Barriers to Competency- Based Innovation Aren't Just Coming from Above

By Julia Freeland 11/25/2013

There is a clarion call from online-learning proponents to free up student time—literally. As Susan Patrick explained in her opening speech at the annual iNACOL Symposium last month, student seat-time requirements are one of the greatest barriers to personalized, student-centered learning.

Removing seat time from state regulations certainly stands to open up more opportunities for students to move at their own pace, and for educators to measure progress in terms of authentic learning rather than hours and minutes. However, regulatory barriers are only half the battle. When it comes to creating effective competency-based schools and classrooms, policy change is only a small part of a much bigger endeavor. It is necessary, but by no means sufficient.

One state, New Hampshire, provides a helpful example of how we need to consider the internal dynamics of fostering innovation, not just the external barriers that constrain it. In New Hampshire, the external barriers to competency-based education are gone altogether. In 2005, the state got rid of the Carnegie unit—the core unit around which credit hours are measured—and mandated that all high schools move to a competency-based model by the 2008-09 school year.

When the state took schools "off the clock," something interesting happened. Some schools ran with the concept of competency-based education, undoing the age-old practices that benchmarked progress against time rather than learning. This subset of schools shifted their grading and testing policies to better reflect mastery, provided supplemental content for students falling behind or moving ahead, and made assessment more frequent and formative. Other schools, however, have remained very much the same. Even though many New Hampshire high schools today may have documents titled "competencies" in their classrooms and student handbooks or offer competency recovery to students falling behind, they have maintained the trappings of a time-based system, where students continue to move through material regardless of mastery and at a course-wide pace regardless of individual ability. These schools may still do a good job at serving students according to the traditional school model; they have not, however, embraced innovative vision enshrined in the state's policies.

Although a variety of factors might explain this uneven transformation across New Hampshire's districts (it's not a coincidence that local control rules the day in the "live free or die" state), one thing is certain: transforming from a time-based to a competency-based system upends the traditional culture, structure, and schedule in schools and districts. Moreover, this work requires innovative restructuring that school systems, by their very architecture, are not designed to undertake.

Why do ideas and solutions that transform certain school districts prove more difficult to implement in another? Disruptive innovation theory tells us that often this relates to the willingness or ability of the managers in the different organizations to create structures that enable new solutions to be formulated and implemented

successfully. An example from outside education can illustrate this pattern: as Tracy Kidder's *The Soul of a New Machine* describes, in the late 1970s, Digital Equipment Corporation (DEC) set out to design a next-generation minicomputer. Its ability to do so, however, was inherently limited by the organizational structure it had in place. At its start, DEC was a small team interactively designing its early products, with all members contributing to the specifications of each component and subsystem. As the company grew, however, it had to parcel out responsibility to design its products: it formed subteams, or departments, to improve each facet of the minicomputer subsystem's design; it established rules or interface standards to define how each department's work would fit together. In other words, DEC's minicomputer architecture drove the way the organization chart came to be configured—what the groups were, what their responsibilities would be, and how they would interact. Over time, as each subteam member's expertise deepened in these discrete areas, the company's ability to reconfigure completely how the pieces of the computer could interact atrophied. As a result, their "next-gen" model proved less efficient than their competition's; DEC's attempt at a 2.0 product was limited to the organizational structure and imagination of 1.0 teams.

Districts' and schools' organizational structures and long standing policies built around traditional seat-time metrics may be inhibiting their ability to move toward competency-based models. For example, bell schedules, grading policies, academic department structures, fixed sense of course scope and sequence, and familiarity with whole-group instruction may all be exerting the tug of status quo bias. As such, transforming districts and schools to competency-based systems is not a simply policy change: it's a fundamental reconfiguration of teams and structures inside schools, that allows for students to progress at their own pace and demonstrate mastery in a variety of ways. In New Hampshire's example, for those schools that have yet to move to fully competency-based systems, getting unstuck from the organizational structures and processes that guide them appears just as potent a barrier to innovation in some schools as the state's policies are a gateway to innovation.

It is easy to be up in arms when irrational policies are constraining rational approaches to personalized education. Seat time is clearly a rule left over from our factory-based education system built over a century ago, which legislatures and departments of education ought to abandon. But when we truly consider new educational models, the process of innovation is not only contingent on navigating and getting rid of the external barriers that regulations pose. The resources, processes, and values internal to an organization may prove just as important in the transformation away from time-based practices.

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