



Your Students Can Outperform 98 Percent of Other Students

Benjamin Bloom reported on how a teacher can achieve 98 percent mastery. Read how it's done in the **Going Beyond** folder for Chapter 20 or scan the QR Code in the book.

There are three basic methods of instruction.

- 1. Conventional Instruction.** This is the ubiquitous textbook, lecture, worksheet, and test method. The chapters in the textbook constitute the assignment, and the tests are written to determine students' grades only. The intent is to "cover and grade."
- 2. Mastery Learning.** The instruction is the same as in the conventional instruction method, but the assignments are based on objectives that the students are responsible for accomplishing and the tests are criterion-referenced. Many are formative tests used to determine what kind of corrective help the student needs before the summative test is given. The intent is to teach for mastery or comprehension.
- 3. Tutoring.** This is one-to-one instruction. The intent is to give one-on-one tutoring to assess for and then tutor to ensure that mastery or comprehension is reached.

We all know that one-to-one tutoring is the most effective form of instruction, but this would be too costly, so Benjamin Bloom set out to find a comparable form of instruction that could be used in standard classroom group instruction. He found it!¹ Here's what he discovered:

The average **TUTORED student outperformed 98 percent** of the students taught under a conventional form (within 2 standard deviations, if you are statistically inclined).

The average student taught under **MASTERY LEARNING outperformed 84 percent** of the students taught under a conventional form (1 standard deviation).

Based on what has been described about assignments (Chapter 18), tests (Chapter 20), and assessment (Chapter 19), the following steps describe how a teacher could teach very effectively.

Step 1. Base each assignment on a set of objectives.

Step 2. Base each test on the objectives; that is, write criterion-referenced tests. Use the test results to determine how well the students learned each objective (remember, the questions are correlated to the objectives).

Step 3. Make the first test a formative test. When you use Steps 1 to 3, you are teaching under a mastery learning format. You are now 84 percent more effective than the conventional teacher who covers the textbook.

Step 4. After the tests are scored (not graded), you note, for instance, that the student has missed question 6.

¹Bloom, Benjamin S. (May 1984). "The Search for Methods of Group Instruction as Effective as One-to-One Tutoring." *Educational Leadership*, pp. 4–6.

Your Students Can Outperform 98 Percent of Other Students (continued)

Look at the information in the parentheses to the left of question 6. (See page 271 for an example.) With this information, determine what corrective activity you need to reteach and assign to the student who has not mastered the objective.

Continue to monitor and assess for individual learning until comprehension is mastered. This is tutoring.

You have just changed from group instruction to individualized tutoring. You are now 98 percent more effective than the conventional teacher.

Mastery Learning + Individual Tutoring = High Student Achievement