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TEACHING FOR DEEP UNDERSTANDING
A Response to the Writings of Howard Gardner

In reading about how the goal of our teaching ought to be deep understanding of a few areas of study, rather than skimming the surface of many areas, I feel both vindicated in my own teaching, but also inspired to pursue even further my own search for what is good, beautiful, and true. The kind of teaching that Howard Gardner describes and advocates is full of riches for the teacher as well as her students.

Analysis of one's subject in order to present a gripping *point of entry*, a narrative, perhaps that draws in the students, involves creativity. One must find the model which will excite these particular students, with their varied ways of learning, and pique their interest in such a way as to kick them up to the next level. Then the students must be brought into full contact with the principal content, replete with rich topics. He advocates a *family of representations* (Gardner, p. 202) such as analogies and *model language*, to convey core ideas. This all sounds like fun for the teacher as well as the students.

Gardner says that his approach calls for well-trained, enthusiastic teachers with deep understanding of their field and topic of study. This is true, but even the ordinary teacher who decides to model her teaching on Gardner's plan will become stronger through the exercise of doing so. You become more interested and curious as you study, and the students respond in kind.

Contrast this *teaching for deep understanding* with the *cultural literacy* approach of spending "five minutes on every topic." (Gardner, p. 118) While the objective tests for such an approach are much easier to design and to score, little is gained in the long run because the facts which have been crammed into the students brains are lost over time and they are left with only their erroneous

childhood conceptions of life. On the other hand, the evaluations Gardner describes consist not of the usual tests and multiple-choice questions, but of *performances of understanding* (Gardner, p. 210). These performances, or projects, are demonstrations of understanding on the part of the student which attest to new ways of thinking, with new mental representations.

I was struck by the examples of shallow learning by the students at MIT and John Hopkins (Gardner, p.120). The physics students were unable to apply what they had learned to simple phenomena outside the classroom, because they did not really have a deep understanding of physical forces. The same is true of math students who simply memorize formulas and plug in numbers as needed, but who, if they forget a formula, can not derive it from scratch, because they never actually understood it. Is this what we want for our students, or do we want them to understand and appreciate a subject which has been studied from many different perspectives and has revealed itself in myriad fascinating ways because the teachers went to the trouble of structuring the material to engender their interest and pique their curiosity? Do we want to prepare our students to become adults who love learning for the intrinsic joy of it, or to become “information-crammed but still ignorant adult(s)?” None of us would choose the latter, and yet, forces over which we have no control seem to push us in that direction: large classes, accountability, administration demands for test results. It is up to us to choose a path which allows us and our students to grow not only in knowledge, but also in deep understanding.

I am attracted to Gardner’s model of teaching for the benefits it offers not only to the students but also to the teachers. Of course, it entails much work, but the outcome would be well worth it.