Mastery Learning: A Report From the Firing Line

One key to management of mastery learning is allowing plenty of time for developing materials and activities before classroom instruction begins.

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Ben Bloom, you’re right on the money. The timing is perfect, and you know how to soothe the collective pains of a generation of educators. Slipping academic standards, parent dissatisfaction, lowered test scores—who can deny that Mastery Learning meets the need? Certainly the system echoes the notion that all students can learn, and it only makes sense to see that students must be proficient at one skill level before they move on to the next. Accountability? You provide the management system everyone has been waiting for. Your careful student achievement records are hard to ignore, and teachers are finally chasing after students before they slip through the cracks. Your research data are so promising, so clean, so right—and damned frustrating! Frustrating because the best practices are not always easy to apply in a real classroom. With Mastery Learning, educators may suffer several minor catastrophes and lots of hair pulling before they start to see the big payoffs we’ve all heard about. Obviously, it’s important to know about the payoffs, but for many teachers and administrators it may be just as critical to hear about small blunders, major mistakes, successes, or changes that paint a more understandable picture of Mastery Learning. Project WRITE offers such an illustration.

Project WRITE—A Calculated Risk

Kids often write incoherent paragraphs full of run-on sentences, faulty punctuation, and jumbled ideas. Many times, they don’t want to write at all. In southwest Washington, two school districts, Battle-ground and Camas, are addressing this problem at the middle school level. They want to ensure high writing standards and plenty of writing practice in grades 6, 7, and 8. This way, they reason, a downward trend can be arrested before it takes a devastating toll in the high school.

The typical shotgun approach to composition instruction finds teachers dependent on an English textbook with a hodge podge of exercises and mini-units. The scope and sequence of the composition strand is often a mystery, even to the text’s author. Teachers will say the study of composition is grammar, or maybe it’s mechanics and punctuation. Some teachers talk about the formal structure of essays or emphasize linguistics and sentence combining. Teachers who attempt to tie it all together often use their own materials and spend countless hours on preparation.

Therefore, the first component of Project WRITE is a concise skill sequence that moves along a continuum. Near the beginning of the continuum is an emphasis on writing complete sentences and eliminating run-on sentences. At the end, the student can produce a coherent, multi-paragraph essay with a defensible thesis and no obvious structural errors. In between are the necessary bridging elements.

This skill sequence represents the core of the program. All other components feed into this core.

For instance, a wealth of commercial texts and media kits have been keyed into the original skill sequence. Teachers use a cross reference guide to locate these materials. Project-developed materials have been prepared to fill gaps in commercial sources and to back each skill. Thus, teachers are guaranteed field-tested corrective, extension, and evaluation materials in addition to other activities.

A preservice plan has also been implemented to train teachers how to use the materials and appropriate teaching strategies. This staff development continues throughout the year as the coordinators model instructional techniques in the classroom and serve as consultants.

The final program component becomes the ultimate vehicle for transferring the skills into measurable results. This instructional management system, Mastery Learning, is the real insurance that learning can be guaranteed.

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Fact or Fiction

Insurance does not always eliminate apprehension, however. Both teachers and project managers were apprehensive about Mastery Learning in the early days of the project. Basically, the concerns were related to management issues. Before the project began in the classroom, teachers discussed many of the questions listed below. Underneath each question is a discussion of measures that were taken to address these concerns and the actual classroom findings.

Although Bloom’s model of Mastery Learning primarily involves group-based instruction, individual learning styles and learning rates must be addressed. How can I provide many different corrective activities for various groups of kids? Won’t the management issues become overwhelming?

The management questions surrounding various learning rates were some of the thorniest issues addressed by project personnel, and, of course, they are central to the success of Mastery Learning. On the one hand, teachers were impressed with the fact that they should provide a variety of corrective learning materials to students. They also believed in using small group, peer tutoring, one-on-one tutoring, and large group instructional methods. They wondered, however, where all the necessary corrective materials were going to come from and how to use grouping techniques successfully.

