Abstract

Despite research practices that have advanced reading knowledge and the billions of dollars spent in the U.S. to improve reading outcomes, why is that too few students fail to read at levels that promote post-secondary academic achievement? In his keynote address David Paige draws on his experience working in a large-district initiative to improve reading instruction in kindergarten through third-grade. From his work and that of others, insights suggest both barriers and solutions to reading achievement. Because these issues appear widespread across the nation they suggest “school systems without a process.” David discusses these roadblocks, and what they mean in the continuing effort to improve reading outcomes in America.

I want to thank the Executive Committee, the Board, and all of you for the honor of serving as President of ALER. We have a vibrant organization that’s made a deep impact on me through the relationships and learning opportunities that I’ve been able to enjoy over the years and for that I am very grateful.

The U.S. has spent large sums over many decades to improve reading outcomes, but the progress has been slow. Between 1992 and 2015 fourth-grade NAEP scores have risen by six points, from 217 to 223, a less than three percent rise. If this were viewed as an economic investment in the youth of our country it’s an average annual return of one-tenth of one-percent. While NAEP shows a solid one-third of students achieving well, with some student segments experiencing growth, this leaves the large majority of students behind. We must ask how we can build on what we know to accelerate improvement. If reading is a fundamental prerequisite to educational achievement, how can we make substantial improvements in the half to two-thirds of students who struggle? Douglas Englebart, the inventor of the computer mouse and the namesake of Englebart’s law, the observation that the intrinsic rate of human performance is exponential has stated - we must improve our ability to improve. This causes me to wonder what could be and then ask “why not?” I’m going to discuss several factors that influence our potential to improve reading outcomes and then suggest an emerging approach to improvement that’s gaining traction. But first, listen to this parable called The Ripple Effect, it goes like this:

The Master was walking through the fields one day when a young man with a troubled look approached him. "On such a beautiful day, it must be difficult to stay so serious," the Master said. "Is it?" The young man said. Watching intently, the Master asked the young man to join him. The two walked to the edge of a calm pond and sat down. The Master then instructed the young man to “Find a small stone, and throw it in the pond.” The Master then said "Tell me what you see." "I see ripples" said the young man. "Where did the ripples come from?" "From the pebble I threw in the pond, Master." The Master said, "Please reach your hand into the water and stop the ripples.” The young man then stuck his hand in the water, only to cause more ripples. He was now completely
baffled. "Were you able to stop the ripples?" the Master asked. "No, of course not."
"Could you have stopped the ripples, then?" "No, Master. I only caused more ripples."
"What if you had stopped the pebble from entering the water to begin with?" The Master
smiled such a beautiful smile; the young man could not be upset. "The next time you are
unhappy with your life, catch the stone before it hits the water. Do not spend time trying
to undo what you have done. Rather, change what you are going to do before you do it."
"But Master, how will I know what I should do before I do it?"
The master answered, "Do not just treat the ripples. Keep asking questions." The young man stopped, "Are you saying I know the answers?" "You may not know the answers right now, but if you ask
the right questions, then you shall discover the answers." "But what are the right
questions, Master?" "There are no wrong questions, only those that go unasked. We must
ask, for without asking, we cannot receive answers. But it is your responsibility to ask.
No one else can do that for you."

I recently had a colleague lament "Why can’t we just implement good reading
instruction?" This is a simple question with the quick response being "Well of course we
can!" But the solution is anything but simple, as teaching is just one factor in an
extraordinarily complex instructional system. We can begin by first recognizing that
education is a socio-political-corporate juggernaut with highly disparate interests that can
sometimes seem overwhelming and depressing. So too often when a wider perspective is
needed to address the complexity we double down on familiar, but failing strategies.
Within all this complexity teaching is just one factor, albeit a very important one. And
while teaching is what we spend our energies trying to improve, I want to suggest that a
broader perspective might help in our work to create a more literate society. But first,
what are a few of the factors impeding “good reading instruction?”

Factors Influencing Reading Instruction?

