Changing Practice

Rolling the Stone Up the Hill or Focusing on Implementation

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> The Gods had condemned Sisyphus to ceaselessly rolling a rock to the top of a mountain, whence the stone would fall back of its own weight. They had thought with some reason that there is no more dreadful punishment than futile and hopeless labor.
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> — Albert Camus, *The Myth of Sisyphus*

Research on Professional Learning

Despite a solid and long body of research, school districts continue to futilely emphasize one-off workshops rather than invest in the ongoing, job-embedded and sustained professional learning and coaching necessary to change practice. Like Sisyphus, our educators are condemned to participate in the same poor quality professional development over and over with little hope of obtaining sustained support to lead to full implementation.

Components	Knowledge	Skill	Transfer
Study of Theory	10%	5%	0%
Demonstration	30%	20%	0%
Practice	60%	60%	5%
Peer Coaching	95%	95%	95%

Joyce and Showers, 1982

The research on professional development for teachers consistently points out the need to provide ongoing and robust support and coaching to transfer knowledge and skills learned in workshops to classroom practice. This research dates back to the Joyce and Showers studies of the 80s, and more recent research continues to support the findings: training alone results in at most 10 percent implementation; whereas, practice and coaching lead to implementation rates as high as 95 percent.

In 2009, Linda Darling-Hammond conducted a study that found 90 percent of teachers interviewed reported that their participation in professional development was by and large useless (Darling-Hammond et al., 2009). Indeed workshops alone have had a poor track record of changing teacher practice and improving student achievement (Yoon et al., 2007). Yoon analyzed 1,300 studies, finding that only those experiences which were intensive and ongoing impacted student achievement. In their 2002 study, Joyce and Showers (2002) found that on average teachers required 20 practice instances to master a new skill. Fuller (2001) noted that the greatest challenge for teachers was not learning a new skill, but implementing it.

Furthermore, research confirmed that teachers changed their underlying beliefs only after they saw student success (Gusky, 2002). The Center for Public Education cited this dilemma: "To internalize a practice and change beliefs, teachers must see success with their students, but student success is very hard to come by initially, as learning new skills takes several attempts to master" (Gulamhussein, 2013).

Best Practices for Promoting Transfer and Implementation of New Learning

To improve teacher learning and implementation, professional learning should be personalized and grounded in the following principles:

1. **Professional development requires significant time** for educators to grapple with new strategies and skills, understandings and implementation challenges. Some studies found teachers required as much as 50 hours of instruction, practice and coaching (French, 1997).
2. **Outside experts are necessary** to start improvement. Guskey and Yoon (2009) found that professional development presented by outside experts who then facilitated implementation resulted in greater improvements in student learning.

3. **Teachers need support** during the implementation stage to change practices. A 2003 study (Truesdale) found that coached teachers transferred learning from workshops, but teachers who only participated in workshops did not. Similarly, a 2009 study of 50 teachers by Knight and Cornett noted that teachers who received coaching following an introductory training workshop were significantly more likely to implement practices they learned.
4. **Initial learning should engage teachers** through varied approaches. Just as students need to both thoroughly understand a new concept and practice it, so teachers need professional learning experiences that blend theoretical knowledge with practice and feedback. The most effective professional development included readings, active engagement, discussions, simulations, modeling, and feedback (Roy, 2005; Goldberg, 2002; Rice, 2001).
5. **Modeling has been proven to be successful** in helping teachers understand and implement new practices. Multiple researchers found that modeling by an expert has been most effective in helping teachers understand and apply a new concept and be "open to it" (Snow-Renner & Lauer, 2005; Penuel, Fishman, Yamaguchi, & Gallagher, 2007; Guskey & Yoon, 2009).
6. **Linking general content and concepts** to teachers' grade levels and materials helps promote implementation. Teachers report that training which links most directly to the content and grades they teach is more useful than general training alone (Darling-Hammond et al., 2009).

