



Course Follow-up Activities

Feedback: A Powerful Tool for Raising Student Achievement in Mathematics and Science – Mary Doran Brown

Note: It is recommended that participants in the video course complete follow-up activities to deepen their knowledge and skills. When these activities are completed in accordance with local staff development guidelines, participants may be able to earn additional professional development credit. Contact your local staff development office for determining how you might receive credit for completing the video program and additional credit for completing follow-up activities.

Activity 1 Review Student Assessments

Print the sample student assessments provided on this website for either mathematics or science.

Mathematics

- Box on Shelf Proportion Sample
- Chart Math Sample
- Coordinate Grid Sample
- Graphing Sample
- Number Sentence Sample
- Raffle Ticket Sample

Science

- Candle and Jar Sample
- Pencil and Mirror Sample
- Snow Melting Sample
- Watering Can Sample
- Weight and Beaker Sample

Pick two of the sample assessments and develop the list of descriptive feedback you would provide to a student that has scored at each level of the responses given. Review your feedback statements and compare them to the definitions of descriptive feedback and evaluative feedback provided by Mary Doran Brown in the presentation. Submit this set of feedback statements along with your sample lessons you have chosen to complete.

Activity 2 Plan a Lesson

Select a mathematics or science lesson you have used or plan to use. You may select one from your own resources or go to a website such as the MCREL Lesson Plan Site for [Mathematics](#) or [Science](#) to select an appropriate lesson. There is a resource on this website – the [Planning Board Form](#) – that was presented by Mary Doran Brown. We have created a fill in form for your convenience. Use this form to outline your plans for implementing the lesson and include the following:

- What do I want students to know and be able to do?
- How will I know if students have learned the content?
- What will I do if students do not learn the content?

- What will I do if students already know the content?

Develop a reflective log for recording your feedback to students during the lesson you developed in Activity 1. Note the following characteristics about your feedback.

- Is it specific to the task?
- Does it point the student to improvement?
- Is it linked to formative assessments?

Activity 3 Feedback to Students

Use the PowerPoint presentation provided on this website. Show the parts about the definitions of descriptive feedback and evaluative feedback to your peers as part of a study group. The Descriptive Feedback Cards resource on this website may be downloaded and used during the video to follow along with the presentation. You should also use some sets of these cards with your peers to practice understanding the difference in the types of responses given.

Use the sample assessments provided in the handouts or from the samples you can download from this website for mathematics or science and have your peers review them and discuss how they would provide descriptive feedback to the various students that may have taken the assessment item. There are ranges of responses.

- What types of responses would be best for each of the various levels of answers given in the assessment item?
- Review the responses your peers develop and critique them for being descriptive or evaluative. Describe what you find. Are the responses more descriptive or evaluative?

Activity 4 Explore and Share Resources

Using one of the references from Mary Doran Brown's PowerPoint presentation listed below, summarize at least 5 key points that would enhance your teaching. Some of the links below take you to a study guide to help you formulate your thoughts as you read the specific book. Develop a handout to share these ideas with your colleagues.

Black, P., Wiliam, D. (1998). [Inside the Black Box: Raising Standards Through Classroom Assessment](#). *Phi Delta Kappan*, 80 (2), 139-149.

Davies, A. (2000). *Making Classroom Assessment Work*. Courtenay: Connections Publishing.

DuFour, R. (1998). [Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement](#). National Educational Service.

Marzano, R., Pickering, J., Pollock, D., (2001). [Classroom Instruction That Works: Research-based Strategies for Increasing Student Achievement](#). Alexandria: ASCD.

O'Connor, K. (2002). *How to Grade for Learning*. Glenview: Pearson.

Saphier, J., Gower, R. (1997). *The Skillful Teacher*. Acton: Research for Better Teaching, Inc.

Strong, R. W., Silver, H. F., & Perini, M. J. (2001) [Teaching What Matters Most: Standards and Strategies for Raising Student Achievement](#). Alexandria, VA: ASCD.