

School Turnaround: An Evidence Guide

Introduction

The first cohort of SIG schools opened their doors in 2010, each implementing one of the federal governments’ four turnaround models (transformation, turnaround, restart, and closure) and ushering in a new era of whole-school improvement with the goal of rapidly improving the nation’s lowest performing schools.¹ In the following decade, with incentives from Race to the Top grant awards and NCLB waivers, multiple states and districts implemented bold new models of turnaround, including Tennessee’s Achievement School District.² Under the newly enacted Every Student Success Act (ESSA), the federal government is not only mandating that every state now engage in turnaround work, but that they do so using plans backed by empirical evidence of effectiveness from sources including evaluations of those Race to the Top-era programs. Most notably, the law requires that for each intervention included in a turnaround plan, an education agency cite at least one study meeting the standard of “Promising Evidence” (i.e., Tier III), defined as a positive and significant statistical correlation with controls for selection bias.³ Specifically, the law states:

“...the term ‘evidence-based,’ when used with respect to a State, local educational agency, or school activity, means an activity, strategy, or intervention that –

- (i) demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes based on –
 - (I) *strong evidence* from at least one well-designed and well-implemented experimental study;
 - (II) *moderate evidence* from at least one well-designed and well-implemented quasi-experimental study; or
 - (III) *promising evidence* from at least one well-designed and well-implemented correlational study with statistical controls for

¹ U.S. Department of Education, 2014

² Zimmer, Henry, & Kho 2017

³ U.S. Department of Education, “Non-Regulatory Guidance: Using Evidence to Strengthen Education Investments.”

- selection bias; or
- (ii)
- (I) *demonstrates a rationale* based on high-quality research findings or positive evaluation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes;
 - and
 - (II) includes ongoing efforts to examine the effects of such activity, strategy, or intervention.”⁴

In addition to the numerals I-III from (i) referred to as Tiers I, II, and III, respectively, evidence falling under the criteria under (ii) is conventionally referred to as Tier IV evidence.⁵

The Tennessee Education Research Alliance (TERA) developed the following Evidence Guide to offer education agencies a directory of interventions meeting the standard of *Promising Evidence* (Tier III), or the higher standards of *Moderate Evidence* (Tier II) or *Strong Evidence* (Tier I). Additionally, we include select findings and recommendations from school turnaround research meeting the Tier IV standard of *demonstrating a rationale* where such evidence can provide guidance for prioritizing among interventions; prioritizing among components of an intervention; or bolsters the case for a given intervention (as a reminder, ESSA requires only one study meeting at least Tier III evidence standards for each intervention).

We focused our review of research and developed the guide around the four key levers for school improvement identified in the school improvement theory of action from Tennessee Department of Education’s state ESSA plan⁶: strong leadership, talent management, effective instruction, and student supports.

Second, we review evaluations of major, comprehensive school turnaround efforts over the past ten years. We include this separately from the interventions falling under each of the key levers because the most prominent turnaround programs over the past decade have been comprehensive interventions that touch almost every aspect of school operation. These multi-faceted interventions create such unique contexts that we cannot extrapolate an overall positive

⁴ Every Student Succeeds Act of 2015.

⁵ e.g. Herman et al., “School Leadership Interventions Under the Every Student Succeeds Act.”

⁶ Tennessee Department of Education, 2018. Page 99.

result of the program as evidence that any single component of the intervention would have yielded similar results if implemented in isolation. As such, the evaluations of those programs only provide ESSA-tier evidence for the interventions as a whole, but not their individual component parts. In addition to offering rigorous empirical evidence to support state or local agencies to replicate these interventions in full if they so choose, evaluations of these comprehensive programs also provide vital guidance on the development and implementation of school turnaround initiatives. Further, agencies can look at the commonalities across successful programs as well as suggestive evidence regarding which specific program components may explain overall results and use this information to prioritize among effective interventions and round out plans with Tier IV evidence.

