Educational Equity: The Transformative Impact of Effective Instruction & Professional Development on Student Achievement

Suzanne Carreker, Ph.D., CALT-QI. Principal Educational Lead

The Every Student Succeeds Act (ESSA) was signed into law by President Barack Obama on December 10, 2015. The purpose of ESSA (2015) is “...to provide all children significant opportunity to receive a fair, equitable, and high-quality education, and to close educational achievement gaps” (SEC. 1001). For the first time, there is a law requiring that all students in America be taught and held to high academic standards that will prepare them for college, career, and life success. ESSA furthers the progress of educational equity with four pillars of opportunity that protect students who have historically been underserved: 1) high-quality curriculum and assessments; 2) multiple measures of success; 3) adequate, equitable resources; and 4) evidence-based interventions with positive outcomes (Cook-Harvey, Darling-Hammond, Lam, Mercer, & Roc, 2016).

Although these pillars provide a strong foundation for supporting equity, none of the requirements can be effective if there is a lack of teacher capacity and teacher confidence in our schools—particularly in literacy education. The teacher’s impact on student achievement is greater than any other factor in a school (Darling-Hammond, 2010; RAND, 2012). Accordingly, under ESSA, state improvement plans must strive to ensure that all students have access to effective teachers (Cook-Harvey, et al., 2016). An effective teacher is an educator who has the time, tools, and knowledge necessary to meet the specific needs of each student—in other words, to provide an equitable education.

This paper will explore how teachers’ well-supported experiences in 1) analyzing data from high-quality assessments, 2) delivering instruction within a high-quality curriculum, and 3) using technology effectively to differentiate instruction can build teacher capacity and teacher confidence and promote equitable literacy education for all students.

What is equity?

An effective way to define equity is to point out what it does not mean: It does not mean equality. Equality is the leveling of the playing field, where everyone plays by the same rules and under the
same conditions. It means every student gets the exact same resources and supports. *Equity*, on the other hand, means each student receives the specific resources and supports that he or she needs (Mann, 2014). It is what educators often refer to as personalized learning, where instruction is designed so that every student has the same opportunity to succeed. *Equity* is dependent on “the policies and practices that provide every student access to an education focused on meaningful learning—one that teaches the deeper learning skills contemporary society requires in ways that empower students to learn independently throughout their lives” (Cook-Harvey et al., 2016, p. 1).

**Why is equity important for literacy?**

Literacy is broadly defined as *understanding, evaluating, using, and engaging with written text to participate in society, to achieve one’s goals, and to develop one’s knowledge and potential* (Program for International Assessment of Adult Competencies, n.d.). More succinctly, it can be defined as *the ability to read, write, and communicate productively*. With literacy come academic success, informed decision-making, improved self-esteem, personal empowerment, greater economic opportunities, and active participation in local and global social communities (Stromquist, 2005). Ultimately, it is the gateway to lifelong learning. Explicit, evidence-based practices support literacy development and proficiency (National Institute of Child Health and Human Development [NIH], 2000; Scammacca et al., 2007). However, studies have demonstrated that some students will struggle with literacy for a variety of reasons (Biancarosa & Snow, 2006; Catts, Hogan, & Fey, 2003; Cirino et al., 2013; Fiester, 2013; Hernandez, 2011). Without equity in literacy education, achievement gaps will persist and too many students will not reap literacy’s innumerable benefits.

