

The Principals' Partnership http://www.principalspartnership.com/

A Program of Union Pacific Foundation

Research Brief

Immediate Feedback to Students and Student Learning

Question: What does the research say about immediate feedback to students and its impact on student learning?

In a Nutshell

A study reported by The National Center for Fair and Open Testing (Black & William, 2007) found that low achievers do particularly well when provided high quality feedback about their work. The type of feedback, as well as the information provided to students about their assignments, can positively impact student learning. Providing students with formative feedback helps them adjust and modify their work. Three conditions have been identified that contribute to this effect. First, students are provided with examples (exemplars) of a good performance. They know what good performance on the assignment looks like. Second, they are provided explicit information about how their current performance relates to expectations for a good performance. Third, students are provided with information about how to close the gap between their current performance and a good performance on the task. When these conditions are present there is evidence that students make academic gains.

Summary of Findings:

Assessment is one of the primary components of a teacher's job. A student's knowledge is continuously appraised and is an integral part of their learning process. According to the Analytic Quality Glossary, "Assessment of student learning is the process of evaluating the extent to which participants in education have developed their knowledge, understanding and abilities." Chappuis (2005) stated that strong and suitable assessment has a coherent function. In the educational system's goal to help students make strong academic gains, it is imperative that students have ownership in their own learning (Chappuis, 2005; Chappuis, & Chappuis, 2008; Garrison, & Ehringhaus, 2007; Nicol, & Macfarlane-Dick, 2006; McMillan, 2000). There are two types of assessment, summative and formative, and they serve different purposes. According to research, when formative assessment is done well it helps improve student learning while summative assessment in the form of standardized tests, is less likely to have such an impact (The National Center for Fair and Open Testing, 2007).

Summative Assessment

This form of assessment sums up or is the culmination of long-term learning. It can take the form of an end of unit or term exam. Such assessments can be used to determine the next steps in the curriculum. However, most often summative assessments are a state or district test, where the results are used to compare students and schools with one other, not reported for months, and/or do not directly impact daily instruction (Chappuis, & Chappuis, 2008; Garrison, & Ehringhaus, 2007; Learn NC, n.d.).

Formative Assessment

Formative assessment, on the other hand, occurs much more frequently, often within a lesson or unit, and allows a student to practice their knowledge, adjust, modify and grow from constructive feedback. Formative assessment provides guidance in the instructional program. It is recommended that formative assessments not be graded because students benefit by making academic adjustments as they use the feedback to modify their own learning (Chappuis, & Chappuis, 2008; Garrison, & Ehringhaus, 2007; Nicol, & Macfarlane-Dick, 2006).

Based on research conducted by Black and William (1998), teacher feedback is most effective when three conditions are in place. The student should know: 1) what a good performance on the given assignment looks like; 2) how their present performance relates to a good performance; and 3) how to close the gap between what their current assessment is and how to make it a good performance. It was found that when these components were consistently

THE PRINCIPALS PARTNERSHIP

The Principals' Partnership

http://www.principalspartnership.com/ A Program of Union Pacific Foundation

Research Brief

implemented, students made academic progress (Nicol, & Macfarlane-Dick, 2006; The National Center for Fair and Open Testing, 2007). Research also shows that when learners are in control of and use results to modify their own learning, they are more self-regulated and become effective, persistent, resourceful, confident and higher achieveing (Chappuis, & Chappuis, 2008; Nicol, & Macfarlane-Dick, 2006; The National Center for Fair and Open Testing, 2007).

Effective Formative Feedback

The research has identified the characteristics of effective formative feedback to students.

- The teacher talks with students about their goals for the course. Once this has been discussed, based on student feedback, the teacher establishes a syllabus for the semester's course.
- Students maintain a list of the learning targets and standards and check off the ones they have learned/mastered.
- Students chart their own progress, then write about where they see growth.
- Teachers inform students about:
 - The goals of the assignment.
 - The characteristics of good and poor responses to the assignment, provide anonymous examples of strong and less strong responses and provide students with a well-developed rubric for the assignment.
 - The task(s) and provide an opportunity for discussion to assure that students understand the requirements.
- There are opportunities for teachers to conference with students one-on-one to provide high quality feedback. Telling them they did a "good job," does not tell the student anything about their work.
- Allow students to use the feedback to modify their work so that it meets/exceeds standards or goals, closes the gap between their assignment and what is good.
- Train students in strategies for working with one another, so that peers can provide constructive guidance and dialogue to each other.
- Train students how to use the feedback they receive to grow and improve their work.
 (Chappuis, 2005; Chappuis, & Chappuis, 2008; Garrison, & Ehringhaus, 2007; Johnson, 2008; McMillan, 2000; Nicol, & Macfarlane-Dick, 2006; STEM, n.d.; Zinn, 2009)

It is important that teachers are trained in how to provide this type of feedback. The literature has a wealth of strategies to provide high quality formative feedback that will guide students to a successful and meaningful academic experience.