Once a child enters the school building research tells us that the teacher is critical
to that child’s success. So the first factor reveals itself in the answer to this question: how
deep is the capacity for delivering effective reading instruction across the U.S.? We can
think of capacity for delivering reading instruction as an “output” resulting from what
one learns in a teacher certification program plus the subsequent experience and
continued professional growth that occurs once one is engaged in practice. But what do
teachers know about reading instruction? About ten years ago a team at Utah State
developed an assessment called the Literacy Instruction Knowledge Scale or LIKS to
measure a teachers’ declarative knowledge about reading and their classroom practice.
After administering the LIKS to 13,000 teachers across the country they found that
teachers had little knowledge about reading, and for those who did know more it had little
to no effect on the reading achievement of their students. These results raise concern
about how reading teachers are being prepared. They also suggest that factors beyond the
teacher may effect reading outcomes. Another piece of insight into teacher capacity is
gained from a project I’ve been working in over the past four years in Louisville. The
JCPS/Bellarmine Literacy Project, is an initiative to improve third-grade reading
outcomes. When we began the BLP we assessed 4,500 first-, second-, and third-grade
students from 31 schools on their understanding of letter-sound correspondence. We
found that by the end of first-grade students knew beginning and ending consonants and
some vowels sounds. Second-graders knew a few more vowels and blends than did first-
graders, while third-graders knew no more about letter-sound correspondences than did
their second-grade counterparts. To no surprise these students were also not fluent readers. This told us first, that what students knew about decoding words they learned by the end of second-grade and secondly, their skills were insufficient to support adequate reading development. The results also suggested that the 187 teachers who instructed these students either did not have the capacity to develop their students beyond basic letter-sound correspondence or if they did, factors in the system were constraining their work. While these two examples are quite different and certainly not definitive, they bring to question what other researchers have been asking – are reading teachers sufficiently prepared? As schools of education we must take this question seriously.

After the effects of the teacher, those of the principal are also important to student success. As an individual who can multiply or diminish reading achievement in a school, the role of the principal is important to reading instruction. How might this be? Consider that many elementary principals were at some point, former reading teachers. However, this does not mean they are highly knowledgeable about effective reading instruction. In fact, our work in the BLP suggests it can sometimes be the opposite. For example, we have a trend occurring in our area where secondary teachers are becoming elementary school principals. In one way this could be an advantage as they are often aware they know little to nothing about reading instruction and so are open to help. On the other hand, they are also susceptible to false information because they don’t know what they don’t know. While principals need many skills beyond knowledge of effective reading instruction, this trend suggests that perhaps core reading instructional knowledge may not be valued by districts choosing those who will be expected to be a school’s instructional leader. It could also be that deep reading knowledge is a difficult-to-find skillset in principal candidates, so it goes to the wayside in the selection process. While we have found principals who have instituted ideas that have greatly helped their teachers be more effective, we have seen actions taken by others that have undermined reading growth in students. Principals are part of the instructional system and they must be considered in the solution to improve reading outcomes.

A third factor contributing to the ineffectiveness to improve reading outcomes is the epidemic of solutionitis, which I might define as the chasing of a quick solution to a problem with little understanding as to its complexity in the hope it will magically improve. The dangers of quick solutions are first, they ignore the complexities that often entangle many educational challenges. Second, such strategies detract attention from pursuit of the deeper solution needed to improve the problem while third, years of solutionitis leads to what I call ambivalitis, the state among teachers of permanent ambivalence towards new initiatives. Solutionitis does not leverage the multiplicative value that a systemic perspective can bring to addressing problems. Effective solutions are often complicated and require deep learning and hard work over an extended period of time. I spent some of last week at a meeting sponsored by the Council of Chief State School Officers for state literacy leaders from about 22 states. In my workshops it was interesting the range of complex problems being addressed, and the difficulty that was present in finding solutions.

A fourth factor I will mention briefly, and it rose to the surface during these CCSSO workshops, was the negative effect of state legislatures on reading outcomes as they often ignore educational research brought to them by state DOE leaders and others. A prime example is the law implemented by 15 states and the District of Columbia that
requires third-grade retention for poor reading while 9 more states have made it an option. Despite the fact that such laws do nothing to improve the core reading instruction that could reduce retention, these laws continue to gain traction. The logic of elected representatives to “blame the lazy kids” is absolutely baffling.

**So How Can We Improve Reading Outcomes?**

I’ve mentioned only a few factors and of course there are more. But if we accept the view that the improvement of reading outcomes across the country is *critical and urgent*, I suggest that as literacy educators we must begin to venture outside our normal boundaries as what we’ve been doing is not working. We can start by *asking different questions* that extends what we already know to a larger and different systemic perspective and solution. What do I mean?

Some of us may remember the 1960’s when “Made in Japan” was a moniker for cheap and low quality. If you’re under 45 or so this might come as a surprise but it was true. Changing that connotation from “cheap” to “world-class” by the 1980s can be largely attributable to an American named Edward Deming. Now Deming was a Yale physicist and mathematician who used the principles developed earlier by Walter Shewhart, another physicist and statistician who worked at Bell Labs in New Jersey in the first half of the twentieth century. In case you don’t know, Bell Labs was the pre-eminent experimental think-tank in its time responsible for hundreds of innovations in the early to mid-twentieth century that added much to the wealth of the U.S. The processes developed by Shewhart identified and measured the root causes contributing to product quality. This method provides valuable insight into where to find improvements in the process and eventually leads to higher quality products and services. Throughout the 60’s and 70’s Deming worked intently with Japanese manufacturers to improve the processes that led to improved product quality. Now interestingly, Deming had first offered his ideas to American industry but was quite pompously rejected as they didn’t think they needed to measure anything. Our titans of industry knew exactly what was good or bad - until the 1980s when consumers began to disagree. You see it was then that American products, particularly cars, had become infamous for their poor quality and unreliability. I’m still trying to forget my Pontiac Sunbird that died at 75,000 miles, my Dodge that caught fire while my wife and son were in it, and the Plymouth van whose parts literally fell out of the engine. Detroit’s arrogance opened the door for Japanese cars that had become far superior through Deming’s quality improvement techniques. Today, most every major corporation, whether they’re a service company or manufacturer, and this includes some universities, has an on-going quality improvement initiative based on the fundamentals of Shewhart and Deming. Some of you may know it as Six Sigma, the point at which only 34 defects occur for every 1 million units. In fact, it’s not a stretch to say that companies without a rigorous quality improvement initiative cannot compete in today’s economy because customers won’t put up with poor quality - they will take their money and walk away, but not before posting a scathing on-line review. Unfortunately K-12 education has ignored process improvement methods, most often in deference to solutionitis.