With the advent new federal regulations in the Every Student Succeeds Act (ESSA), we recognize that Tennessee is actively planning its own approach to school turnaround under ESSA. In order to aid in this effort, we synthesize evidence from rigorous empirical research over the last ten years in order to help guide the next generation of efforts to improve our neediest schools. In the following pages, we first summarize evidence of effective turnaround strategies in alignment with Tennessee's four pillars of school improvement: school planning, leadership, instruction, and student supports. We then review turnaround strategies across multiple states and districts with a demonstrated record of effectiveness, beginning with an outline of recommendations from the early qualitative case studies to help contextualize turnaround efforts over the last decade.

Part I: Synthesis of Four Turnaround Pillars

Strong Leadership

A. Overview

Principals play a vital role in the performance of any school, but their position is especially critical in the turnaround context. All mechanisms for school turnaround flow through the principal's office. It is the principal who oversees the development and execution of the school plan, recruits effective teachers, communicates the school's vision to maintain focus on the turnaround effort, establishes the climate and routines to promote sustained teacher improvement, decides when and how to delegate authority for any decisions not made him/herself, and serves as the symbolic leader (if not primary contact) for community relationships.

Yet because principals' effects on student outcomes are filtered through so many functions of the school, it is difficult either to isolate the benefits of a specific leadership intervention or to classify interventions as targeting leadership itself rather than something more proximal to student outcomes. For instance, is an intervention designed to improve the quality of instructional feedback a principal gives to teachers a leadership intervention or an instructional intervention?

For the purposes of this guide, we focus on interventions narrowly focused on the principalship, as designed to either replace, select, retain, or develop effective principals. These are district-level strategies involving principals, rather than principal-level strategies involving principals' discretionary use of time or school resources.

B. Evidence

- Replacement
 - Research and theory are each split on the necessity of replacing principals as part of school turnaround.⁷ As an intervention, mandatory principal

⁷ Herman et al., 2017

replacement meets only Tier IV evidence under ESSA, with a theoretical rationale that principal replacement is a necessary disruption of reform-inhibiting status quo⁸ somewhat supported by findings that **the more disruptive SIG model, Turnaround**, is also more effective than its less disruptive counterpart, the Transformation model.⁹

- Selection
 - **The New Leaders program** is a selective non-profit leadership training and support system for aspiring principals which has partnered with districts, including Memphis, since 2001 and has Tier II evidence to support its effectiveness. In its 2014 evaluation of the program, RAND determined that New Leaders principals had a positive impact on student achievement and were more likely to be in their schools three years later than were other principals in their district.¹⁰ The heart of the program is a year-long residency in which program participants work as a mentee under an experienced principal within the district where they will serve. An important caveat of the program is that it began with a selective admissions process, so results may not generalize to non-voluntary participation of principals already in Priority Schools. Further, given the requirement of the year-long residency ahead of placement in a Priority School, districts will have to consider whether they would recruit aspiring principals for the program a year ahead of potential designation as a Priority School, or begin the program after designation and assign the principals in the second year of a school's Priority status.

- Retention
 - Principal bonuses are a component of the school-level US Department of Education experiment known as the **Teacher Incentive Fund**. An evaluation of the randomized control trial by Mathematica¹¹ offers Tier I

⁸ Le Floch et al., 2014. Hassel and Hassel, 2009.

⁹ Carlson & Lavertu, 2018; Dee, 2012.

¹⁰ Gates et al., 2014.

¹¹ Chiang et al., 2015.

evidence that the bonus program had a positive effect on student reading achievement. However, the principal bonus was not tested in isolation from the program as a whole and there was no impact on principal retention in the treatment schools.

- The effectiveness of **teacher retention bonuses** in achieving desired outcomes in Tennessee provides suggestive evidence that similar programs could be successful for school leaders as well. Under Race to the Top, Tennessee offered retention bonuses to effective teachers in Priority Schools, with an evaluation of the program offering Tier II evidence of positive effects on both teacher retention and student achievement.¹² The positive effects of these bonuses for teachers in Tennessee offers Tier IV evidence for similar interventions for leadership within the Tennessee context and using the evaluation system to identify effective leaders.
- Development
 - An evaluation of the **National Institute for School Leadership’s (NISL) Executive Director program** also has Tier II evidence support for improving student learning outcomes in schools served by participating principals.¹³ The NISL ED program is designed to prepare principals with the following goals:
 - Formulating a clear vision to inspire others in the school communities,
 - Implementing fully-aligned, standards-based instructional systems,
 - Building effective instructional programs in the core academic subjects, particularly math, language arts and science,
 - Using data to produce continuous improvements in instruction and student achievement,
 - Providing effective training programs to build a professional learning community for school faculty and staff,

¹² Springer, Swain, & Rodriguez, 2016.

