dot it

Research that Connects the Dots

for Smarter MTSS and Special Education

dotit.app

1 Big Problem

"History doesn't repeat itself but it often rhymes." MARK TWAIN

Speaking of rhyming, I remember the looks from people when I was a CBM trainer for DIBELS and AimsWeb. It felt like 95% of the room was looking at me like I was asking them to teach on Mars. It took a long time for people to use the tools of NCLB. Now everyone is using them everywhere for almost everything.

With the passing of the Every Student Succeeds Act (ESSA), does your technology match your expectations? Are you still using NCLB tools to solve ESSA problems? Although the Every Student Succeeds Act has been law since December 2015, many schools are still using the thinking and technology left over from No Child Left Behind.

WHAT IS THE PURPOSE OF ESSA?

According to the statement of purpose in ESSA, "The purpose of this title is to provide all children significant opportunity to receive a fair, equitable, and high-quality education and to close educational achievement gaps."

Under NCLB, schools analyzed the reading process by breaking reading into 5 parts or the 5 Big Ideas. Districts implemented science-based reading research (SBRR) to improve each part. As a result, everyone monitored progress on each part or skill. Therefore, educators gained knowledge about the PROCEDURAL PARTS of the reading process. That was an important step.

Now the bar has been raised again. The new standards require that we not only master foundational skills, but that we develop higher order thinking as well.

ARE YOU STUCK IN NCLB?

Do your MTSS plans and IEPs give all students access to grade-level expectations?

no yes

Do your MTSS plans and IEPs empathize with individual cognitive challenges and impacts?

no yes

Do your MTSS and IEP teams write plans with evidence-based strategies that help everyone access the core curriculum?

no yes

Are your MTSS and special education services equitable? Do you have a defensible continuum of support?

no yes

If you answered "no" to any of these questions, you are not alone. Making the shift is not as hard as you might think. With the right thinking and the right technology, you can make the shift to ESSA quicker, clearer, and smarter than you might believe is possible.

2 Key Changes

To meet the new expectations, education needs to innovate once again. Innovation emerges from changes in thinking interacting with changes in technology.

Changes in Thinking

With ESSA, school leaders are learning that it is the CONNECTION between the parts that lead to success. When it comes to academic achievement, the whole is really more than the sum of the parts.

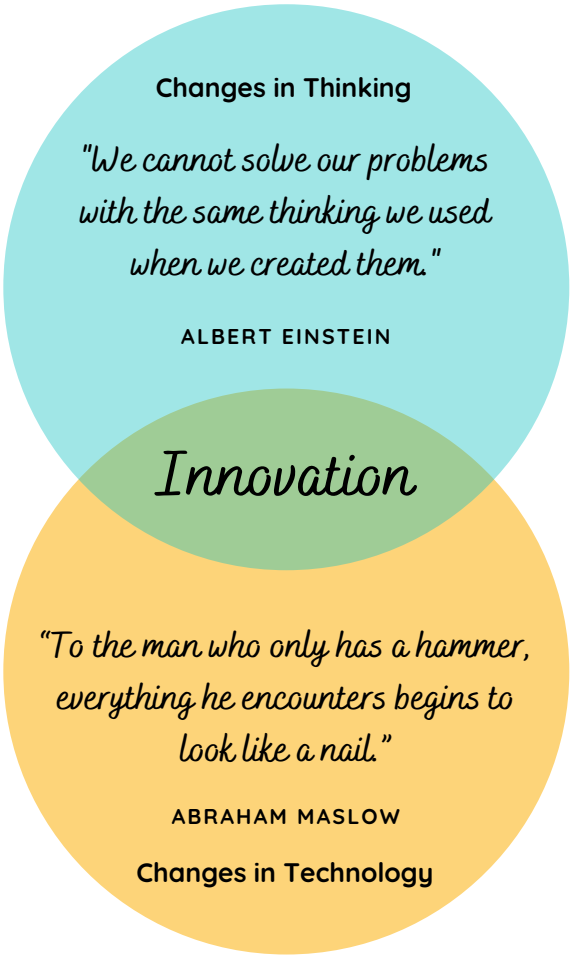
For example, I remember working with a young man who did not know all of his letter sounds. Does that mean he has to learn all the letter sounds before he can read? No. We started with the 5 sounds that he does know and used them to teach decoding, fluent text reading, vocabulary, and comprehension. Next, we will fold in new letter sounds and connect them from sound to word to text. This is one-way educators are learning to CONNECT the WHOLE. The same principle applies to math, writing, and even social-emotional learning.