Given the challenges at improving reading achievement I must ask why education doesn’t use a proven process as a mechanism for systemic improvement. As the parable I read earlier suggests, if improvement is to happen we must ask different questions that involve different answers and different work; hard questions that demand new learning.
and new skills. Because reading achievement is fundamental to academic achievement, and because many students are failing to acquire it to the necessary levels, it’s extracting a cost our country can’t afford. So I offer you three things to consider as you travel back to your respective institutions.

First and fundamentally, can we be satisfied with the present state of reading attainment? Reading is not only a social equity issue, it’s one that ultimately drives economic development for our communities, our states, and our nation. So is it acceptable that across our country, no matter how it’s measured, one-third to one-half of our children are gaining acceptable reading skills while the other half to two-thirds are not? Is this an acceptable failure rate? In my home state of Kentucky I hear little outcry about poor reading results. While there is grousing over less-than-desirable achievement when end-of-year test scores are released, few adults are upset because too few children have adequate reading skills. I suggest to you that we must speak up and engage those accountable in rigorous and urgent conversations directed at changing reading outcomes. If you are not currently involved in the conversation in your community or state, think about how you can insert your voice.

Second, it is clear to me that changing reading outcomes must be viewed as a systemic process that involves not just teachers, but numerous other stakeholders. In contrast is the perspective that improving reading is viewed as a school improvement objective that’s satiated with a few PDs or some reading “focus” for the school year. In this misguided paradigm no one is accountable for improvement. It’s not really the responsibility of district administrators, not the school board, not attributable to the curriculum, not the union, not the state who certifies school personnel, not the accountability assessment systems, not the politicians who make the laws, and not the domain of schools of education. It might be the principal’s fault, but more often than not the rest of the system says through its actions that fault rests solely with teachers because they instruct the students. And with this I disagree. The paucity of reading improvement tells me that success will not come without addressing all parts of the macro system because they directly and indirectly influence what happens in the classroom. Ask how you can be a catalyst to systemic solutions for reading improvement.

The third and obvious question then is what is the way forward, how do we improve this juggernaut of a system that produces such poor reading outcomes? The School of Education at the University of Michigan has adopted Shewhart’s and Deming’s principles of process improvement in what they call improvement science. Now to be sure, an old dog by a new name makes it neither young nor new, but it might get some well-deserved attention. Improvement science at Michigan applies the quality improvement methods that have been in use for over 90 years to effect change in the instructional process. Implementing successful quality improvement is difficult, slow, and laborious, and there are no shortcuts. But it’s also the only approach that when properly implemented is consistently successful across all kinds of organizations. And it can be effective at improving reading outcomes too, but it requires new learning on the part of everyone working in the system.

In 2015 Anthony Bryk, now president of the Carnegie Foundation for the Advancement of Teaching, wrote an article appearing in Educational Researcher entitled “Accelerating How We Learn to Improve,” which takes to heart Englebart’s call to improve how we improve. Bryk espouses the methods of improvement science as a
systematic process for educational improvement. If we want significant improvement in reading outcomes across the United States we must first accept that while what we’ve been doing is necessary, it is not sufficient. To gain improvement traction we must ask new questions and expand our skillsets beyond instruction. We must recognize that we work inside a very complex system that does not know how to improve. As schools of education we must become the leaders in improving how we improve which means we must engage in new learning. Our students, our principal candidates, and our future superintendents must understand that “continuous improvement” is not a simple slogan that we nod our head to in agreement. Rather, it is a rigorous system that can improve the quality of instructional outputs and change reading outcomes for millions of students if only we are willing to engage in the work. Quality improvement works because it brings a disciplined mindset for improvement to a plan-do-study-act process based on asking questions. If we are to make substantial improvement in the percentage of students with adequate reading skills it is insufficient to stay in our present mindset. As educators we must expand our perspectives, adopt new methods, and then teach them to our students. In the words of Deming, we must learn what to do, and then do it well.

Thank you very much.