their feedback. These might



include:

- Templates for listing strengths, weaknesses, and where to focus on improvement,
- Lists of questions for students to consider and respond to when setting learning goals,
- Worksheets that help students reflect on errors and provide further practice, and
- Graphs generated by the teacher that track student progress over time, and paper-based grids on which students can record this information themselves.

Slide 10: Adjusting instruction

Teachers can consider students' data analysis results, learning goals, and any areas that students identify for improvement as they decide how to adjust their instruction.

Students' responses in these areas can help teachers identify concepts that need to be retaught, organize small-group instruction around goals the students prioritize for themselves, or provide full-class reviews on areas that the most students identify as a weakness.

Slide 11: Challenges

Teachers should be aware that some students may take feedback as a reflection on their ability, rather than their work on a specific assignment. It's important to avoid global statements like "You need to improve" that can reinforce this misconception. Feedback needs to be specific and clearly related to the relationship between the task and the goal at hand.

Different teachers within a school often have their own approaches to feedback with students. This can be perceived as inconsistency, confusing students and even leading some to dismiss the feedback they receive. Having all teachers involved in professional development and peer collaboration around feedback can result in consistent, normative feedback procedures throughout the school.

Slide 12: Conclusion

Helping students understand and interpret *their own* data is key for a coherent approach to using student achievement data to support instructional decision making. Explaining expectations and assessment criteria, providing specific and focused feedback, and using tools that help students understand the data and feedback all contribute to this practice. As a result, teachers will have additional information to consider when making instructional changes, and students can better monitor their own learning.



Slide 13: Learn More

To learn more about Teaching Students to Examine Their Own Data, please see the additional resources on the Doing What Works website.