

Immediate Feedback Assessment Technique (IFAT)

Why Is This Strategy Useful?

This technique provides immediate feedback to students in a group setting without the need to utilize computers or one-on-one teacher time. IFAT also can have a positive impact on students' motivation and engagement in learning. The technique enables students to immediately know whether their answers to multiple-choice word problems are correct or not. Students are then encouraged to revise their thinking in order to identify the correct answer. This strategy may be especially helpful for students with disabilities and struggling students in the elementary school grades.

Description of Strategy

Rather than filling in a circle with a pencil on an answer sheet, students scratch off their answers as if they were scratching a lottery ticket. If the answer is correct, a star or other symbol appears somewhere within the rectangle. If the answer is incorrect, the rectangle is blank. Students aim to select the correct answer with as few trials as possible. Using this technique, students know immediately if their selected answer is correct or incorrect. Receiving feedback immediately can help motivate and engage students in the learning process.

It should be noted that researchers agree that feedback that only indicates if an answer is correct or incorrect is insufficient to help students improve their learning and self-confidence in regard to math. Teachers should attempt to provide all students prescriptive feedback that helps students understand the steps of the correct problem-solving techniques.

Research Evidence

One article reporting on a series of small randomized controlled trials provides support for this strategy. The study included normally achieving students and students with learning disabilities in mathematics from third-grade classrooms in an urban elementary school. For both ability groups, receiving immediate feedback either by an educator or by the IFAT resulted in higher achievement than students receiving delayed feedback. Students receiving immediate feedback did better than the comparison group also at follow up, five weeks after the end of the intervention.

Sample Studies Supporting this Strategy

Brosvic, G. M., Dihoff, R. E., Epstein, M. L., Cook, M. L. (2006). Feedback facilitates the acquisition and retention of numerical fact series by elementary school students with mathematics learning disabilities. *Psychological Record*, 56(1), 35-54.

The effects of feedback to assist elementary school students classified as either normally achieving (NA) or with a mathematics learning disability (MLD) in acquiring the fact series of 0 to 9 for the operations of addition, subtraction, multiplication, and division were examined in Study 1. The acquisition of each fact series was facilitated by immediate, but not by delayed feedback, the latter of which was no more effective than control procedures. The students with math disabilities were tested with either delayed feedback or a Scantron form in Study 1, then participated in Study 2, in which they were provided with feedback from either an educator or the Immediate Feedback Assessment Technique (IFAT). The beneficial effects of immediate

feedback reported in Study 1 were replicated and extended during maintenance which continued for as many as 25 sessions. The effects of auditory feedback provided by an educator and visual feedback provided by the IF AT were compared with the effects of combined auditory and visual feedback provided by the Write-Say method in Study 3. The integrated presentation of auditory and visual feedback was no more effective than the use of either modality, separately. The comparable effectiveness of feedback by an educator and by the IFAT, and the nonsynergistic effects of combining auditory with visual feedback, suggests that a response medium such as the IF AT has considerable adjunctive potential to assist in the instruction of elementary school students with special learning needs.

Additional Resources

Immediate Feedback Assessment Technique. Background and overview information available at: <http://www.epsteineducation.com/>

Immediate Feedback Assessment Technique. Summary information available at: <http://www.csom.umn.edu/Page6448.aspx>