Supporting the Dual Role of Teachers: Technicians and Teachers as Intellectuals

The Center for Public Education identified two roles teachers have. First, teachers are technicians who acquire skills and strategies that they must implement in their classrooms. Second, teachers are intellectuals who must continually make judgments and decisions about instruction and students. Schools need to provide personalized professional learning and coaching opportunities that support teachers as both technicians and intellectuals. The charts below from the Center for Public Education's Report *Teaching the Teachers: Effective Professional Development in an Era of High Stakes Accountability* show what is necessary.

Teacher as Technician: A Coaching Model

STAGE ONE: Introduction to New Teaching Ideas	**STAGE TWO:** Support During Implementation in the Classroom
▪ New teaching methodology is presented to teachers and the research supporting it. ▪ The presentation of the material requires active learning, not passive learning from the teachers. ▪ Modeling has been shown by research to be very helpful at this stage. ▪ The content is not generic, but focused on the exact concepts a teacher teaches.	▪ A coach meets with the teacher before he/she teaches a lesson with the new teaching skill, hearing the teacher's concerns about the lesson and giving feedback on the structure of the lesson. ▪ The coach then observes the lesson with the new teaching skill. ▪ The coach and teacher meet together after the lesson to debrief, and they create suggestions to improve using the teaching skill in the next lesson. ▪ The cycle is repeated several times, as research shows that it can take as many as 20 practices for teachers to master a new instructional skill. ▪ The time given for this process is extensive; as research shows effective professional development is ongoing and longer in duration than traditional models.

Teacher as Intellectual: A Professional Learning Community Model	
STAGE ONE: Introduction to New Teaching Ideas	**STAGE TWO:** Support During Implementation in the Classroom
▪ "Artifacts" such as student work and standardized test scores are presented, spurring thought and discussion among teachers. ▪ Teachers engage actively, not passively, in reading and analyzing the artifacts, identifying how they connect to challenges they're facing in the classroom. ▪ The artifacts are not generic, but focused on the exact concepts a teacher teaches.	▪ Teachers identify a predominant area of concern after their analysis of artifacts. ▪ Together, the team develops a teaching innovation that addresses the concern raised. ▪ All teachers on the team practice the new strategy in their classroom. ▪ Because the implementation stage is the most difficult and comes with the highest likelihood for frustration the teachers reconvene after implementation to "coach" one another. They share how the lesson went and brainstorm how to improve its use or tweak it for future lessons. ▪ If possible, teachers may observe one another to see others teach with the new innovation. ▪ The cycles of implementation and team discussion are extensive, as research shows that it can take as many as 20 practices for teachers to master a new instructional skill. ▪ The time needed for this process is considerable, as research shows that effective professional development is ongoing and longer in duration than traditional models.

A Proven Approach to Effective Professional Learning

When creating a professional learning program, it is important to build in practices that are proven to promote the transfer and implementation of new learning. Effective professional learning builds knowledge and skills through well-structured courses combined with site-based coaching, modeling and mentoring. Training should blend theoretical knowledge with the hallmarks of quality professional learning, whether offered live or online: hands-on practice, high-leverage practices, video models, collaborative discussions and reflection, readings, simulations, and modeling and feedback from an expert.

To drive transfer of learning into classrooms, educators should receive job-embedded coaching from content experts that includes modeling, practice, feedback, collaborative study, and administrative mentoring. The coaching follow-up can be provided on-site in face-to-face visits or virtually using a remote coaching system that enables both modeling by the expert and observing and debriefing of the classroom teacher. Online coaching can be an effective alternative to on-site mentoring. In addition to saving on travel costs, online coaching provides teachers with the opportunity to create and share video lessons, lesson plans and other materials, as well as review model lessons with coaches for feedback through the internet. It also allows coaches to watch a lesson while it is occurring.

Job-embedded coaching and support should move from knowledge learning to transfer and application. During on-site days, a specialist might model the strategies teachers learned in workshops in the context of teachers' own curricula and materials. Teachers should have the opportunity to meet with these specialists individually and within grade groups to debrief lessons and then practice together to refine their techniques.

