

What is a grade?

Twenty years ago, I published my text about the application of Dr. W. Edwards Deming's principles to K-12 education. One challenge was to translate and re-state Deming's 14 Points for Management as "14 Obligations for the School Board and Administration." I am very grateful to Dr. Deming for the time he took to review and discuss my efforts and I was happy to receive his approval. Later, his estate gave me permission to publish his paper, "Introduction to the System of Profound Knowledge," as an appendix in my text.

Without a doubt the most controversial of the 14 Obligations is Point 12, which reads in part, "Abolish the grading system in America's schools, K through 12 and higher education." Many people get apoplectic over the idea of eliminating grades and demand explanation, justification, and alternatives.

But just what is it that they're trying to defend? Below are a few descriptions of the current approach to grading students from a variety of sources.

The grading process is not very accurate. It frequently does not measure valuable skills important in engineering, like creativity and insight. Additionally, grades measure, to a certain extent, factors somewhat irrelevant to real world ability. These include physical endurance to stressful working conditions and mental compliance to repetitive, uncreative tasks. Furthermore, the present system misrepresents grades as being more accurate than they really are. It also causes students to misdirect their efforts in an attempt to achieve higher grades rather than learning the material more efficiently and effectively. [In other words, too often students work for high grades and rank, not knowledge; just as workers work for high rank and ratings, not quality or the intrinsic joy experienced from a job well done.]

◆ Mike Jenkins, MIT Class of 1997
Published in *The Tech*, February 1995

Undergraduate teacher education majors, when asked about the criteria that should be used for their own grades, believe that "effort" is more important than amount of academic content learned. One contributing factor may be that after sixteen years of obtaining grades based on factors other than academic achievement, teachers-in-training have a difficult time accepting theoretical principles that do not match with their personal experience. [Teachers who emerge from the school of education without knowledge of systems and theory of variation emerge with the power to destroy children. And they wield that power without mercy – because they wield that power without knowledge.]

◆ Professor James D. Rose, College of St. Rose
Published in the *Clearing House*, May/June 2005

Letter grades are a tradition in our educational system, and we accept them as fair and objective measures of academic success. However, if the purpose of academic grading is to communicate accurate and specific information about learning, letter, or points-based grades, are a woefully blunt and inadequate instrument.

- ◆ English Teacher Jessica Lahey
"Letter Grades Deserve an F"
Published in *The Atlantic*, March 2014

A grade is defined as a letter, number, or other symbol indicating the relative quality of a student's work in a course, examination, or special assignment; mark.

- ◆ *American College Dictionary* (1969), p. 524

A variety of grading systems are used in U.S. education. The decision on what grading system to use is a matter within the exclusive authority of the individual school or higher education institution, and usually up to the individual faculty member or disciplinary department within the school or institution. [In other words, there is no such thing as consistency in determining and issuing grades for students.]

- ◆ Published by the International Affairs Office
U.S. Department of Education

A grade is an inadequate report of an inaccurate judgment by a biased and variable judge of the extent to which a student has attained an undefined level of mastery of an unknown proportion of an indefinite amount of material.

- ◆ Professor Paul Dresser, Michigan State University
Published in *Basic College Quarterly*, Winter Edition, 1957

Systems thinking assigns most performance differences to the system, not the people alone. This is the theory behind my call to abolish the grading system in America's schools. One way to consider the rational theory behind this radical proposal is to try to solve the following math problem.

If $A + B + C + D + E + F = 73$, what is the numerical value of "F"?

Thinking logically, one would conclude that this problem cannot be solved without knowing the values (or sum) of variables A through E. Our teachers, however, are willing to give a student a low grade on an exam, ignoring the host of other factors that influence test scores (see Figure 2 on next page).

Figure 2. In a school system, the student is only one of the many variables that determine his or her score on a test.

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|--|------------|--------------|
| A + B + C + D + E... | + F | = 73 |
| Curriculum design, content, scope, and sequence; texts; supplementary materials; teacher; lesson plan; teaching methods; learning methods; assigned projects; homework; the effect of the home environment; the test itself; physical facilities; equipment; instructional technology; and many other variables... | + Student | = Test score |

Thus, we hear that Molly got a 73 on her math exam, so she received a grade of C-minus. When we look at work and learning from an appropriate systems perspective, however, it becomes clear that sources of variation in test scores include more than simply Molly and her fellow students.

Why do people keep trying to defend these flawed practices? What's so controversial about a proposal to stop *grading* students and to start *teaching* them?

Note

J.F. Leonard, *The New Philosophy for K-12 Education: A Deming Framework for Transforming America's Schools*, ASQ Quality Press, Milwaukee, WI (1996).