

## The Grammar of American Schooling and the Challenge of the Common Core

*The hard work of improving teaching in the United States cannot succeed without changes in the culture of teacher learning*

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Every year, primary teachers all over America see something like the following as their students begin to work with more advanced forms of 2-digit addition:

$$\begin{array}{r} 17 \\ +6 \\ \hline 113 \end{array}$$

For anyone who has already been socialized into the ways of base-10 arithmetic, it's a quaint reminder of early childhood thinking at work. For us, the error is obvious. The way of thinking that tells us we can't squeeze "13" into the ones place is now so intuitive that it has become "common sense."

But for students on the other side of the developmental divide, **there is no error**, and the logic of base-10 is anything but intuitive. Most of those students are still feeling good about the triumph of insight that, just a few years earlier, helped them see that "numbers" represent the same fixed quantity no matter what it is you're counting. Now this base-10 thing comes along and says that a number's value isn't fixed at all, but depends on where it's placed in a left-to-right sequence of other numbers which, by the way, don't have fixed values any more either.

In *Immunity to Change* (2009), developmental psychologists Robert Kegan and Lisa Lahey call this kind of dilemma a "competing commitment." The competition pits a particular way of organizing and interpreting information that is deeply rooted in prior experience against a different way of knowing that conflicts with the first in some fundamental way. Working through these conflicts is what conceptual development is all about. When development stalls, competing commitments are usually at play. When development soars, competing commitments have given way to a more comprehensive way of knowing that opens the door to whole new worlds of possibility.

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## The Grammar of American Schooling: Our Most Persistent Competing Commitment

Culture is what happens when groups of people are socialized into particular ways of thinking and acting. The particular way of thinking and acting that characterizes learning cultures in most American schools starts with the belief that learning is a step-by-step process that moves in a steady sequence from simple skills to more complex skills. All or most complex learning depends on mastery of simpler, more basic skills. Without that mastery, more complex forms of mastery are impossible to attain because the foundation has not yet been laid to support them.

This way of thinking about the structure of knowledge and the process of learning is characteristically American (Cuban, 1993) and is instantly recognizable to American educators. We have been enacting and reinforcing it through a variety of organizational structures, program designs, curriculum materials, assessment designs, and instructional strategies for close to a century. Tyack and Tobin (1993) call it the “grammar” of American schooling.

Because the grammar of American schooling is a stable feature of American culture, it shouldn't be surprising that many of us tend to think of it as simply “the way learning happens.” But a growing international literature makes it clear that educators in the world's highest achieving countries not only reject the American grammar in their daily practice, but would describe it as something akin to  $16+7=113$ .

## International Comparisons

For close to two decades, James Stigler, James Hiebert and their international research team (1999; 2009) spent thousands of hours analyzing videotaped instruction from around the world. Some of their most important findings include the following:

- Teaching is more of a **cultural activity** than an individual one. Underlying patterns in the way people teach are very different from one country to the next but are remarkably similar within countries.
- Instructional practices we argue about the most have no consistent relationship with achievement. Differences between lecture and independent learning, whole-group versus small

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group instruction, etc. vary as much among high-achieving countries as they do between higher and lower achieving countries.

- There is one practice that does consistently appear in all higher-achieving countries. Teachers there engage students in active struggle with concepts and procedures that ***have not yet been explicitly taught***. This contrasts sharply with more didactic forms of instruction that Stigler and Hiebert found in American classrooms.
- In every one of the American classrooms they studied, teachers did most of the thinking ***for*** students, spending large amounts of time reviewing material and practicing procedures without expecting students to wrestle with the underlying concepts on which skills and procedures were based.

### What Can Leaders Do?

Ever since Terrence Deal and Allan Kennedy (1982) first popularized the concept of organizational culture in the early 1980's, there has been a growing understanding that leaders of highly effective schools build different kinds of learning cultures than the leaders of less effective schools (Elmore 2004; Senge 2006; Hargreaves and Fullan 2012). More recently, we've also come to see (Newmann & Associates, 1996; Newman et. al, 2001, Joyce & Showers, 2002) that the features of highly-effective learning cultures involve organizational norms and capacities which are fundamentally different than those reflected in the grammar of American schooling (Stigler & Hiebert, 2009; DuFour & Marzano, 2011). But we're only just beginning to understand how the embedded assumptions of culture and infrastructure conspire in invisible ways to defend the practices we most want to change.

Helping school leaders understand and respect the history that produced existing practices is a necessary first step toward building learning cultures that can change them. The success of the Common Core will likely hang in the balance.

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