Online Resources:

- Analytic Quality Glossary. (n.d.). Retrieved online
 http://www.qualityresearchinternational.com/glossary/assessmentoflearning.htm
 An online site that provides definitions of concepts.
- Chappuis, S. (2005, August). Is formative assessment losing its meaning? Retrieved online
 https://files.pbworks.com/download/E9WQbxDB6Y/florin/13015266/Formative%20Assessment%20-%20chappuis.pdf

Some of the reasons why formative assessment may be losing its effectiveness are described in this article.

Chappuis, S. & Chappuis, J. (2008, January). The best value in formative assessment. Retrieved online
 http://www.ascd.org/publications/educational-leadership/dec07/vol65/num04/The-Best-Value-in-Formative-Assessment.aspx

The article provides easy to understand definitions of formative and summative assessment along with some ideas for strengthening student learning.

THE PRINCIPALS' PARTNERSHIP

The Principals' Partnership

http://www.principalspartnership.com/ A Program of Union Pacific Foundation

Research Brief

• Funderstanding. (n.d.). Brain-based learning. Retrieved online http://www.funderstanding.com/content/brain-based-learning

A brief description of what the brain needs to learn and retain information is provided in this piece.

- Garrison, C. & Ehringhaus, M. (2007). Formative and summative assessments in the classroom. Retrieved online http://www.nmsa.org/publications/webexclusive/assessment/tabid/1120/default.aspx
 This article describes formative and summative assessments and provides some examples of each.
- Johnson, B. (2008, April). Instant feedback: Principles of, and techniques for, formative assessment. Retrieved online http://www.edutopia.org/formative-assessment-part-two
 This is a succinct blog about the importance of feedback to students.
- Learn NC. (n.d.). Summative assessment. Retrieved online http://www.learnnc.org/lp/pages/5233
 A very brief definition and examples of summative assessment are given in this article.
- McMillan, J.H. (2000). Fundamental Assessment Principles for Teachers and School. Retrieved online http://pareonline.net/getvn.asp?v=7&n=8
 Some excellent points about the key importance to assessment are described in this piece.
- Nicol, D. J. & Macfarlane-Dick, D. (2006). Formative assessment: A model and seven principles of good feedback practices. Retrieved online
 http://www.informaworld.com/smpp/section?content=a743789423&fulltext=713240928

 "The research on formative assessment and feedback is reinterpreted to show how these processes can help students take control of their own learning, i.e. become self-regulated learners."
- STEM. (n.d.). Formative Assessments. Retrieved online

 http://www.stemresources.com/index.php?option=com_content&view=article&id=52&Itemid=70
 The importance of formative assessment and some ideas to use it are provided in this piece.
- The National Center for Fair and Open Testing. (2007). The value of formative assessment. Retrieved online http://www.fairtest.org/value-formative-assessment-pdf
 Reasons why formative assessment should be used for student growth are cited in this article.
- West Virginia Department of Education. (n.d.) Retrieved online
 http://www.taosschools.org/ths/School%20Improvement/CIEDipTTModule7TypesofFormativeAssessment.pdf

This list includes different ideas of formative assessment.

- Yara, G. (2010, February 6). Clickers, Smart Board enhance learning at Gililland Middle School. Retrieved online http://www.azcentral.com/news/articles/2010/02/05/20100205tr-clicker0206.html
 A brief article about electronic clickers that are being used in classrooms as part of the assessment program.
- Zinn, T. E. (2009, October). But I really tried! Helping students link effort and performance. Retrieved online http://www.psychologicalscience.org/observer/getArticle.cfm?id=2564
 This article combines formative and summative assessment strategies that utilize technology and daily quizzes.



The Principals' Partnership

http://www.principalspartnership.com/ A Program of Union Pacific Foundation

Research Brief

Submitted: Jan 2, 2011

By: Dr. Karen Walker Lebanon Valley College

http://www.principalspartnership.com

This is provided as a service to educators by The Principals Partnership and Union Pacific Foundation, neither of which assumes any responsibility for the content of the brief or the positions taken by the authors or the Web sites or other authors whose works are included. This research brief reflects information currently available and is not the official position of The Principals Partnership or Union Pacific Foundation.

Disclaimer: All URLs listed in this site have been tested for accuracy, and contents of Web sites examined for quality, at the time of addition. Content accuracy and appropriateness, however, cannot be guaranteed over time as Web sites and their contents change constantly. The author takes no responsibility for difficulties, which may result from the use of any Web site listed herein. Please notify the <u>Webmaster</u> if you find any dead links or inappropriate material.

Permission: You may use or download content for research or educational purposes, or for your personal, noncommercial purposes, provided you keep unchanged all copyright and other notices with them. No other use of any content is permitted. You agree that you will make only lawful use of this research brief, and will only use these briefs in compliance with all federal, state and local laws and regulations. You agree that you will make no use of the research that violates anyone else's rights, including copyright, trademark, trade secret, right of privacy, right of publicity or other rights.