Changing Practice: Rolling the Stone up the Hill or Focusing on Implementation

By Linda Diamond

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.

— *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 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. The research on professional development for teachers consistently points out the need to provide ongoing, robust support and coaching to transfer knowledge and skills learned in workshops to classroom practice.

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

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% implementation; whereas, practice and coaching lead to implementation rates as high as 95%. In 2009, Linda Darling-Hammond conducted a study that found 90% 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 1300 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).

Research on Online Adult Learning

Until recently, the vast majority of research on the effects of online learning has focused on course design features that influence teacher knowledge rather than on its effects on student outcomes. This research generally demonstrated that online learning can have positive effects on teacher knowledge and can influence instructional practices. However, five high quality studies of teachers who participated in specific online literacy or math courses also found statistically significant positive effects in teacher knowledge, instructional practices and student achievement (O'Dwyer, Masters, Dash, Kramer, Humez & Russsell, 2010; Weschke & Barclay, 2011). Four of these studies were randomized controlled trials, the gold standard in educational research. In these studies, the online curriculum for teachers included readings from multiple sources, activities that require interaction with the content, viewing online videos that model instructional practices, and postings to discussion board forums that require critical analysis of the course content. These intensive discussion forums fostered a collegial sharing of ideas and practices and supported a community of learners. In short, the research on professional learning whether online or face-to-face is consistent.

What is the Best Practice to Promote Transfer and Implementation of New Learning?

To improve teacher learning and implementation, professional learning should be 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 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.

The Approach of the Consortium on Reaching Excellence in Education

For over 20 years, CORE has provided technical assistance and professional development to the most vulnerable schools in America. Our model rests on the research on effective professional learning that fosters durable implementation. Our approach builds knowledge and skills through well-structured courses and site-based coaching, modeling, and mentoring. CORE's Face-to-Face or Online Elementary Reading Academy (OERA), grounded in the *Teaching Reading Sourcebook,* blends theoretical knowledge with hands on practice, video models, collaborative discussions and reflection, readings, simulations, modeling and feedback from an expert — the hallmarks of quality live and online professional learning. In addition, the OERA occurs over seven weeks, for about five to six hours a week, aligning to the research that indicates significant time is necessary. To drive transfer of the learning from the Reading Academy into the classroom, CORE specialists provide job-embedded coaching 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 an innovative remote coaching system that enables both modeling by the expert and observing and debriefing of the classroom teacher. Taken together, CORE's model meets all the principles of effective professional learning. When schools follow through and invest in this complete approach, educators will have the necessary knowledge and support to ensure genuine, sustained student achievement improvement, and a recent survey of OERA participants confirms effectiveness.

Online Elementary Reading Academy

In February 2016, CORE piloted the online version (OERA) of the Reading Academy. 100% of the participants believed the course met or exceeded their expectations. Further, at least 93% of the participants believed that the course goals of learning new models of reading instruction, learning effective reading assessment practices, and understanding how to use the research to inform instructional practice, were met or exceeded. Many commented that they were excited to share their learning with their teacher colleagues and were able to try new techniques with their students.

Job-Embedded Coaching and Support

CORE's job embedded coaching and site support moves from knowledge learning to transfer and application. During on site days, the CORE specialist models practices teachers learned in the Reading Academy using the curricula and materials the teachers have. Teachers meet with the CORE expert individually and in grade groups to debrief lessons and then practice together to refine their techniques. In addition, CORE experts support the teachers and administrators as they study student data, collaboratively problem solve and plan instructional interventions, and gain additional practice and coaching. CORE experts guide administrators and site coaches on learning walks to study implementation and identify areas requiring further practice and support. During the course of a year, the CORE expert mentors the site leaders and coaches as they develop their own coaching and facilitative skills, so that they build on the work of the external expert in order to sustain implementation efforts for the long haul.

