

ADVANCING TEACHING – IMPROVING LEARNING (ATIL)

Quality Reading Instruction Expert Convening

MEETING SUMMARY

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Carnegie Foundation for the Advancement of Teaching Stanford, CA

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Summary

INTRODUCTION

On June 27-28, 2013, the Advancing Teaching – Improving Learning program at the Carnegie Foundation for the Advancement of Teaching hosted more than 20 leading researchers and practitioners in early grade reading instruction to focus on the system requirements to increase the quality and reliability of reading instruction. Within the larger goal of teaching all students to read proficiently by grade three, we focused on one question: what would it take to provide quality instruction in reading to all students?

Over the past two decades, the field of education has accumulated a great deal of knowledge about how to teach students to read. Articles on effective reading programs, approaches, and interventions are abundant. Several panels of reading experts have been convened in recent years to assess and synthesize what is known about the effectiveness of different approaches to reading instruction. Not only does the federal government fund a great deal of rigorous research on reading instruction, it also vets high-quality research in a clearinghouse that provides educators with information and guidance on how to make evidence-based programmatic and instructional choices.

Given this wealth of research, our knowledge of quality reading instruction clearly outstrips what is routinely put into practice. Students experience dramatic variation in instructional methods, content, and cognitive demand depending on their teacher. The low reliability of instructional practice results in wide variation in opportunities for students to master reading skills by grade three.

The objectives of our meeting were 1) to better understand the system producing this high degree of variation in reading instruction, and 2) to explore the applicability of continuous improvement in networks² as an approach to achieving effective reading instruction reliably at scale.

OVERVIEW OF THE CONVENING AGENDA

We began the meeting by articulating a critical aim for the field of education: teaching all students to read by grade three. In our conception, knowledge of how to read goes beyond basic reading skills. Each student should also possess the cultural knowledge and disposition to use those skills and be prepared to engage in ever more complex content in subsequent grades. Next, we identified high-leverage instructional processes for teaching reading in the early grades. We then selected a subset of the "highest leverage" instructional processes and drafted initial process maps for how to execute those processes reliably and with quality.

With these early process maps as a backdrop, we invited practitioners to tell us what they saw as the main systemic changes needed to support this type of teaching every day, with every student.

Building off these suggested changes, we developed a root cause analysis of the system factors that currently militate against achieving quality reading instruction reliably at scale. Then we brainstormed evidence-based change ideas for addressing a subset of the root causes. Finally, we discussed implications for the spread of these ideas through networked improvement communities, as well other

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¹ Brian Rowan, Richard Correnti, Robert Miller, and Eric Camburn, "School Improvement by Design: Lessons from a Study of Comprehensive School Reform Programs," *The Consortium for Policy Research in Education* (August 2009): http://www.cpre.org/sites/default/files/researchreport/828_sii-final-reportweb-file.pdf

² Anthony S. Bryk, Louis M. Gomez, and Alicia Grunow, "Getting Ideas into Action: Building Networked Improvement Communities in Education," in *Frontiers in Sociology of Education* (Springer Netherlands, 2011) 127-162..

roles Carnegie might assume in pursuit of this aim. More detailed descriptions of each of the meeting sessions follow.

SESSION 1: SCALABLE, EVIDENCE-BASED READING INSTRUCTION PROCESSES

To achieve quality, the field of education tends to focus singularly on outcomes, namely student test scores. In manufacturing, this approach is called "quality control" or "inspection at the end of the line." Students and their teachers are held accountable for the *output* of a set of complex, interrelated, sequenced instructional processes that play out over time. Improvement science shifts the focus from the outcomes to the processes themselves in order to achieve better quality in those outcomes.

A process is a series of actions or steps taken to achieve an end. Effective teaching requires the mastery of core instructional processes. Agreement is emerging on a number of research-based and practice-tested instructional processes that early grade teachers can undertake in order to better teach their students to read. In this meeting, we drafted a core set of high-leverage instructional processes. Three criteria mark high-leverage processes: 1) they consume substantial resources, typically in terms of teacher and/or student time; 2) variability characterizes their current execution; and 3) evidence indicates that changes in those processes might engender greater efficiency and improved effectiveness.⁴ It is our hypothesis that if teachers can master a small number of high-leverage teaching processes, schools stand to make major gains in the quality of reading instruction provided to students. One goal of the expert convening was to identify and articulate those high-leverage processes.

