# Motivation Through Mastery Learning

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*Every developmental education teacher would probably agree that motivation to complete assignments is one of the biggest obstacles to getting students to practice necessary skills. Short stories and other types of recreational reading might help motivate students, but they need to learn specific skills to help them cope with college textbook reading. An adaptation of mastery learning, a technique that uses multiple attempts for students to master goals at their own pace, was the key concept that allowed my students to achieve this goal.*

I have taught developmental reading to college freshmen for almost twenty years. During all those years, I looked for teaching strategies that would motivate my students to learn and enable them to gain competency in all the skills set forth by my district. I also wanted to be fair in my grading practices. Many of my students are older teens and adults who struggle with the multiple demands of life: jobs, small children with the accompanying emergencies, parental pressure, and poor health. Motivating my students to complete each assignment seemed to belong in a fantasy world I had never visited; getting them to care about what I was teaching seemed impossible. I knew about the idea of mastery learning, the technique of instruction which allows students multiple opportunities to master a series of goals which are evaluated with reference to specified criteria (Biehler & Snowman, 1990), but I did not know how to incorporate it into a class with limited meeting times and the pressure to complete all skills by the end of a semester.

## The Relationship Between Hope, Goals, and Mastery Learning

In the winter of 2003, Jackson, Weiss, Lundquist, and Hooper published an article with a title that caught my eye: *The Impact of Hope, Procrastination, and Social Activity on Academic Performance of Midwestern College Students*. In the article, the authors wrote that although many variables affecting academic performance have been verified through research, only recently have hope and procrastination been considered as potential predictors of academic performance. The reason I was interested in what these authors had to say was that my

students were definitely procrastinators and I have always suspected that one reason that retention in the community college is so low is that the students lose hope that they can succeed in college. Jackson (2003) and his colleagues concluded that hope reflects the interaction between goal-directed determination and the planning of ways to meet goals and it positively correlates with academic performance. Students who tested low on measures of hope used more disengagement strategies for coping with stressful academic situations and thus were not actively engaged in the learning process. These students procrastinated to the point of having insufficient time to do their assignments well, or they underestimated the amount of time it should take them to complete their assignments. According to the study, students with higher hope scores usually had lower procrastination scores, which suggests that although a student's hopeful disposition does not in itself predict higher academic performance, the behavior related to low hope—procrastination—may be the significant variable.

Other researchers have also investigated the link between hope, goal setting, and success. Snyder (1995) found that people with a higher level of hope, as opposed to those with a lower level, have a greater number of goals, set more difficult goals, have success at achieving those goals and perceive those goals as challenges rather than obstacles. I was particularly interested in the findings of a study by Ford (1995) that suggested that teachers can improve their effectiveness if they help students precisely define the targets in their learning activities. However, student efforts must be accompanied by feedback regarding their performance and progress. Ford concludes that human potential grows exponentially when people have significant goals and when they believe they can reach those goals through their own effort and through the help of others.

Clearly defining targets and providing specific feedback fits right in with mastery learning models. Biehler and Snowman (1990) built on the work of Bloom (1968) and Carroll (1963) to describe in very specific terms how to use the mastery approach in a classroom. Their suggestions include:

1. Distribute the list of objectives at the beginning and tell students they will be tested on them.
2. Use a variety of instructional methods to explain and illustrate the objective-related ideas.
3. Write exam questions based on the objectives and arrange them in two or even three alternate exams.
4. Test students when you feel they have had ample opportunity to learn the material.

5. Grade and return tests promptly; go over questions briefly in class and more extensively with individuals who desire the help.
6. Schedule make-up exams and make yourself available for consultation the day before.
7. Supplement exams with books reports, oral reports, papers, or some other kind of individual work that allows for student choice as much as possible (Biehler & Snowman, 1990).

## My Solution

In the fall of 2003, I began to experiment with a system using the competencies (skills) set up by the district reading faculty. I had the goals; I needed to define the behavioral objectives (the measurements) and state them on the syllabus the students would receive on the first day of class. I set up the schedule for my students in four columns. 1) I numbered and named the competencies, 2) I wrote the number of points possible to earn for that competency, 3) I added the dates of the first and second chances for students to prove mastery of the competencies, and 4) I carefully described the measurements I would use to ascertain their mastery of each competency. (See appendix).

My next goal was to figure how I could be fair in my expectations and the grades I had to report when so many of my community college students had complicated lives that kept them from getting to class for a test or getting the homework to me on time. I did not want to penalize students for what they could not control. On the other hand, I did not want them to turn those situations into habitual excuses so that not meeting deadlines would become a way of life for them.