> *I appreciated the opportunities to try new things with my students then reflect upon and solicit opinions from other teachers in a non-threatening manner.*
> — *Christine T., Kindergarten Teacher, Colorado*

> *I love the Sourcebook and assessment book both!…so nice to be able to share ideas and learn from others…I wish every teacher at my school had the opportunity to take this course.*
> — *Susan W., Reading Coach, New Mexico*

Options for Schools and Districts: CORE's Bundled Research-Based Professional Learning for Elementary Teachers of Reading

Schools may decide, based on budget and time constraints, to begin slowly, with the Face-to-Face or Online Elementary Reading Academy in order to develop a common knowledge base, then later build in job-embedded support by CORE experts to lead to transfer and implementation, or plan for the most effective bundled approach right from the start.

Online Elementary Reading Academy or Face-to-Face Elementary Reading Academy	Onsite and/or online expert coaching and job-embedded support by CORE experts	National conference for coaches and administrators to enhance sustainable capacity

Schools that choose a complete approach with strong ongoing support and coaching will get results. Teachers will be better prepared to ensure all children become readers.
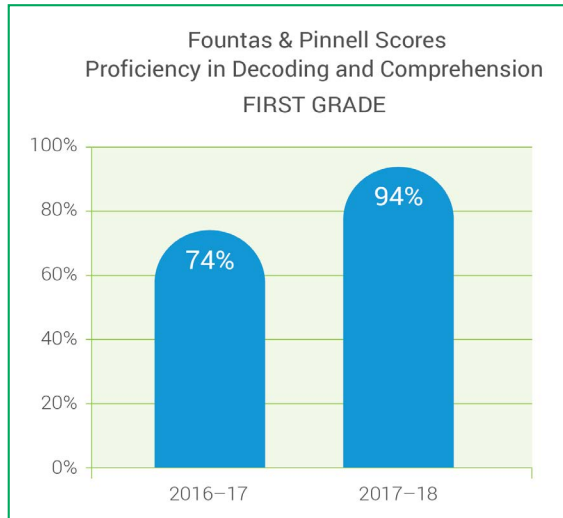
Start: Take the 7-session, asynchronous, Online Elementary Reading Academy (or Face-to-face Elementary Reading Academy) to acquire foundational knowledge and research-based practices for phonological awareness, decoding, fluency, vocabulary, and comprehension.

Next: Bring CORE experts to your site or via a unique and easy-to-use online coaching system*, or choose a blended approach with both on-site and remote coaching to provide practice, problem-solving, expert modeling, coaching, and leadership mentoring to build internal capacity.

Then: Send the leadership team to a CORE-sponsored national conference to learn from colleagues who also attended the Face-to-Face or Online Elementary Reading Academies and together build processes for sustainable implementation.
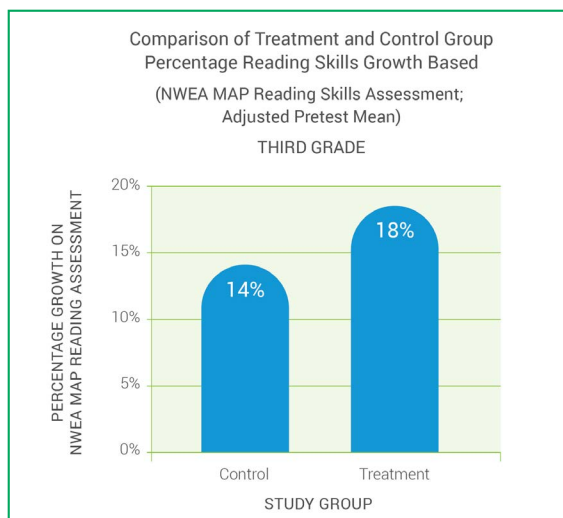
*Online coaching saves travel costs and provides teachers with the opportunity to create and share video lessons, lesson plans, and other materials, as well as review model lessons with a personal CORE coach for feedback through the internet. It also allows the CORE coach to watch a lesson while it is occurring.

When a comprehensive, well-designed professional learning system is implemented in a school or district, gains in reading achievement can be achieved. For example, Pajaro Valley Unified School District in California (PVUSD) has partnered with CORE to implement Systematic Instruction in Phonological Awareness, Phonics and Sight words (SIPPS) reading foundational skills program and build capacity for MTSS. As a result, student reading achievement has increased.

