

GRAPE JUICE

BARBARA J. YANOSKO, *Extension
Coordinator, Office of Continuing
Education*

It has been my privilege over the last few years to teach courses in remedial mathematics for college students. For whatever reason, my students have been judged insufficiently prepared to cope with college level math courses. These people have represented a broad spectrum of the population at any university: young college freshmen, seniors who must take a subsequent math course to graduate, international students who need the vocabulary, older re-entry students, and adults who have not used math in twenty years. How can anyone cope with the disparity of backgrounds and needs? Are there any common factors?

First, the great majority of these people come to learn—indeed, want and demand to learn. There is no apathy in a basic algebra class unless I create it. Who does not like a class brimming with good questions and secure enough to point out their own insights? This is an atmosphere to cherish and carefully nurture. And it is easy enough to bring about with high expectations and respect.

My students expect heavy homework assignments every class meeting. I expect them to turn their homework in and they expect me to return it the next class meeting—even though it probably will not affect their class grade! It is our means of communication: an affirmation of their learning as well as a chance to nip errors in the bud. But even more they learn by doing and have a basis for reaction in class. I probably would not assign as much work in an advanced class. Heaven knows I dread the chore of having to grade homework papers, but my experience overrides all reluctance.

Sometimes I feel like a cheerleader for my students, each and every one. The basic class is no

place for the humorous “put down.” I must reinforce shaky confidence, encourage those who are down to try again, and loudly cheer all the winners, those who pass, all the way through the course. Obviously, I have trouble doing this in a large class, but I have had classes as large as 72 students (not at HSU). I certainly prefer 25 or fewer.

Is the basic class subject matter boring to me? Not at all. I see it as an opportunity to communicate the coherence of mathematics and the interrelationship of ideas. It is a constant challenge to present the material in an understandable fashion, to react with the needs of the class as a whole, interact with the individuals, and to be on stage and “grab” the audience with the power and beauty of the subject. Is “Othello” boring to the actor or teacher who has worked with it a hundred times? Only if the individual perceives it to be so. The math text is a script to be brought to life. In this sense I can bring life and joy and energy to the subject.

The rewards are great. Enthusiasm begets enthusiasm. I have seen some basic math students become math majors; very few, but some. To see the people come alive in class, in one-to-one contact, to open the door to the possibilities of the subject, to know that future teachers will relate better to math—are all rewards which make the homework grading worth it.

The Committee on Improving Remediation Efforts in the Colleges, in their Report to the Board of Governors of the Mathematical Association of America, identified some characteristics of successful remedial classes. Relative to the individual instructor’s class conduct they observed effective programs included:

—Requirement of strong commitment of time and effort on the part of students, with attempt to communicate honestly to students the scope and demands of the program

—Program of study tightly structured, with the individual's pace determined by the instructor (not the student) in response to the student's ability and progress

—Awareness of the needs of different groups of students in the remedial audience (e.g., 18 years old vs. returning adults, untaught students vs. lazy

students) and instructional strategies that provide for these differences

—Emphasis on an informal instructional atmosphere that provides considerable moral support to the students and encourages peer interaction in the learning of students

—Evidence of considerable enthusiasm among teachers and strong respect for the potential of the mathematics

Basic math classes are not the dregs of departmental teaching assignments, but rather the grape juice from which to make fine wine.