**The impact of teacher capacity and teacher confidence in literacy education**

As stated previously, the teacher’s impact on student achievement is greater than any other factor in a school (Darling-Hammond, 2010; RAND, 2012). Accordingly, under ESSA, state improvement plans must strive to ensure that all students have access to effective teachers (Cook-Harvey, et al., 2016). Several influential publications and initiatives have outlined the knowledge and/or skills teachers need to be effective. For example, the National Reading Panel (NRP; NIH, 2000) was convened in 1997 at the request of the U.S. Congress to identify best practices in literacy instruction based on available evidence. Across the country today, the Common Core State Standards (Council of Chief State School Officers [CCSSO] & National Governors Association Center for Best Practices [NGACBP], 2010) have been implemented in many states and districts to ensure all students have access to a high-quality education that prepares them for success in college, career, and life.
Center [NGO], 2010) and other state initiatives guide teachers of all disciplines in teaching appropriate literacy skills to all students (Fiester, 2013). The National Board for Professional Development Standards presented five propositions in its publication "What Teachers Need to Know and Be Able to Do" (2016): Teachers 1) are committed to students and their learning; 2) know the subjects they teach and how to teach those subjects to students; 3) are responsible for managing and monitoring student learning, 4) think systematically about their practices and learn from experience, and 5) are members of learning communities. The International Dyslexia Association Knowledge and Practice Standards for Teachers of Reading (2010/2018) outlined what a highly knowledgeable and skilled teacher of reading needs to know and be able to do to teach literacy well to all students.

Indeed, research has demonstrated that student gains in literacy are the result of an interaction between teacher knowledge about literacy and teacher skill with instructional practices (Piasta, Connor, Fishman, & Morrison, 2009). **Teacher capacity** in literacy instruction, therefore, can be defined as the ability, or the possession of knowledge and skill, to advance literacy achievement.

Yet, teacher capacity is not finite. Teachers will encounter content that is unfamiliar to them, or they will encounter students whose difficulties in learning to read seem intractable. With such encounters, a growth mindset engages teachers as learners and builds teacher confidence. A growth mindset is the belief that learning new abilities helps in meeting new challenges (Dweck, 2006). Teachers’ well-supported experiences in analyzing data from high-quality assessments, delivering instruction within a high-quality curriculum, and using technology effectively to differentiate instruction build teacher capacity and confidence and promote meaningful learning for all students.

1) **High-quality assessments, and teacher capacity and confidence**

Rather than relying on one end-of-year assessment to measure student achievement, ESSA requires the use of multiple measures (e.g., norm-referenced or standardized, performance-based, progress monitoring) to evaluate students’ learning level and how they are learning over time (Cook-Harvey et al., 2016). Standardized, computer-adaptive screeners that measure skills that are most predictive of end-of-year reading success can efficiently inform school leaders about instructional priorities. An adaptive screener adjusts the difficulty level of items based on student responses; therefore, it can quickly identify students’ current learning level, strengths, and areas of
Performance-based assessments can measure what standardized multiple-choice assessments cannot measure: They can measure how students use or apply the knowledge they acquire through the completion of a task or the creation of a product (Conley & Darling-Hammond, 2014). These assessments reflect and influence instruction and learning, provide learning experiences that are not always offered to historically underserved students, and tap into the higher-order thinking skills that prepare students for higher education and 21st-century careers (Cook-Harvey et al., 2016). Conley and Darling-Hammond (2014) describe an assessment system as being on a continuum:

At one end are the multiple-choice and close-ended items found in today’s traditional tests. These measure recall and recognition but not higher-level thinking skills or the ability to apply them. The tasks become more complex and extend over longer periods of time at each step along the continuum. They measure larger and more integrated sets of knowledge and skills and provide insight into more cognitively complex aspects of learning and the knowledge of application to new settings and situations. (p. 258)

Examples of performance assessments include: finding evidence; open-ended questions and essays; problem-solving tasks; and products, such as creating a questionnaire, analyzing the responses, and reporting the results of an in-depth investigation of a topic with a culminating exhibition (Conley & Darling-Hammond, 2014). Criteria are created for each performance or product to allow teachers to evaluate tasks objectively and measure growth in students' higher-order thinking. The use and scoring of these assessments connect instruction, assessment, student learning, and professional-learning opportunities (Darling-Hammond & Falk, 2013).

