Winning with coaching:

Strengthening the links between professional learning, CCSS, and STEM

By Bruce Joyce, David Hopkins, and Emily Calhoun

In the 1980s, when we and our colleagues were investigating the characteristics of professional development practices that generated changes in teaching and curricular repertoires, some of us found our way to the Vic Braden Tennis College in Coto de Caza, Trabuco Canyon, California.

Braden, who sadly passed away in October, was very funny and very precise. He announced that he could not teach us to play tennis, but he *could* improve our strokes, starting with the backhand.

The first surprise: Rationale

At this point, we had our first surprise. The course on the backhand (and later, the other strokes) began with the rationale for the new stroke. Essentially, you studied your body mechanics, ergonomics, and how to impart serious topspin to the ball. We had expected a very physical course, and that was the case, but we now found that the introduction to a stroke was very conceptual, and the concepts were continually emphasized throughout the instruction.

Then, there were demonstrations—dozens of them, some live, some taped—all connected to the rationales. And then, practice—each of us got a ball machine that delivered about 300 balls an hour. As we practiced, coaches danced around us and continued to demonstrate elements of the stroke, and repeated the rationale, politely but directly. And then back to the classroom, and then again to the courts—practice, think, practice.

We were videotaped while trying to execute our new strokes, and a coach behind us picked up our rhythm. In playback, we could see our form superimposed on that of the expert. Again, while analyzing the videos, the rationale was repeated continuously.

By the end of Braden's sequence—rationale, demonstration, practice, video, more rationale, demonstration, and practice—could we execute our new topspin backhand stroke? You bet we could, $while\ practicing$.

The second surprise: Practice with peers

Then Braden preached, again and again, that when we got home, we were not to play matches. His rationale was: "As soon as you do, you will revert to your old strokes because they will feel more comfortable than the new ones. The reason we want you to come here as pairs is so you can practice together for a few weeks until your new strokes are grooved."

And, sure enough, if we played someone else, we reverted. If we practiced together, the new strokes became embedded.

Congruence with research on professional development

Fascinatingly, Braden's approach conformed to what we were learning about how to design workshops to help teachers learn new curricular and instructional models and how to create their own training for their colleagues. In both the tennis and professional development (PD) experiences, *rationale* mixed with *demonstrations* mixed with *practice* makes the difference in building knowledge and skill.

However, gradually, we saw teachers losing the new practices, unless they worked together with a partner, planning lessons, trying them out, and studying student responses—which is cooperative learning, or what we also call peer practice or peer coaching. Just like with the



tennis strokes, peer coaching allows for the new teaching practices to become "grooved."

Importantly, Braden's coaches do not have to follow their students and move into their homes for them to achieve transfer—and the same applies in staff development. Teachers themselves can work together to get the job done, provided they have experienced well-designed training with high-quality, new content, and are further supported in follow-up workshops.

The implications for educators are clear: The design of PD and the follow-up with peer coaching are part and parcel of the same thing. Without well-designed training on precise, well-specified new practices, there is not much to practice, either as peers or with any other coach!

This knowledge and experience enables us to generate professional development initiatives with content from tested models of teaching and curriculum that:

- · increase the repertoire of teachers in curriculum and teaching,
- · have a design that they will both enjoy and learn from,
- can be used immediately in their classrooms,
- · result in enhanced student learning, and
- are conducted from an action-research perspective so that everyone concerned collects and uses formative information throughout the process. Thus, success can be celebrated.

The good news is that the knowledge and evidence needed to do this are now widely available.

Linking intent to action to success

This section describes a simple formula for linking the intent to develop a strong PD initiative to the selection of content and the use of effective designs for adult learning, resulting in effective implementation in classrooms, and consequently, enhanced student learning. The linked procedures are shaped from research on curriculum and teaching and teachers as learners, and experience in a wide range of school improvement programs in the U.S. and globally.

Begin with resolve

Resolve and the development of narrative are important regardless of who is leading the PD initiative. This can be teachers in Professional Learning Communities (PLCs) making decisions about effective PD, school leadership teams developing a whole school initiative in teaching or curriculum, or school districts or colleges developing a systemic approach.

The journey begins with the determination to create productive learning experiences—productive in the sense that participants have the satisfaction of adding to their repertoire practices that they know will enhance their students' learning. We will use just two examples of initiators: PLCs planning PD for themselves and a school leadership team planning PD for a school faculty. The PLCs employ action research processes to study their students and select a teaching strategy or aspect of curriculum that they will try to add to their repertoire. The school leadership team similarly selects the content of the school-wide workshops because the team also employs the action research framework and select teaching strategies or dimensions of the curriculum that the faculty agreed might be improved—again leading to PD.

Resolve is enormously important—initiators who simply adopt something because it is fashionable at the moment generate the blizzards of paper initiatives that are virtually empty of meaning and have no impact on teaching or learning. Selecting content (curricular or teaching models) requires significant study.

Ensure that the PD content is actually a change

The leadership team and the PLCs need to ensure that the content of the PD is a teaching strategy and/or curriculum that is actually a change in the classroom. This may sound obvious, but as we have studied the content of many initiatives generated by both learning communities and leadership teams, as well as state and national policymakers, it turns out, on examination, that the content is often—too often—just iterations of current practice or very minor variations on existing practice.