To put it bluntly, Mastery Learning involves an incredible initial investment of time and preplanning. Unfortunately, time is the one commodity teachers cannot afford. Recognizing this fact, the project coordinators produced countless extra worksheets, games, activities, and manipulatives to reinforce concepts. At least three or four corrective activities were written for each skill and many commercial sources were indexed for teachers. I don’t mean to imply that Mastery Learning exists only where there is intensive outside support, but ways have to be found to give teachers extra time for planning. This could be achieved by providing extended contract time or the assistance of an additional staff person. The pleasant thing to remember is that the initial investment need be made only once. When the materials are in place, they can be used over and over again with minor modifications.

When teachers tackled the issue of grouping and individualization, a common misconception emerged. Many teachers had the impression that there must be long periods of time when students were all working at different levels and with different materials. This was not the case. With Bloom’s model, at least as the Project interpreted it, an effort was made to keep students together the majority of the time. For example, Project WRITE’s students receive group-based instruction during introduction of a new concept, reinforcement of the skill, application of the skill in a major writing assignment, and checking of student progress with a short developmental test. Typically, this procedure involves one to two weeks of instruction.

Results from the developmental test switch the mode to intensive corrective or extension activities. And the emphasis is on intensive. Most teachers can handle various grouping needs if the time period is short. Teachers were assured that all the necessary prescriptive activities were ready beforehand. In addition, they kept some students after school for extra study; used short-term, team-teaching strategies; involved a small group of outside volunteer tutors for extra help; and encouraged parents to assist with homework. Interestingly, teachers found that small group instruction with a different teacher was the most effective corrective. In most cases, this concentrated focus was enough. Once again, the group was pulled back together and eventually unit mastery tests were given to the entire class. Student mastery for each skill was determined as a score of 90 percent or better on the unit test. At times 95 percent of all students in the project reached this goal.

What about students who learn at...
a faster rate? Will I have to hold them back while I work with the others? Won't they get bored?

The need for enrichment activities was no less difficult for project participants. However, the same lessons learned in planning corrective activities were appropriate again. Basically, teachers needed to have good materials developed beforehand. Because a greater number of students are involved in extension activities, teachers needed games and large-group activities that operated on higher cognitive levels. Attempts were made to tailor activities to individual student interests and to emphasize application, synthesis, and evaluation. Sample extension activities included special (individualized) writing activities, producing skill-related media materials, producing practice exercises for fellow students, peer tutoring, and more difficult games and contests. At no time did these students seem restless or bored. In large part, this was due to excellent preplanning on the part of teachers.

If many of my students attain mastery, they should receive "A" or "B" grades. Won't some people find this hard to believe? What about kids who have always gotten good grades? Won't they resent not being part of a select group anymore?

The grading issue was much worse in anticipation than reality. Maybe dealing with students at an earlier age made a difference. At any rate, project participants found that neither students nor parents objected to a rather dramatic improvement in grades.

In fact, students who had never received an "A" before were, quite honestly, ecstatic at times. The most important thing to them was the fact that they had legitimate proof of accomplishment, and teachers felt that as long as their standards were high enough to begin with, they had nothing to worry about. If the mastery test is a valid measure of skill attainment, then the test itself is the bottom line. It always exists in the student's file as verification of the grade.

Students who had consistently received high marks in the past still seemed satisfied with their achievement. Many were aware that they had achieved mastery a little earlier than others. If anything, however, they seemed more willing to help their peers once the competitive aspect was removed.

What are mastery tests like? Are there any special considerations we should have in this area?

Unit mastery tests are much like any other good exam. They needn't be long, but they must be valid and reliable for the skill being measured. Project WRITE has a two-part test that is both objective and written. Students have to show they can apply the knowledge in their own writing as well as recall facts. Teachers are also provided with alternate tests so that students who do not achieve mastery can be retested after additional correctives are given.

Kudos

These questions and answers reflect only a portion of our total experience with Bloom's recommendations. Nevertheless, these critical segments reveal something akin to a sound endorsement.

Mastery Learning can work and the implications are very exciting, but it isn't easy.