Changes in Technology

Consequently, you cannot teach ESSA expectations with NCLB tools alone. The new expectation of ESSA requires using technology that fits. Consider tools for teachers that:

- helps teams address cognitive challenges to higher order thinking and their impacts.
- facilitates the improvement of pedagogy.
- maintains compliance in plans, schedules, and documentation.
- monitors tasks that are visible evidence of students' mastery of standards aligned to the state assessment design.

Most importantly, find technology that makes the work of teachers more efficient. Give them technology that reduces paperwork and facilitates classroom management instead of incentivizing them to replace their instruction with video.



OPEN YOUR DOORS TO ESSA

To meet the expectations of the Every Student Succeeds Act, schools need two things: develop ESSA thinking and use ESSA technology.

ESSA Thinking means developing a common understanding that

- every student must be presented with grade level assignments that are directly aligned to state assessment design from day one of school.
- every student must engage in active participation and be given ample opportunities to respond to instruction.
- every student must have positive behavior supports that demand acccountability to academic expectations in a learning rich environment.

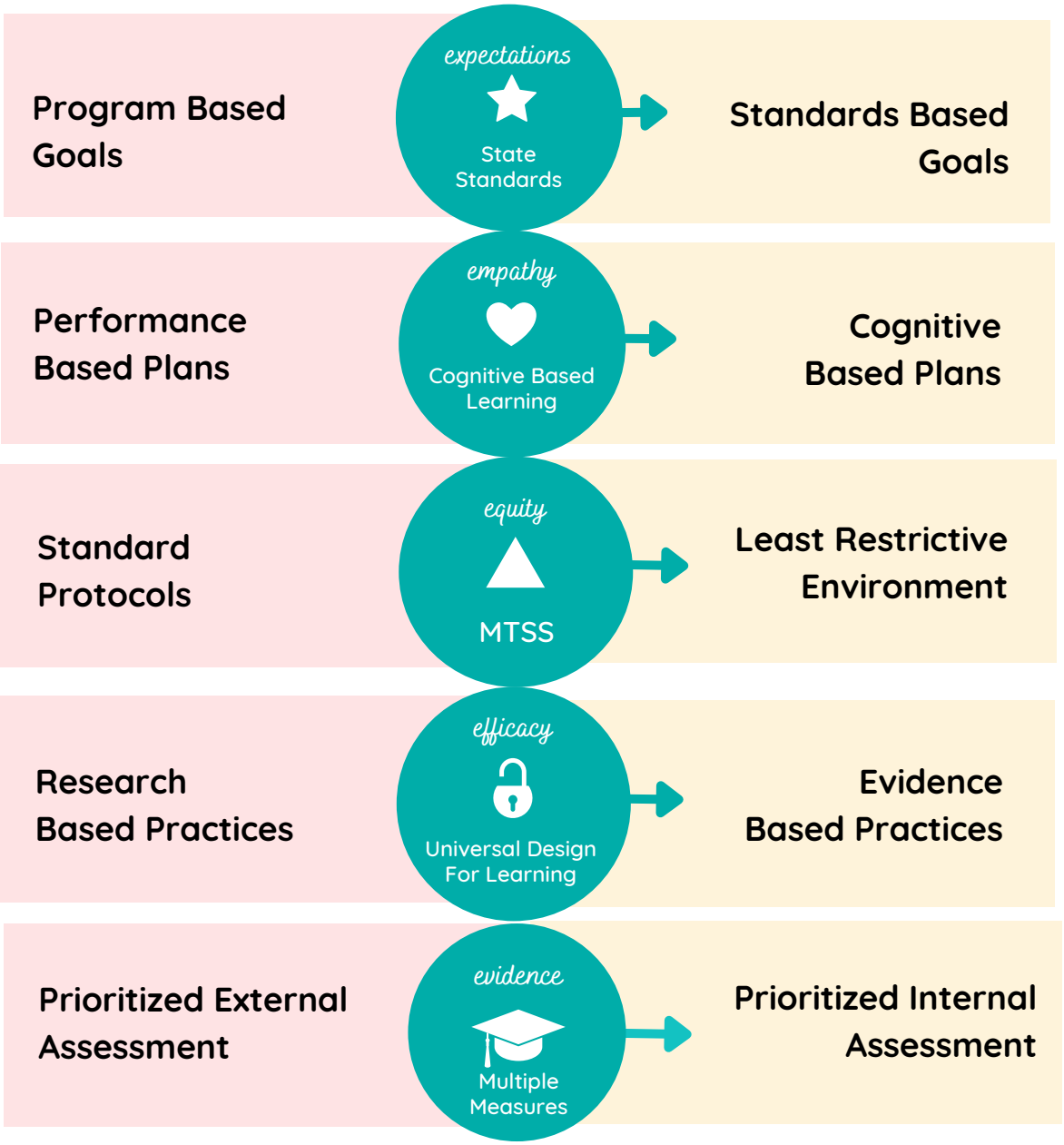
ESSA Technology means teachers have tools and resources to

