“School Transformation in the 21st Century”

by

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There is a gap between what is claimed as values for 21st Century educational essentials and what we value in our assessments of teachers, students, schools and even our nation’s educational systems. As we examine the many lists of desired skills and competencies to prepare our future citizens for a life of problem solving, uncertainty and globalization, and given the access we have to information through technologies, it becomes apparent that the keys to learning are dispositional in nature: thinking dispositions—tendencies toward particular patterns of intellectual behavior.

Our industrial age mental models of assessment however, focus on the student’s ability to provide correct answers. Such testing has a negative impact as teachers tend to spend more time covering material in class that will appear on standardized tests and worry that they won’t cover everything before the tests are administered. These types of measures are no longer sufficient. If students are to achieve their full potential, they must have opportunities to engage, develop and demonstrate a much richer set of skills and dispositions. We call attention to this gap.

We need to align our curriculum with the stated needs of students in their future lives. We must raise awareness of the need for dispositional teaching and learning, to provide rationale for transforming our educational system to value and to assess growth in dispositional learning as valid educational outcomes.

We are not suggesting that we abandon nor diminish the teaching of basic skills and knowledge of significant, relevant content, concepts and skills. These, too, are
essential for our students’ future. Dispositions not only direct our strategic abilities, they also help activate relevant content knowledge as well, bringing that knowledge to the forefront to better illuminate the situation at hand. Thinking dispositions such as the Habits of Mind develop resourcefulness (capacities) for expanding that knowledge and those skills and capabilities. Dispositional thinking informs and mediates that knowledge and those skills and capabilities. Intelligent action in the world is what counts most. Knowledge of content is only a part of performance. Of equal importance is becoming alert to occasions for the application and the inclination to put skills and knowledge into play. The Habits of Mind become the patterns of a student’s exhibited behavior over time.

Furthermore, the processes of acquiring content knowledge have changed drastically as a result of technology. Ask students to compare ancient Egypt with Mesopotamia, for example, and their first move is to the computer to query Wikipedia, turn to Google Scholar or enlist a response to the question on a social network. (To search the web well, however, requires the dispositions of flexibility, persistence and the use of clear and precise language). We are suggesting, however, that if we believe that 21st Century dispositions are also essential, that they, too, become the subject of curriculum, instruction and student assessment. Might we give equal attention to students’ reading skills as well as their love of reading; their knowledge of scientific principles as well as their curiosity, intrigue and wonderment about scientific phenomena; their knowledge and application of mathematical processes as well as their persistence with complex problems? Might we teach not only “right” answers, but also teach our students how to behave when they are confronted with problems the answers to which are elusive. Both
are essential. We suggest that well-chosen, intriguing, rich, relevant content serves as a vehicle for experiencing the “joy-ride” of learning. The focus is not only learning of the content but also learning from the content. As one high school math teacher said, “I prepare students for life. I use calculus as a means.”