Fountas & Pinnell Scores
Proficiency in Decoding and Comprehension
FIRST GRADE

- 2016–17: 74%
- 2017–18: 94%

A third-party study conducted by SEG Measurement looked at the reading performance of 364 PVUSD third grade students in classrooms with teachers who participated in CORE professional development. 182 students were in the treatment group. These 182 students were matched based on multiple characteristics to an additional 182 students to create a control group.

Students in classes with teachers participating in CORE professional development showed significantly greater growth in reading skills than did students in classes with teachers who did not receive CORE professional development.

Comparison of Treatment and Control Group
Percentage Reading Skills Growth Based
(NWEA MAP Reading Skills Assessment; Adjusted Pretest Mean)
THIRD GRADE

PERCENTAGE GROWTH ON NWEA MAP READING ASSESSMENT

- Control: 14%
- Treatment: 18%

STUDY GROUP

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, best 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). She is a former school administrator and author of the *Teaching Reading Sourcebook* and *Assessing Reading: Multiple Measures.*

Bibliography

Darling-Hammond, L., Chung Wei, R., Andree, A., & Richardson, N.(2009). Professional learning in the learning profession: A status report on teacher development in the United States and abroad. Oxford, OH: National Staff Development Council.

Fuller, J. (2001). Effective strategies for creating change within the educational system: A three-cycle action research study. Retrieved March 2016 from http://files.eric.ed.gov/fulltext/ED453597.pdf.

Goldberg, M.F. (2002). 15 School Questions and Discussion: From Class Size, Standards, and School Safety to Leadership and More. Blue Ridge Summit, PA: Scarecrow Education.

Gulamhussein, A. Teaching the Teachers: Effective Professional Development in an Era of High Stakes Accountability. *Center for Public Education.* Retrieved from http://www.centerforpubliceducation. org/teachingtheteachers.

Guskey, T.R. (2002). Professional development and teacher change. *Teachers and Teaching: theory and practice,* 8 (3), 381-391.

Guskey, T. R., & Yoon, K. What Works in Professional Development. *Phi Delta Kappan,* 90(7), 495-500.

Joyce, B. & Showers, B. (1982). The coaching of teaching. *Educational Leadership,* 40 (1), 4-10.

Joyce, B. & Showers, B. (2002). Student achievement through staff development. Alexandria, VA: Association for Supervision and Curriculum Development.

Knight, J. & Cornett, J. (2009). Studying the impact of instructional coaching. Lawrence, KS: Kansas Coaching Project for the Center on Research on Learning.

O'Dwyer, L.M., Masters, J., Dash, S., Magidin de Kramer, R., Humez, A., & Russell, M. (2010). E-learning for educators: Effects of on-line professional development on teachers and their students: Findings from four randomized trials. Retrieved from http://www.bc.edu/research/intasc/ PDF/EFE_Findings2010_Report.pdf.

Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007, December). What Makes Professional Development Effective? Strategies that Foster Curriculum Implementation. *American Educational Research Journal,* 44, 921-958.

Rice, J.K. (2001). Fiscal Implications of New Directions in Teacher Professional Development. School Business Affairs, 67 (4), 19-24.

Roy, P. (2005). A Fresh Look at Follow-Up. Retrieved from http://www.nscd.org/library/publications/ results/res2-05roy.cfm.

Snow-Renner, R., & Lauer, P. A. (2005). Professional development analysis. 24. Retrieved from http:// www.mcrel.org/PDF/ProfessionalDevelopment/5051IR_Prof_dvlpmt_analysis.pdf.

Truesdale, W. T. (2003). The implementation of peer coaching on the transferability of staff development to classroom practice in two selected Chicago public elementary schools. Dissertation Abstracts International, 64 (11), 3923. (University Microfilms No. 3112185).

Weschke, B. & Barclay, R. (2011). Online teacher education: Exploring the impact of a reading and literacy program on student learning. *Journal of Asynchronous Learning Networks,* 15 (2), 22-43.

Yoon, Kwang Suk, Teresa Duncan, Silvia Wen-Yu Lee, Beth Scarloss, and Kathy L. Shapley. Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement. *Issues and Answers Report,* REL 2007 – No. 033. Washington, D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest, 2007.