- facilitate the writing of standards based goals that remove individual cognitive barriers and align to the rigor of the state assessment expectations.
- generate flexible grouping and scheduling with plans that personalize learning and measure response to standards-based instruction directly.
- connects social emotional learning (SEL) goals to academic goals so every student is accountable for learning in every interaction and assignment.

Essentials for Making the Shift

"Learning and innovation go hand in hand.
The arrogance of success is to think that what you did yesterday will be sufficient for tomorrow."

Innovation is the practical implementation of ideas that result in the introduction of new or improved products or services. You still need the knowledge and skills you learned from NCLB. It is the successes of NCLB, not the failures, that are keeping many schools stuck. It's that and the uncertainty of what to do next. However, if you stay stuck in NCLB, your achievement gaps will continue to widen.



Essentials for Making the Shift

THE STANDARDS

RESEARCH

EXCEED EXPECTATIONS

Every DOT IT student plan is based on teacher and team inputs that generate options for attainable grade level standards-based goals.

"80% of teachers agree that students should achieve the standards. 50% believe the standards are attainable for their students."1

"71% of students are successful on classroom assignments. 17% of students accessed a grade level standard on those exact same assignments."2

"States are expected to adopt challenging academic standards that will serve to guide curriculum and instruction for all students. Furthermore, states must implement assessments that measure "higher-order thinking skills and understanding."3

DOT IT MTSS and IEP goals are based on a task analysis across the 4 stages of learning applied to each standard.

"Each goal has four elements: a target behavior, the conditions under which the target behavior will be exhibited and measured, the criterion for acceptable performance, and the timeframe within which the student will meet the criterion."4

Each DOT IT goal is deconstructed according to the four basic units of learning. To clarify measurable results, goals are progress monitored and graphed on a digital rubric within the system.

"Information integration has four basic units: the input, the sensory register, the central processing unit, and the unit for output."5

Safety lives in the standards.

Essentials for Making the Shift

COGNTIVE-BASED LEARNING

DOT IT plans directly address the cognitive challenges that are impacting learning. The system generates impact statements based on the 5 cognitive components and aligns recommendations for goals, conditions, and accommodations that best remove the cognitive barrier.

RESEARCH

"Psychologists have come to learn that while general mental ability measured by FSIQ is a powerful metric for more global descriptions of a person's cognitive abilities, the greatest clinical usefulness comes from an analysis of the index scores; those "primary" mental abilities that more specifically describe the key or most important components of intellectual and cognitive functioning."6

"A useful classification system shapes how we view complex phenomena by illuminating consequential differences and obscuring trivial differences. A misspecified classification system orients us toward the irrelevant and distracts us from taking productive action."7

ENCOURAGE EMPATHY

DOT IT practices clearly articulate what the teacher will say and do and what the student will say and do to meet the expectations of the standard.