Ongoing progress monitoring helps teachers understand their students’ learning and indicates needed adjustments to instruction based on students’ growth trajectories. With real-time data, teachers can design personalized learning for students. Teacher agency (i.e., ownership in directing one’s own professional growth; Calver, 2016) increases when teachers use data to answer: Where
are my students in their learning, what is the evidence, and how will I use this information? When these data are shared with students, they are then able to answer: Where am I in my learning, how do I know, and how will I use this information? Hence, students increase their own agency, or ownership in their learning (Getting Smart, 2018).

2) **High-quality curriculum, and capacity and confidence of elementary teachers**

To read productively, a reader must be able to translate the printed symbols on the pages of a text into their spoken equivalents and attach meaning to them (Gough & Tunmer, 1986; Hoover & Gough), with the end goal of deep understanding and evaluation of the text. Chall (1983) described stages of reading development that are consistent with reading instruction through the grades. In general, kindergarten through third grade is considered to be the stage in which students are “learning to read,” with fourth and fifth grades considered as the beginning of the “reading-to-learn” stage. Reading proficiency at the end of third grade is a particularly critical milestone for predicting future success. A longitudinal study (Hernandez, 2011) demonstrated that 23 percent of below-basic third-grade readers dropped out or failed to finish high school on time, compared to 9 percent of basic-level readers and 4 percent of proficient readers. Students who lived or had lived in poverty were more likely to have lower reading test scores and were less likely to graduate from high school (Hernandez, 2011).

High-quality literacy curriculum (i.e., the broad content of instruction, not a published curriculum, program, or system) in the early grades aligns to state standards and best practices (e.g., CCSSO & NGO, 2010; NIH, 2000) and provides a solid foundation for literacy success. In the learning-to-read stage, necessary instructional components include phonological and phonemic awareness, phonics, and fluency (NIH, 2000). With these components firmly in place, students’ cognitive resources are freed to focus on meaning (Perfetti, 1985). Comprehension in Grades K-5 is dependent on the development of oral language and vocabulary, the academic language (Nagy & Townsend, 2012; NIH, 2000; Schleppegrell, 2012) and the higher-order thinking skills that ESSA promotes to prepare students for 21st-century careers (Cook-Harvey et al., 2016; CCSSO & NGA, 2010). To develop and apply academic language and higher-order thinking skills, fourth-graders, for example, may be asked to compare and contrast the Sahara Desert and the Atacama Desert after reading a text about them, then illustrate and explain two imaginary desert creatures—one for each desert—with labeled features that would ensure their survival. Components needed for writing (e.g., vocabulary,
syntax, sentence structure) are introduced and practiced in a manner that increases complexity across the grades (e.g., CCSSO & NGA, 2010). Job-embedded professional development and peer collaboration can assist teachers in understanding key instructional components, identifying appropriate resources, and delivering effective, meaningful instruction (Croft, Coggshall, Dolan, Powers, & Killion, 2010; Darling-Hammond, 2010).

Students who do not keep pace with their peers in learning to read need the same instructional components; however, they need instruction that is more explicit, more comprehensive, more intensive, and more supportive (Foorman & Torgesen, 2001). ESSA encourages the use of evidence-based (i.e., demonstrates statistically significant and positive results) blended learning to differentiate instruction for all students: “Improving the use of technology can impact personalized learning by allowing educators to better tailor instruction to students’ needs, while also improving teachers’ ability to monitor growth and understand when to use intervention strategies” (Cook-Havey et al., 2016, p.18). Wilkes, Macaruso, Kazakoff, and Albert (2016) offered a reminder that a blended learning approach to literacy instruction is not solely about technology but also includes evidence-based resources and pedagogy, combined with actionable, real-time data. Additionally, the level of teacher engagement and implementation fidelity in a blended learning approach significantly impacted student gains in reading (Schechter, Kazakoff, Bundschuh, Prescott, & Macaruso, 2017).