According to our meeting participants, the following ten instructional processes⁵ (with representative components) will, if practiced with integrity, lead to the greatest gains in student reading outcomes:

- 1 **Phonics basics:** link letters to sounds; common clustering; segmenting; blending games; word play; word study; alphabetic principles in service of meaning
- 2 <u>Text-based discussions:</u> text selection; teacher-child and child-child (not just didactic) interaction; authentic discourse; natural language books (not just decodable); specific content focus; text-based questions
- 3 <u>Guided reading with feedback:</u> scaffolding; modeling; high amount of student reading; feedback; conversations on meaning; small group work
- 4 <u>Formative assessment of student learning to guide instruction:</u> running records of student reading; identifying student development and needs as a reader; text selection; 1-on-1 observation
- Differentiating students on the basis of reliable, valid, useful, and appropriate evidence: use of running records; flexible reading groups

³ W. Edwards Deming, "Out of the Crisis," Center for Advanced Engineering Study (1986): 6.

⁴ Anthony S. Bryk, unpublished manuscript, 2013.

⁵ Not all entries in this list strictly qualify as instructional processes. The use of formative assessment (number 4) and differentiation (number 5), are rather attributes of quality that cut across all instructional processes for teaching reading in the early grades.

- 6 <u>Writing about text:</u> encoding; independent writing; lots of writing; workshop model; demonstrations of writing process; creating text based on a text; writing to read
- 7 <u>Interactive read aloud with focus:</u> read challenging text to students; differentiated questioning; multiple rereads; emphasize vocabulary
- 8 <u>Cultivating growth mindsets:</u> productive persistence; proximal development; increasingly complex
- 9 <u>Language development:</u> text-based vocabulary; authentic, structured opportunities to practice; depth of vocabulary; morphological structure; context; authentic discourse
- 10 <u>Teaching meta-cognitive strategies for reading:</u> teach reading strategies (inferring, predicting, attending to text, etc.); identify student strategies

SESSION 2: MAPPING STANDARD WORK OF QUALITY READING INSTRUCTION

A hallmark of many professions is a shared set of accepted practices. Members of the profession understand when to invoke these practices and how to execute them well under complex conditions. In contrast, the work of teaching has been caught in a long-standing and largely dysfunctional debate that casts the teacher in one of two extreme roles, either as transmitter of teacher-proof scripted lessons, or solitary craftsperson who must invent her own practice to accommodate the individuality of her students, using methods suitable to her unique educational philosophy. "Standard work" offers a third way to think about teachers and teaching. Standard work precisely describes the most efficient and effective way to perform a particular task or process to achieve a desired result. By codifying the essential components of effective instructional processes, standard work reduces the cognitive load on teachers, freeing them to respond imaginatively to the complex and fluid conditions of the classroom.

Standard work is easily misinterpreted or misunderstood. A teacher could conceivably balk at the idea of borrowing a work approach from manufacturing. Teachers teach children, and each child is an individual, not a widget on an assembly line. If standard work were indeed rigid and inflexible, this point of view would be valid. However, what distinguishes standard work from a teacher-proof curriculum is that standard work is not static. "Standard" does not mean "standardized." To the contrary, it relies on the expert judgment of teachers in the selection of which pedagogical processes make sense in a given context, as well as the implementation of those processes in the variable classroom environment. Teachers also double as researchers, tracing the evidence-based evolution of the processes in their classrooms.

Consider the work of a surgeon in an operating theatre. One cannot deny the considerable professional judgment and skill she must apply in order to perform a successful operation. And yet, there are many standard practices she will implement while doing so: sterile procedures for "scrubbing in," a preoperative "time-out" protocol for the surgical team to assure preparation for the ensuing procedure, the method by which she makes the initial incision, and so on, down to the manner of suturing the incision. Each of these standard steps contributes to the performance of safe and successful surgery; none is invented on the fly by the surgeon during each procedure.

In much the same way, standard work on core processes for effective teaching could serve as a baseline from which teachers can continuously improve. Standard work acknowledges that variability in

performance is a major problem to solve, while also affirming that individual professional judgment and creativity must play a central role in work as dynamic and responsive as teaching.

During the convening, participants formed groups to map out possible standard work steps for four of the high-leverage instructional processes identified above. Below is an example of the type of work that emerged in the groups.

E	laborated Conversations Based or	n Text		
Steps in the Process				
Before	During	After		
 Identify and introduce concepts and vocabulary Survey, select knowledge domain Identify text and activity Establish classroom and conversation norms, build skills of engagement Design a checklist for quality Students use words/explore concepts 	 Teacher talks, students respond Set purpose for discussion w/ students Student-to-student interaction Opportunities to use academic language and vocabulary Asking higher order questions (teacher and students) Ensuring all students are engaged Explicit references to text Teacher collects observation data 	 Respond to text Protocol for formative assessment for learning plan Data used in analysis of lesson 		

SESSION 3: FISHBOWL DISCUSSION, PRACTITIONER PANEL: UNDERSTANDING THE SYSTEM BARRIERS TO ACHIEVING QUALITY INSTRUCTION RELIABLY AT SCALE