"It is the relationship between the teacher, the student and the content-not the qualities of any one of them by themselves-that determines the nature of instructional practice."8

DOT IT goals are prefaced with instructional conditions that best remove barriers to learning. Options for accommodations are aligned to the Universal Design for Learning strategies that are evidenced based for each cognitive challenge.

"Generally, incoming sensory information, such as what we see and hear, is received in the back of the brain, including the occipital and temporal lobes of the brain (Recognition networks), processed and relayed for meaning in the center of the brain (Affective networks), and is organized in the frontal lobes for response or action (Strategic networks). While there is no linear progression for this process, this model for thinking about three broad learning networks can be helpful when we design learning experiences." 9

Empathy is the highest order thinking.

Essentials for Making the Shift

ESTABLISH EQUITY

MTSS & LRE

DOT IT plans are based on a clear and consistent continuum of services across 5 levels of support: Tier 2 and Tier 3 support for non-eligible students, and 3 levels of support for students with disabilities. Recommendations in DOT IT are based on teacher inputs aligned to research based scaffolds such as intervention intensity and concrete-representational-abstract instructional sequences.

DOT IT's meeting protocol guides teams through the necessary and appropriate inputs to make choices that fit within the MTSS framework while respecting the autonomy of team decisions based on unique student needs.

RESEARCH

"The CPA approach consist of three steps specifically: 1) learning by physical manipulation of concrete objects, 2) learning by representation of pictorial of concrete manipulation, and 3) solve the problem by mean an abstract notation."10

MTSS provides an effective framework for turning around schools, reforming curricula to better meet student learning needs, and improving outcomes for all students—including those from culturally and linguistically diverse backgrounds."11

"The power of collective capacity is that it enables ordinary people to accomplish extraordinary things—for two reasons. One is that knowledge about effective practice becomes more widely available and accessible on a daily basis. The second reason is more powerful still—working together generates commitment."12

Equity is access to excellence for everyone.

Essentials for Making the Shift

EVIDENCE-BASED PRACTICES RESEARCH

ENHANCE EFFICACY

DOT IT plans allow teachers and teams to pinpoint can do descriptors and remove barriers to learning much more clearly. DOT IT Group Goal Guides give teachers flexibility on how to instruct and assess based on individual student strengths and needs.

"The various meta-analyses conducted yielded weighted average effect sizes ranging from 0.537 to 0.628. Collective teacher efficacy was found to be strongly and positively correlated with student achievement."13

DOT IT's Support Schedule makes it easy to provide differentiated instruction in flexible small groups. Teachers and coaches can support multiple goals and plans simply.

"Scientifically based instructional practices are those that instructors use to teach content and that have been demonstrated to be effective. Differentiated instruction refers to the use of flexible teaching approaches in the classroom to accommodate the individual learning needs of all students."14

DOT IT's coaching tool gives coaches crystal clear content focus. The recommendations are made during active instruction. Because the instruction is in an accountable plan, it fosters consistent practice on standards based goals. The share feature makes it easy for teachers, coaches and administrators to capture the value of coaching practice.

"When examining understanding instructional coaching through the lens of the 5 empirically predictive elements of effective PD (content focus, active learning, sustained duration, coherence, and collective participation) the model presents itself as a powerful tool for improving teacher knowledge, skills, and practice."15

Efficacy is the product of sincere responsibility.

dot it Essentials for Making the Shift

MULTIPLE MEASURES

RESEARCH

DOT IT assessment is based on authentic student work aligned directly to grade level standards and state assessment design.

"Reviews of research across a number of learning domains have discovered that students need to demonstrate application of their learning to effectively document the acquisition of valuable skills such as summarizing and generating and testing hypotheses (e.g., Marzano, Pickering, & Pollock, 2001; Pellegrino, Chudowsky, & Glaser, 2001)." 16

DOT IT progress monitoring measures standards based goals that are specific, measurable, attainable, relevant and timely.