Use a PD design that conforms to how educators learn best Essentially, to add new practice to their repertoire, people need to know the rationale of a new curricular or instructional practice, see demonstrations (video is a godsend), prepare to practice (make lessons and units to implement), practice, and study student reactions. Whether PLCs, schools, colleges, or districts organize PD events, components that include these opportunities to learn need to be included. Governance does not vary these needs; a PLC cannot have successful instructional initiatives without observing them any more than a district office can.

Link PD to cooperative learning, including peer coaching

For long-term impact and sustainability, peer coaching duos or triads need to plan implementation, including studying what students are learning. The teams may request more demonstrations, help with planning, and more ways of studying the responses of the students. Organizers must respond to those requests. Regular support needs to include help with planning—sequences of workshops should occur at intervals (every two or three weeks in the early stages and once a month until full implementation is achieved). Above all, participants need to study student response and learning—again, cooperatively and collectively. Everybody, from the leaders to paraprofessionals, needs to engage in continuous action research that links PD content to the study of implementation, engagement in problem-solving, and the study of student response (learning) in the short and long term.

It's important to note that the guidelines must be followed completely. If the content of PD does not represent a positive change in curriculum and instruction, student learning will not change, either. Skimp on demonstrations, and practice will not occur. Failure to support planning of practice will inevitably depress implementation. And, without cooperative groups and long-term support, the initiative will dissipate; a small number of teachers will work their way to success, but most won't.

Supporting school faculties and PLCs as they implement CCSS and STEM

School district boards and staffs are responsible for promoting the general educational health of the district and for supporting the learning of school administrators, faculties, and PLCs. Currently, professional learning is largely focused on implementing the Common Core State Standards (CCSS) and the integration of science, technology, engineering, and mathematics (STEM), as well as on organizing PLCs and utilizing coaches. These initiatives can all

be enhanced by the research on how teachers learn.

- School Faculties and Professional Learning Communities

 Simply put, if a faculty or a PLC decides to improve student learning, the members need to select a curricular or instructional model that is not in their present repertoire, set about to learn it, implement it and study the effects on student learning. Models of Teaching is an example of a basic source for faculties and PLCs intent on expanding teacher repertoire to enhance student achievement and capacity to learn.
- Literacy and School Coaches Now important agents for school improvement, coaches need to study the repertoire of their teachers, decide whether there is a curricular or instructional model that will enhance that repertoire, and proceed to provide the opportunity for teachers to learn it and study the effects on student learning. To accomplish this, coaches need to demonstrate many times and help teachers study the rationale of what they are teaching. Coaches cannot teach something that they are not well-versed and practiced in.
- The New Core Curriculum Standards The implementation of these standards requires most teachers to expand their repertoire of curriculum and instruction models. As school districts and states develop the resolve to implement the standards, they need to generate professional development offerings that will follow the pattern described earlier—rationale, demonstrations, opportunities for practice, and peer coaching. If consultants, coaches, or principals are to provide real help, they need to have implemented the new practices and reached a high level of skill in them.
- Technology The need here is so great and so multidimensional that we will not try to cover its waterfront. Hybrid courses and distance offerings, including online courses, are needed in almost every content area.

The processes we describe are easy to list, a little more difficult to implement, but altogether necessary to improve student learning.

This is the best we can offer until something better comes along.

Bruce Joyce engages in the research and development of teaching, professional development, and school improvement in the U.S. and around the world. David Hopkins is a U.K.-based school improvement activist, professor, and author. Emily Calhoun is the director of The Phoenix Alliance and works with school districts and provinces in the U.S. and Canada to design, implement, and assess professional development and school improvement programs.



4601 DTC Blvd.. Suite 500 Denver, Colorado 80237-2596

P: 303.337.0990 • 800.858.6830 F: 303.337.3005

Nonprofit US Postage **PAID**

Denver, CO Permit No. 993

Featured Experts

BRUCE JOYCE



An internationally recognized education researcher and author, Joyce has worked with districts, states, and agencies around the world on teaching, professional development, and school improvement.

DAVID HOPKINS



A school improvement expert, advisor, professor, and consultant based in the United Kingdom, Hopkins is the author of several books, including Exploding the Myths of School Reform. He is an honorary senior fellow at

EMILY CALHOUN



A researcher and developer of curricula on teaching reading, writing, and literature, Calhoun designs, implements, and assesses PD and school improvement programs for districts and provinces in the U.S. and Canada.

PETE HALL



An award-winning former educator and principal, Hall now coaches principals nationwide. He is an NAESP National Principal Mentor, and has written three books and numerous articles on school leadership.



ISSN 2150-1106 (print) ISSN 2150-1114 (online)

© 2014 McREL 20141010

Changing Schools

Editorial Staff

Heather Hein, managing editor Roger Fiedler Christine Handel Carol Kaness

Graphic Design/Layout Colleen Ingham

info@mcrel.org • www.mcrel.org



Tell **us** what **you** think

We want to hear from you! Use #ChangingSchoolsMag to let us know how you feel about this issue or coaching.

Not on Twitter? E-mail your thoughts to: info@mcrel.org



Sign up to receive Changing Schools free in your mailbox: http://www.mcrel.org/contact-us



View a digital version online: http://www.mcrel.org/changingschools