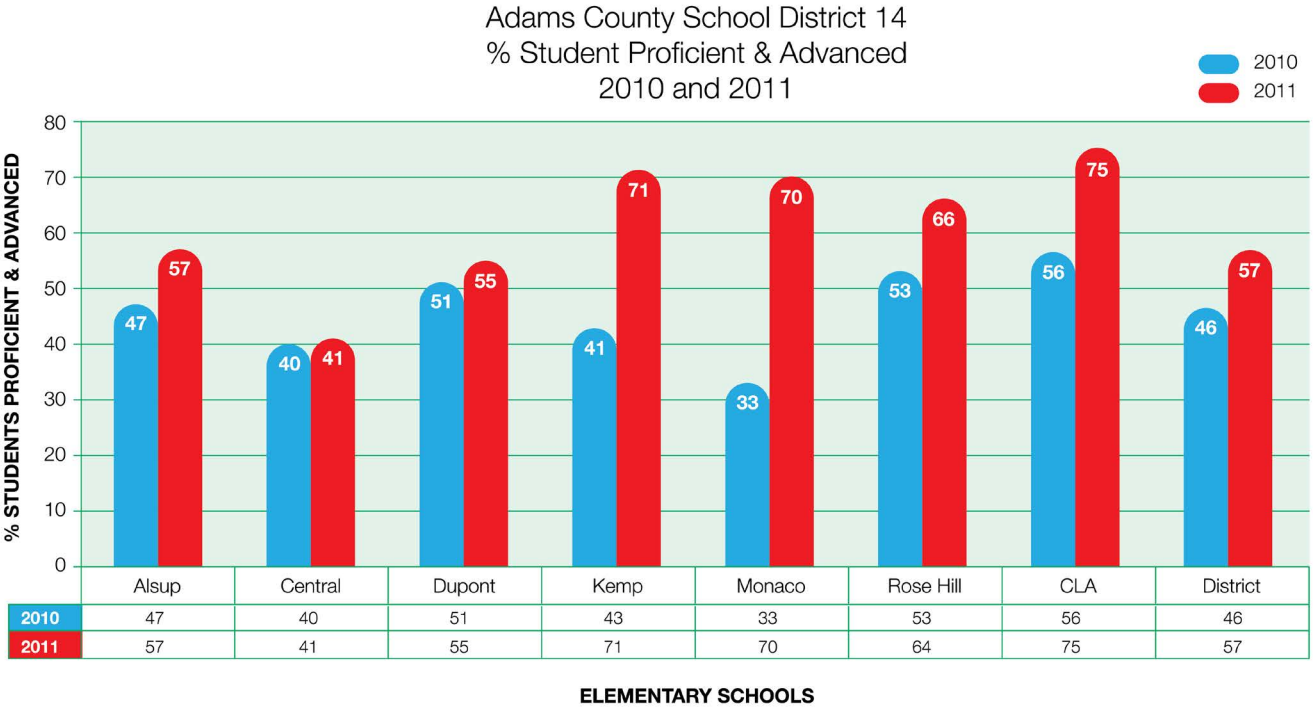
In addition, specialists should support teachers and administrators as they study student data, collaboratively problem-solve and plan instructional interventions, and gain additional practice and coaching. Specialists should guide administrators and site coaches on learning ways to study implementation and identify areas requiring further practice and support, and they should mentor site leaders and coaches as they develop their own coaching and facilitative skills. This helps staff build on the work of the external expert and ensures long-term and sustained success so implementation efforts are supported for the long haul.

This professional learning model of building instructional knowledge while providing job-embedded support meets all of the principles of effective professional learning, and the benefits are long-term and sustained to ensure lasting success. When schools follow through and invest in this complete approach, educators will have the necessary knowledge and skills to ensure genuine, sustained student achievement improvement.