"Any state or district that hopes to use progress monitoring as a tool to ensure the highest possible outcomes for every student needs to ensure that the educational system itself—including curriculum, instruction, formative and summative assessments, professional development and school improvement processes—is aligned, coherent, and focused on ensuring that every child is being taught and is learning the grade-level content." 17

EVALUATE EVIDENCE

DOT IT captures teacher documentation, observations, authentic student work, and evidence of learning behaviors in addition to curriculum based goal assessment.

"ESSA requires the use of multiple measures for accountability, calling upon states to evaluate student and school progress beyond test score gains and graduation rates by also including one or more indicators of "school quality or student success." 18

The best indicator of success today is success yesterday.

WORKS CITED

1. City, Ellmore, Fiarman, and Teitel. Instructional Rounds in Education, Harvard Education Press, 2009.

2. The New Teacher Project, “The Opportunity Myth: What Students Can Show Us About How School Is Letting Them Down—and How to Fix It”, PDF September 2018

3. Wakefield, MA, “UDL & the Learning Brain”, CAST, 2018.

4.The IRIS Center (2019). IEPs: Developing high-quality individualized education programs. Retrieved from https://iris.peabody.vanderbilt.edu/module/iep01/November 2019

5. Naglieri and Das. “Planning, Attention, Simultaneous, Successive (PASS) Theory: A Revision of the Concept of Intelligence”, The Psychological Bulletin, 1995

6. Weiss, Saklofske, Holdnack, and Prifitera. WISC-V Assessment and Interpretation, Elsevier Inc., 2016.

7. Naglieri and Das. “Planning, Attention, Simultaneous, Successive (PASS) Theory: A Revision of the Concept of Intelligence”, The Psychological Bulletin, 1995

8. City, Ellmore, Fiarman, and Teitel. Instructional Rounds in Education, Harvard Education Press, 2009.

9. Wakefield, MA, “UDL & the Learning Brain”, CAST, 2018.

10. Witzel W.S. (2005). Using CRA to Teach Algebra to Students with Math Difficulties in Inclusive Settings. A Contemporary Journal 3(2), 49–60, 2005 .

11. Learning Focused. “8 Proven Steps for Increasing Achievement”, February, 2017.

12. Darling-Hammond, Linda. “Developing and Measuring Higher Order Skills: Models for State Performance Assessment Systems.” The Learning Policy Institute, March, 2017.

13.Eells, Rachel Jean, "Meta-Analysis of the Relationship Between Collective Teacher Efficacy and Student Achievement" (2011). Dissertations. 133. https://ecommons.luc.edu/luc_diss/133

14. The IRIS Center. (2006). RTI (part 3): Reading instruction. Retrieved from https://iris.peabody.vanderbilt.edu/module/rti03-reading/ October 2018

15. Laura M. Desimone & Katie Pak (2017) Instructional Coaching as High-Quality Professional Development, Theory Into Practice, 56:1, 3-12, DOI: 10.1080/00405841.2016.1241947

16.Schneider and McGrew, “The Cattell Horn Carroll Model of Intelligence”, The Institute for Applied Psychometrics, 2012. http://www.iapsych.com/articles/schneider2012.pdf

17. Quenemoen, R., Thurlow, M., Moen, R., Thompson, S. & Morse, A. B. (2003). Progress monitoring in an inclusive standards-based assessment and accountability system (Synthesis Report 53). Minneapolis, MN:

18. Channa M. Cook-Harvey, Linda Darling-Hammond, Livia Lam, Charmaine Mercer, and Martens Roc "Equity and ESSA: Leveraging Educational Opportunity Through the Every Student Succeeds Act", The Learning Policy Institute, November 2016.

Eventually everything connects
...people, ideas, objects...
the quality of the connections
is the key to quality per se.

-Eames

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Smarter MTSS and Special Education

DOT IT® is a product of Smart Learning Systems.

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