Recently Peter Hill, Carmel Crévoila and I published *Breakthrough* based on our work in several countries in which we have been achieving ‘deep’ change in the classroom, while also attempting to go wider across many schools in whole systems especially for literacy and numeracy (Fullan, Hill & Crévoila, 2006).

The core of our model is the Triple P framework (Figure 1).

![TripleP Diagram]

Basically, Triple P involves combining personalization, precision, and professional learning of all teachers.

Personalization, or what used to be called individualization, is the least advanced in practice of the three core components, although if anything it has a longer history than the other two. In recent years there has been renewed interest in personalization, thanks to educators such as Caroline Tomlison (1998), whose work on differentiating classroom instruction has long been a staple resource of teachers and schools trying to implement a more individually tailored instructional program. *Breakthrough* strives to build on such good work with a meshing of the many components into a streamlined system of operations and processes.

Personalization is education that “puts the learner at the center” (Leadbeater, 2002, p. 1), or more accurately puts each and every child at the center and provides an education that is tailored to the students’ learning and motivational needs at any given moment. Schools couldn’t do this even when only 50 percent of the population of school-age children was being served, so how will they do it with virtually all children? Yet this is the *Breakthrough* standard we are setting.

Again it has to be practical—less rather than more work for teachers. There are two aspects to personalization: namely, motivation to learn and pedagogical experiences that hit the unique mark particular for the individual. These aspects are obviously related. Students do not become engaged in learning unless the experience matches or inspires their needs, and exciting learning experiences generate further motivation. It is now well documented that, as children go from grade to grade in the educational system, their engagement with school and learning declines. This is a function of failure to personalize learning (and is related to inadequate linkages to the other two Ps—precision and professional learning).

Imagine a health care worker facing 30 citizens and having the responsibility for helping them establish healthy lifestyles. The health care leader has excellent standards at her disposal. It is clear where everyone should be heading. But the citizens are differentially motivated and are at very different starting points. Would inspirational teaching and clear standards carry the day? It would for a few, but not for many. The leader would have to have a way of diagnosing each individual’s starting point in order to sort out where and equally how to proceed initially, and every day thereafter. Heifetz’s and Linsky’s (2002) observation about complex adaptive challenges is apt here: “The person with the problem is the problem, and is the solution” (p. 13)
This is a personalization statement. Personalization is about individuals, but it is *relational*—between the teacher, the student, the home and the school.

The mission of the school system is to make personalization a reality. But it must be universal—for all—or it will fail. Personalization is as much a collective as an individual phenomenon.

Aside from the immense practical problem of how to do it, there are dangers if personalization is carried out in the absence of the other components or without moral purpose of serving all students to a high standard. Personalization often includes choice—by students, and by parents. If the capacity to make choices is uneven, greater inequality will occur. Programs involving school choice within public systems, let alone systems that provide public funds to choose private educational options, are divisive and would not meet our *Breakthrough* criteria.

Instead, our view is that every public school and every teacher (individually and collectively) should be skilled at personalizing learning—putting the individual student (each of them) at the center of learning. If this happens, the divisive tendencies to choose alternative schools will dissipate or otherwise operate within acceptable bounds of a system that is good for all. So the first challenge for the new mission of schools is how to make personalization of learning for everyone a practical reality. In the absence of pervasive personalization, the opposite will happen—mass production, a one-size-fits-all mentality that serves only those who benefit from the status quo.

To be precise is to get something right; to prescribe is to lay down rigid rules. Precision is in the service of personalization because it means to be uniquely accurate, that is, precise to the learning needs of the individual. Here a great deal of progress has been made recently in education’s corporate basement under the practice of “assessment for learning” (using data as a tool for improving teaching and learning), there remains on fatal weakness—how to go from assessment to improvement of instructional practice in the classroom (again, for each and every child). Schools need to get assessment for learning out of the basement, clean it up, and creatively recombine it with personalization and continuous professional learning.

Remarkably, the theory of assessment for learning was laid out in clear and comprehensive terms many years ago by a number of writers. For example, 15 years ago, Sadler (1989) developed answers to two problems: (1) the lack of a theory of feedback and formative assessment in complex learning settings and (2) the puzzling observation that even when teachers provide students with valid and reliable judgments about the quality of their work, improvement does not necessarily follow (p. 119).

Sadler’s (1989) main solution, way ahead of its time, was to focus on “how judgments about the quality of student responses (performances, pieces or works) can be used to shape and improve the student’s competence by short-circuiting the randomness and inefficiency of trial and error learning” (p. 120). Consistent with our solution, Sadler said that feedback is the key element of formative assessment, but feedback qualifies as feedback “only when it is used to alter the gap” [of learning] (Sadler’s italics, p. 121). Sadler observed:

> The learner has to (a) possess a concept of the standard (or goal, or reference level) being aimed for, (b) compare the actual (or current) level of performance with the standard, and (c) engage in appropriate action which leads to some closure of the gap” (p. 121, italics in original)

Sadler argued:

Qualitative [personalized] judgments are invariably involved in appraising a student’s performance. In such learnings, student development is multidimensional rather than sequential, and prerequisite learning cannot be conceptualized or neatly packaged units of skills or knowledge. Growth takes place on many interrelated fronts at once and is continuous rather than lock-step.