Too often, policymakers design new policies or programs without understanding the practitioners affected by the policies or the contexts in which the programs must be implemented. In order to design for educators, we must understand the work they undertake daily and the conditions under which they teach. To better understand why instructional practice in reading is characterized by a high degree of variation, we held a "fishbowl discussion" with teachers and teacher coaches. Fishbowl discussions are meetings structured to help build mutual understanding among people in different roles. Practitioners talked together around a central table while researchers, seated in a circle around them, were encouraged to interject questions into the conversation. Some themes that emerged from the discussion include

1 Not all preparation programs prepare teachers to teach reading effectively

- 2 Many things vie for teachers' attention, with problematic prioritization
- 3 Curricula may not represent best practice
- 4 Teachers lack the skills and abilities to teach reading effectively in the early grades and have few opportunities to enhance their skills
- 5 The research base on effective practice is inaccessible to practitioners

SESSION 4: ROOT CAUSE ANALYSIS

The lack of reliable quality reading instruction is an example of a clear gap between the performance of the current educational system and what we know to be best practice. Improvement science offers a tool called the *root cause analysis* to help stakeholders understand why the system is producing gaps in performance. Focusing on the system prevents stakeholders from jumping too quickly to solutions and restrains the natural impulse to anchor attention onto the most visible causal factor.

We used a technique called the "Five Whys" for building the root cause analysis. Repeatedly asking the question, "Why does this occur?" can peel away surface-level problems that are actually symptoms of deeper problems. The technique can also unveil relationships between different root causes of a problem. Asking "why?" five times is simply a rule of thumb; in practice one may need to ask the question any number of times before reaching the originating root cause.

Convening participants used the Five Whys technique to create "chains" of reasons that explain the lack of quality reading instruction for all students. Each reason serves as an explanation for the one prior to it:

Example Chain A:

- 1 Curricula may not represent best practice.
- 2 Many curricula do not use all of the research available.
- 3 Practitioners do not make use of available research because they lack the knowledge or incentives to do so.
- 4 District personnel are not always familiar with the research and so make decisions based on cost and appearance of materials, among other reasons.
- 5 School districts have many pressures to which research takes a back seat: policies, costs, and state and federal mandates.

Example Chain B:

- 1 Teachers lack the skills and abilities to teach reading effectively in the early grades.
- 2 Teachers have few opportunities to enhance their skills.
- 3 There is a lack of shared vision for high quality instruction.

- 4 There is a lack of alignment around which areas to target for improvement, and therefore a lack of alignment around teacher support.
- 5 There is a lack of understanding about which practices qualify as "high-leverage" and should be prioritized, which makes it difficult to appropriately structure teacher training and support.
- 6 Practitioners don't always believe that research works for their kids.

Example Chain C:

- 1 The research base on effective practice is inaccessible to practitioners.
- 2 There is a lack of established clinical practice in pre-service preparation and the induction of teachers.
- 3 Preparation programs are not accountable for quality/learning/readiness of practitioners/graduates.
- 4 Schools and school systems have weak human resource management systems, ungrounded in knowledge of the sector or research on reading practice.
- 5 Schools and school systems manage for compliance, not quality or performance.

Example Chain D:

- 1 Not all preparation programs prepare teachers to teach reading effectively.
- 2 There is not enough fieldwork in teacher preparation.
- 3 There is not enough time in teacher training for fieldwork.
- 4 Not enough money is given to teacher training.
- 5 There is a lack of partnerships between schools and schools of education.

SESSION 5: WHAT CAN A SCHOOL OR DISTRICT DO TO GET STARTED?

The root cause analysis activity underscored our belief that a lack of reliable, quality teaching is more than just a teacher-level problem. Simplistic approaches such as firing individual teachers or one-shot professional development sessions will not achieve substantive, sustained improvements in instructional quality. The causes lie at the system-level.

In the field of healthcare, the Institute for Healthcare Improvement has developed an approach to system improvement called a *change package*⁶ to address identified gaps in performance. A change package is a set of recommended interventions that, when implemented together through improvement research, are very likely to bring about desired results. Local adaptations will need to be

⁶ Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement, IHI Innovation Series white paper (Boston: Institute for Healthcare Improvement, 2003) p. 6: www.IHI.org.

made to the package to address issues of context. Collectively, these changes will significantly improve the system's performance.