As elementary teachers successfully implement high-quality, data-driven instruction within a high-quality curriculum and with the support of job-embedded professional development, peer collaboration, and technology, they increase their capacity and confidence to meet the unique learning needs of their students (Cook-Havey et al., 2016; Croft et al., 2010).

3) Effective use of technology, and capacity and confidence of secondary teachers

Non-proficient adolescent readers demonstrate difficulties with reading comprehension and other academic subjects. In fact, Biancarosa and Snow (2006) suggested that 70 percent of secondary students need some kind of remediation in reading. The reading proficiency of these students may range from at grade level to well below grade level, and these students may also exhibit different learner profiles (Carreker, 2017). In spite of intact academic language and higher-order thinking skills, some students may read so inaccurately and slowly that they cannot attend to meaning (Perfetti, 1985). Others may read fluently but may not able to understand what they read because they lack adequate academic language and high-order thinking skills (Biancarosa & Snow, 2006).
Still others may be slow, inaccurate readers with inadequate academic language and higher-order thinking skills. ESSA’s goal of higher graduation, college-going, and college-success rates (Cook-Havey et al., 2016) hinges first and foremost on higher reading proficiency rates. However, interventions for non-proficient adolescent readers are often not as effective as those in the early years (Hernandez, 2011).

There are multiple challenges in implementing literacy interventions at the secondary level. The assumption—rightly so—is that secondary students have mastered basic reading and writing skills (such as decoding, fluency, sentence structure, and composition), and they are therefore independently and proficiently reading and writing increasingly complex texts commensurate with or above grade level (e.g., CCSSO & NGA, 2010). By virtue of the requirements of their positions, secondary teachers are usually not prepared to teach basic literacy skills, nor are there adequate resources for assessment and instruction readily available to them. Time for planning and implementing effective literacy interventions is rarely built into the master schedule, which, in high schools, is tightly built around graduation credits. Non-proficient adolescent readers often are unmotivated to read and are unengaged in learning. This is where the improved use of technology as suggested by ESSA (Cook-Harvey, 2016) can be helpful in boosting reading, writing, and academic achievement.

Instruction for non-proficient adolescent readers lends itself well to technology, and a blended learning approach can provide personalized literacy instruction by identifying student learner profiles and delivering instruction accordingly. Blended learning can accelerate the development of both foundational and higher-order thinking skills with features such as instructional videos, interactive tasks, and text-to-speech support. Student choice and embedded game-like elements can satisfy students’ need for autonomy, competence, and relatedness (Ryan & Deci, 2000; Ryan, Rigby, & Przybylski, 2006), which motivates and engages non-proficient adolescent readers. The lion’s share of the instructional content that is not familiar to secondary teachers can be delivered online and supported with short supplemental lessons delivered by teachers as well as offline activities completed by students independently or collaboratively. As secondary teachers implement a blended learning approach to literacy with fidelity, they increase their capacity and confidence to provide a wider range of literacy instruction that benefits all students.
It is imperative that districts and schools appropriate resources and time in the master schedule for teachers to plan for and implement literacy interventions that address the needs of non-proficient adolescent readers. Teaching grade-level state standards without addressing the underpinning literacy skills that these students need is not equity, and it does not provide equal opportunity for students to succeed. Ultimately, this practice will not close educational achievement gaps, particularly for students who have been historically underserved.

Summary

Literacy—*the ability to read, write, and communicate productively*— is essential to academic success, which in turn provides greater opportunities for each student to develop their full academic and societal potential (Cook-Harvey et al., 2016; Darling-Hammond, 2010). When every student develops this potential, America’s future as a leading global competitor in the 21st century can be secured and safeguarded (Darling-Hammond, 2010). Because teachers are the linchpins of making this a reality, it is essential that all teachers have the support, resources, and time they need to develop their capacity and confidence to ensure equitable literacy education for all students.
References


The National Board for Professional Development Standards. (2016) *What teachers need to know and be able to do.* Retrieved from