Eventually, I felt I had an almost ideal solution: I allowed everyone who failed or missed a test a second chance. If a student missed class, I did not judge the validity of his/her reason. I simply gave the student another version of the missed test during the college's finals week, not earlier. Another group of students also took specific competency tests during finals week. Those students who earned less than a 70% on a competency on the regularly scheduled test date were required to work on that competency with a tutor in the reading lab in order to be eligible to retake another version of the test. To prove their eligibility, they were required to hand me a copy of the tutor-signed form. The week before finals week, I collected the forms and verified who was eligible to retake which specific competency test. A system of little circles in my grade book for retakes made gathering the appropriate number of specific tests fairly easy. Mastery learning made my job easier too! I did not have to make plans for frequent make-up exams throughout the semester as I

did in the past and I did not have the confusion of grading exams out of the context of the other students' exams.

Not only did my students have two chances for the competencies measured by tests but also those measured by take-home projects that allowed some student choice of content, as recommended in the 7th criteria point. By turning in a first copy (rough draft) on the date it was due, all students had the opportunity to read my suggestions to improve their work. I returned their drafts during the next class period. Then in one week they turned in the new version of their work for me to assign a grade. This was their second chance. If they chose not to give me a draft on the draft due date, they could still turn in their final version on its due date; however, in that case, they received no help from me. Students who gave me a draft but neglected to rewrite it for a final copy could return the rough draft to me to grade "as is." Almost all students gave me a draft because they knew that incorporating my suggestions brought them closer to an "A" paper. The quality of student work made me proud to have them for my students.

In my adaptation of mastery learning, my current students also have two chances for success in every competency area. My students are now skillfully annotating, using SQ3R, outlining full-length college text-book chapters, and summarizing essays. They may select two out of three subject areas for their textbook chapters. In addition, they research a global issue of their choice. They appear to be more motivated than my former students who did not have the benefit of this approach. I am less guilt-ridden about not being fair to people with real problems because I feel two chances does allow for unexpected situations in their lives. I do not have to continue giving and grading make-up tests throughout the semester. Both my students and I have very specific goals towards which we work. My assignments are realistic and encourage skill transfer to future college courses. Students monitor their own grades while knowing that with some effort and tutoring they may improve test grades at the end of the semester. They feel good about their own skills when they have successfully completed the course; I feel good because I am no longer giving busy work to make them extend their lessons at home or to cover all the skills required by the district.

## Problems

One of my colleagues questioned whether or not the students bother to turn in the rough drafts. I was pleased to respond that most of my students do. Others questioned whether students would study for the tests when they know they may have a second chance during finals week.

I have found that students have their own personal goal: achieving at least a 70% on every test and not returning to class during finals week! However, even when students have already failed one test, they still do not want to fail additional tests because they know they must spend time with a tutor for each failure. Also, they realize that the more tests they retake, the more stressful their make-up exam period will be.

I have made one big compromise. The first semester I required students to achieve at least a 70% in every competency area to pass the class . This meant that students with several strong skills who probably could have succeeded in higher-level classes were held back because they had not mastered every individual skill. After one semester, I decided I would accept an average of 70%. I must admit that the students were especially motivated to get my help that first semester but less so after I changed to averaging their grades.

A very important element to success for my plan is having a reading lab staffed with knowledgeable reading teachers. If the lab and its tutors were not available to my students, I would have to find an alternative tutoring method. I have considered using a computer assisted instructional program such as PLATO.

Do students consider the system completely fair? At the beginning of the term they think it appears to be extraordinarily fair. By the end of the term some students think they should have had three chances. What's important to me is that I feel my system is fair and I like seeing the improved quality of student work.

## Conclusion

I have begun my sixth semester of using the mastery learning plan because I really think it works. Although not all students pass the class and many drop the class for family reasons, students who might have dropped due to poor grades on tests now continue to try because they have hope that they will improve their grade on the second version of the test. I have provided precisely defined goals at a reasonable level of difficulty and the help needed to support the students reaching those goals. Providing the competencies and assessment measures on the syllabus ensures that the students set very specific goals. I have been able to motivate my students by giving them hope so they are not likely to procrastinate. Most students learn not to procrastinate and meet assignment deadlines because they know I do not make exceptions. However, they also know I give prompt feedback by marking all drafts on the same day and grade all final copies one week later.

I believe that adapting mastery learning for underprepared college students in reading helps them take the first steps in becoming successful college students.

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