Convening participants discussed evidence-based changes that could potentially be included in a change package to address some of the root causes identified in the previous sessions. The following is an example of one such set of change ideas:

Root cause: Many preparation/certification programs				
do not prepare teachers to teach reading effectively				
Develop closer ties between candidate selection and school placement (demand-driven model for selection) Make selection criteria more demanding Lower the number of teacher candidates admitted to a program	Placement Strengthen mentor—teacher relationship Individualize teacher training by grade level, school type	Teacher educator training • Develop training curriculum for teacher education on latest evidence-based practices	Teacher prep program database Design a teacher preparation program database that includes the following data: Where graduates are teaching How graduates are regarded/rated in terms of teaching effectiveness	Move to practice (certification standards/process for evaluation) • Have evaluation for certification that sets high goals and requires demonstrated skills linked to theory • Create a definitive set of standards of practice (akin to medicine)
Residency/Clinical pract Create a longer pract residency in medicine Tie field work more of Develop a stronger of courses Expand the amount of reading and writing t	icum period (like e) losely with class work inical basis for reading of time devoted to	Measurement system for evaluating teacher preparation programs • Develop and test a mechanism to measure the effectiveness of preparation programs • Identify and certify evidence-based programs that enable newly placed teachers to be effective • Incorporate teacher education programs into accountability mechanisms	Content/skills taught in preparation courses Train teachers to be critical consumers of research during preservice Deepen study of language acquisition to support reading in coursework Emphasize writing and discussion in reading courses	Coordination across organizations Change course credit model Develop alternative models of providing courses that draw on different capacities of faculty and teachers (research, methods, practicing teacher) Stimulate awareness of training programs, experiment with demand-driven services Create collaborative partnerships between schools and schools of education

SESSION 6: DISCUSSING NEXT STEPS FOR THE WORK

The meeting generated an innovative set of potential solutions for tackling long-standing problems of practice. In the final session, we collectively explored what it might take to scale some of the improvement approaches discussed on the previous day. We also spoke directly about what roles the Carnegie Foundation might play in this space, with particular attention to the potential for a Carnegie Knowledge Network and/or a Networked Improvement Community on early grade reading.

ATIL WORK ON EARLY GRADE READING GOING FORWARD

Participant engagement and interest in continued partnership affirmed Carnegie's initial foray into using continuous improvement methods to solve problems of practice in early grade reading. The convening also affirmed our general belief that the field not only should but could achieve much better results than it realizes today. Transformation, however, is discontinuous. Achieving higher student outcomes will require approaches, methodologies, and systems very different from the ones we have relied on in the past. While we as a Foundation have much left to explore, this convening built confidence in the idea that continuous improvement offers the right tools and frameworks to tackle deeply rooted problems at the heart of teaching and learning. As one participant commented following the convening, "the session was outstanding. The network conceptualization is very helpful in understanding the scope of the problem but also in pointing to improvement. That framework is coupled with a level of detail and causal analysis that promises real progress forward."

APPENDIX A: QUALITY READING INSTRUCTION EXPERT CONVENING PARTICIPANTS

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APPENDIX B: QUALITY READING INSTRUCTION EXPERT CONVENING AGENDA

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Agenda

Thursday, June 27

8:30-9:00am	Breakfast
9:00-9:30am	Overview and Introductions
9:30-10:00am	Presentation: The Challenge of Achieving Quality Instruction Reliably at Scale Tony Bryk, President of the Carnegie Foundation for the Advancement of Teaching
10:00-10:45am	Whole Group Discussion: Evidence-Based Processes for Teaching Reading Chris Thorn, Director of the Advancing Teaching-Improving Learning Program
10:45-11:00am	Break
11:00-12:00pm	Small Group Breakouts: Mapping Standard Work of Quality Reading Instruction Lee Nordstrum, Research Associate, Advancing Teaching-Improving Learning Program
12:00-1:00pm	Lunch
1:00-2:00pm	Practitioner Fishbowl Discussion: Understanding the System Barriers to Quality Instruction Reliably at Scale
2:00-2:15pm	Break
2:15-3:30pm	Small Group Breakouts: Root Cause Analysis - Aligning the System for Quality Reading Instruction
3:30-3:45pm	Break
3:45-4:45pm	Small Group Breakouts: Practical Implications for Schools and Districts
4:45-5:00pm	Reflections & Closing

Friday, June 28

8:00-8:30am	Breakfast
8:30-9:15am	Opening and Summary Day 1: Gallery Walk
9:15-9:25am	Presentation: Synthesizing Extant Knowledge for Practitioners in a Carnegie Knowledge Network
	Jeannie Myung, Director of the Carnegie Knowledge Network
9:25-9:45am	Presentation & Discussion: Achieving Integrity of Implementation of Early Grade Literacy Instruction through Continuous Improvement Networks
	Paul LeMahieu, Senior Vice President of the Carnegie Foundation for the Advancement of Teaching
9:45-10:45am	Open Forum: A Needs Assessment for the Field – What Do We Need to Spread What We Know?
	Tony Bryk
10:45-11:00am	Reflections, Closing & Evaluations
11:00am-	Lunch
	Box lunches available for those who need to depart immediately for the airport
	Shuttles to airports



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We invite you to explore our website, where you will find resources relevant to our programs and publications as well as current information about our Board of Directors, funders, and staff.

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