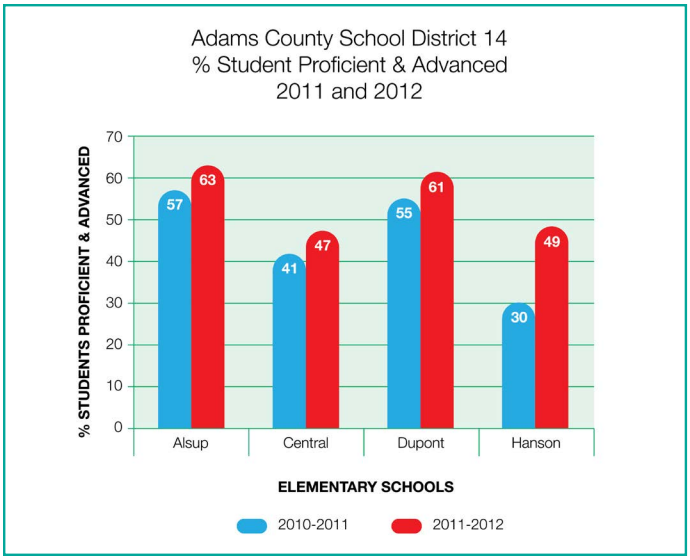
The Impact of High-Quality Professional Learning

It should be stressed that a professional learning program like the one detailed here does not have to be implemented all at once. Schools may decide, based on budget and time constraints, to begin slowly with courses to develop a common knowledge base. Then later they may build in job-embedded support to lead to transfer and implementation. Or, schools may decide to plan for the most effective bundled approach right from the start. Schools that choose this complete approach — content and pedagogical courses combined with strong ongoing support and coaching — will get results.

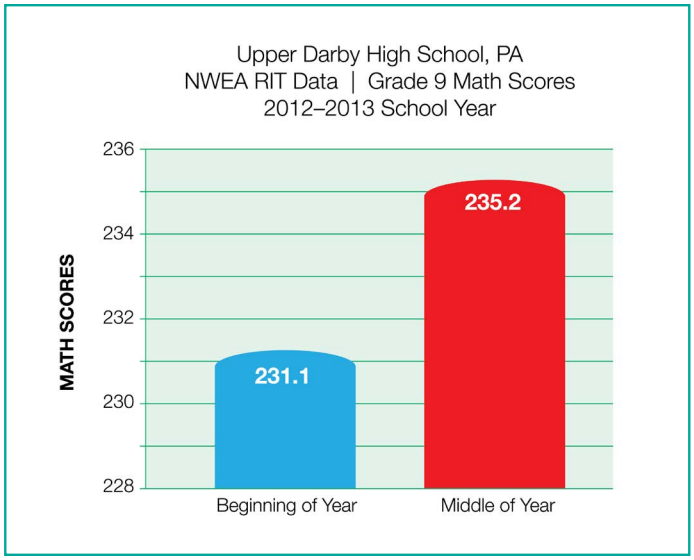
The Consortium on Reaching Excellence in Education (CORE) is a professional learning provider that has embraced this approach in their work with schools and districts over 20 years. When Adams County Schools in Colorado worked with CORE within this professional learning model, they realized improved state assessment scores:



	Alsup	Central	Dupont	Kemp	Monaco	Rose Hill	CLA	District
2010	47	40	51	43	33	53	56	46
2011	57	41	55	71	70	64	75	57



Adams County School Districts's reading scores rose from 2011 to 2012 for students in Grade 3. The most sizeable increase to note was at Hanson Elementary with an increase of 19%, the greatest increase in the district.



Upper Darby High School also utilized CORE's approach and saw growth.

Conclusion

If educators take the steps necessary to transfer learning and implement effective practices, student achievement will improve. Professional learning will not be futile. Educators will not continue to struggle with little hope of success. Instead, high-leverage practices will take root, and all the hard work of teachers will not be in vain.

About the Author

Linda Diamond is President of Consortium on Reaching Excellence in Education (CORE), a subsidiary of Pivot Learning. Linda is a former school administrator and author of the *Teaching Reading Sourcebook and Assessing Reading: Multiple Measures.* Learn more about Pivot Learning at pivotlearning.org.

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