

Noyce/Richardson: Success lies beyond the test in education

By Penny Noyce and Rob Richardson/Local columnists

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In October, the Massachusetts Business Alliance for Education (MBAE) issued "Preparing for the Future: Massachusetts Employer Perspectives on Work Readiness." Its outcomes echoed the results of a recent survey of 400 U.S. businesses by the Conference Board. The message? Education reform must include the "how" (execution skills) and not only the "what" (high academic standards) to prepare students for jobs.

Execution skills include communication, problem-solving, and teamwork. Most entry-level jobs require that workers be able to identify problems and figure them out, do so productively with others, and be able to publicly and effectively present their solutions.

From our perspective in foundations that support school improvement, it is puzzling that successful school and after-school approaches that emphasize these execution skills are not adopted more widely.

Classrooms and after-school programs where these skills are honed can be very engaging. Students are challenged to choose interesting problems, to work effectively in small groups, and to present their work creatively and publicly.

One story, from a Central Massachusetts middle school science class demonstrates how good teaching can help students meet newly required state science and engineering standards and cultivate good execution abilities at the same time.

As the Intel volunteer pulled away from the enthusiastic middle school student, he commented to the teacher, "It's terrific: he designed a comb that adds gel at the same time! I need his kind of innovation and salesmanship in my office tomorrow!" The teacher wryly said, "He was bored and hadn't said much in class all year, till he and others started working on their projects. The transformation's striking. He's studied hard, used graphs to chart the experiment's progress, and worked well with other students."

This example of what educators refer to as inquiry-based learning starts with a critical question that the student answers through a research and discovery project. The teacher teaches the rigor of good problem solving and directs students to needed resources. The best examples of inquiry-based learning integrate language arts, math, and science. The teacher guides students in all three subjects using the project as the context.

We see the success of inquiry-based learning all the time: in classrooms where 'figuring it out' is valued; in science fairs, where two or three students demonstrate projects on which they spent 20 to 30 hours of their own time ("but we liked it," they say); in informal education where scouts, Boys & Girls Club members, and others develop innovative projects, big and small. In each case, they work in teams to get it done and present the results publicly.

In these test-driven days, parents and teachers report that in some schools the pressure to meet academic standards is so great that there is no room for inquiry, projects, and discovery. These approaches are seen as somehow inefficient or as "add-ons." But such a view is short-sighted, when "inefficient" learning experiences such as science projects, theater performances, and student presentations do such a good job of teaching students the skills of problem identification, brainstorming, finding and integrating information, team dynamics, and personal time management. These aren't add-ons, they're the main course!

Employers say they don't see enough of these skills in their young job candidates. Let's all of us-business people, parents, teachers, community members-find and support ways to prepare children, not just for high marks on MCAS, but also for meaningful work and a lifetime of learning.

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