For a system of continuous learning to work, standards must be communicated and be available to students. In a teaching setting, this presupposes that the teacher already possesses the knowledge of what is expected for given learners. However, “teachers’ conceptions of quality are typically held largely in unarticulated form, inside their heads as tacit knowledge” (Sadler, 1989, p. 126). Such knowledge, “keeps the concept of the standard relatively inaccessible to the learner, and tends to maintain the learner’s dependence on the teacher for judgments about the quality of performance. How to draw the concept of excellence out of the heads of teachers, give it some external formulation, and make it available to the learner, is a non-trivial problem” (Sadler, 1989, p. 127). Not to mention the fact that some teachers’ tacit knowledge may be vague or erroneous.

Feedback is at the heart of what is known as “assessment for learning”—a high-yield strategy of improvement that has come on the scene strongly in the past five years. The work of Black and Wiliam (1998a; 1998b) and Stiggins (2004), attests to the power and prominence of assessment for learning as a core precision-based component of reform.

As they do with most potentially high-yield solutions, systems have gone overboard on assessment as a solution. Systems have swamped schools with assessments and standards to the detriment of manageable and precise action. Too much of a good thing is a bad thing. Precision means refinement, not death by information overdose. Not only must feedback be relative to standards and performance but assessment for learning must also provide feedback to the teacher about *instruction* so that he or she can construct the instructional focus and set the goals of the lesson accordingly. Feedback, in other words, can be taken to extremes if it provides mounds of undigested information or if it is taken to imply impossible tasks for teachers, such as having to organize individual conferences with students every day.

*Breakthrough* is about linking all the core pieces of the puzzle—within assessment for learning, in this case—and across the three core Ps of personalization, precision, and professional learning. Without our framework, educators often have many of the pieces, but they come from different puzzles.

We have deliberately selected the term *professional learning* over the more narrow conceptual terms of *professional development* or *professional learning communities* because *Breakthrough* means focused, ongoing learning for each and every teacher.

You can’t have personalization and precision without daily learning on the part of teachers, both individual and collectively.
We refer to the larger Cross City Campaign (2005) evaluation of reform in Chicago, Milwaukee, and Seattle to confirm that professional development is a central strategy but one that is problematic to implement effectively at the classroom and school levels.

Cross City Campaign (2005, p. 9) researchers found that most teachers experienced professional development as fragmented and not linked to their classroom practice, although districts were making some progress in improving the quality of individual sessions. In Seattle, for example, “professional development was a major tool for implementing reform”—one of the three key strategic standards (the other two are “Standards-Based Reform,” and “Transformation Academic Planning Process”). As the researchers conclude, “the strength of the individual professional development offerings was sometimes quite high, but there was no overarching umbrella to integrate them. As one administrator observed, “the ideas are good ideas and well intentioned. There’s just no follow through” (p. 80).

So, what’s the solution? Generally, it involves turning the problem on its head. The solution does not involve attempting to coordinate centrally driven professional development, which (1) usually doesn’t work or (2) can yield results only by resorting to behavioristic prescription, which we maintain is self-defeating.

Instead, schools need to work from the classroom outward—and glimpses of this solution are seen in the large-scale studies we just reviewed. Professional development works when it is “school-based and embedded in teachers’ daily work” (Cross City Campaign, 2005, p. 10). And Cohen and Hill (2001) show that new policies and resources provide the potential for “new opportunities to learn, rooted either in improved student curriculum or in examples of students’ work on assessments, or both” (p. 9).

How, then, do we make deeper daily learning a reality for teachers? Replacing the concept of professional development with professional learning is a good start; understanding that professional learning “in context” is the only learning that changes classroom instruction is a second step. Elmore (2004) got it right: “Improvement is more a function of learning to do the right things in the setting where you work” (p. 173).

We would have also italicized “in the setting where you work.” Elmore (2004) elaborates on this fundamental insight:

The problem [is that] there is almost no opportunity for teachers to engage in continuous and sustained learning about their practice in the setting in which they actually work, observing and being observed by their colleagues in their own classrooms and classrooms of other teachers in other schools confronting similar problems of practice. (p. 127)

It is not just a matter of teachers interacting; they must do so in relation to focused instruction. Professional learning communities can contribute mightily to altering school conditions, but by themselves, they do not go deep enough into classroom practice, and they can even be (unwittingly) counterproductive if their interactions reinforce teaching practices that are ineffective (Cohen & Hill, 2001).

Our reluctant conclusion is that the most ambitious reforms have fallen miserably short of establishing the new mission of schools where virtually all students are engaged in their own significant learning. We need to start at the classroom, reconstructing the problem and the solution as one of embedding personalization, precision, and teacher learning into the daily experiences of students and educators. In so doing, we need to build an infrastructure that surrounds the classroom that will make such transformation inevitable. Moreover, it must be practically achievable.

Conclusion

Our work has continually expanded to engage whole systems (countries, provinces, states). The most complete example is Ontario, Canada, where we have used our change knowledge to work with the government since 2003 in putting into practice policies and strategies aimed at the whole public school system—all 4,000 primary schools, all 900 secondary schools and all 72 regional districts. So far the results are very positive (Levin, Glaze & Fullan, 2008).

In the next phase of reform we expect much more worldwide attention in attempting and benchmarking large-scale reform affecting all the schools in the system (Fullan, in press; Fullan, 2008). The most important point is that we are no longer talking just about ‘theory’. All of this work is embedded in real classrooms across large jurisdictions. In the new few years we will have much to learn from each other.

References