¹³ Nunnery, Ross, & Yen, 2010.

- Creating integrated school improvement plans that reflect strategic and systemic thinking.

Leadership Interventions

Study	Evidence Tier	Intervention	Findings
Gates, Susan M., Laura S. Hamilton, Paco Martorell, Susan Burkhauser, Paul Heaton, Ashley Pierson, Matthew D. Baird, et al. "Preparing Principals to Raise Student Achievement." Product Page, 2014.	Tier II	New Leaders principal residency program	New Leaders teachers had positive impact on student achievement and were less likely to leave their schools.
Nunnery, John A., Steven M. Ross, and Cherng-jyh Yen. The Effect of the National Institute for School Leadership's Executive Development Program on School Performance Trends in Pennsylvania, 2010.	Tier III	National Institute for School Leadership Executive Development Program	Evidence of improved student learning in schools led by participating principals.
Chiang, Hanley, Alison Wellington, Kristin Hallgren, Cecilia Speroni, Mariesa Herrmann, Steven Glazerman, and Jill Constantine. "Evaluation of the Teacher Incentive Fund: Implementation and Impacts of Pay-for-Performance after Two Years. NCEE 2015-4020." National Center for Education Evaluation and Regional Assistance, 2015.	Tier I	Teacher Incentive Fund	National pay-for-performance intervention. Treatment was at the school level and applied to both teachers and principals, so positive impacts are not necessarily tied to principal incentive pay.

Talent Management

A. Overview

Schools that hope to improve student achievement should focus on recruiting and retaining effective teachers. Once quality educators are in a Priority School, retaining them becomes essential. Energy and resources that would otherwise go to recruiting, selecting, and onboarding a replacement teacher can instead be directed to activities more closely tied to student learning. Also, many of the professional development investments in low-performing schools leave when a teacher exits; retention efforts are necessary to maintain the capacity that is often difficult to develop. Below are some strategies proven to increase the recruitment and retention of teachers, and especially teachers working in high-poverty or low-performing settings.

B. Evidence

- Reduce Costs to Enter the Profession
 - States can help recruit and retain teachers by offering statewide student loan forgiveness programs and service scholarships for educators. Teachers are more likely to enter a low-wage profession when student debt is lessened or eliminated. Loan forgiveness and scholarship programs are also shown to attract and retain teachers to high needs schools.¹⁴ Research suggests that the following five attributes could guide loan forgiveness and scholarship program design:
 - Covers most or all of tuition.
 - Targets high needs fields or schools.
 - Recruits and selects candidates with strong academic backgrounds who are committed to teaching and are well-prepared.
 - Commits recipients to teach with reasonable financial consequences if recipients do not fulfill the commitment (but not so punitive that they avoid the scholarship entirely)

¹⁴ Podolsky and Kini, 2016.

- Bureaucratically manageable for participating teachers, districts, and higher education institutions.
- Examples of successful programs:
 - **Woodrow Wilson Fellowship:** provides a one year \$30,000 service scholarship to candidates who complete a Master’s degree in a STEM-focused teacher preparation program and agree to teach in a high needs school for three years. Colleges and universities with the capacity and willingness to design 12-15 rigorous teacher preparation programs are selected by the Woodrow Wilson Foundation. The programs must train teachers for both rural and urban contexts and agree to mentor them for three years before they receive funding from the foundation. Wilson Fellows were found to be more effective at raising math test scores and persisted in high needs schools at almost double the rate of non fellows.¹⁵
 - **North Carolina Teaching Fellows:** recruits high school students and provides \$6500 scholarships to enroll in an enhanced teacher preparation program in exchange for agreeing to teach at least 4 years in North Carolina. The program found that Fellows higher retention rates than non fellows and were more effective as measured by test scores.¹⁶
 - **California Governor’s Teaching Fellowship:** Provided \$20,000 scholarship to attract academically talented newly licensed teachers to teach schools in the bottom 5% of the state’s Academic Performance Index for at least four years. Candidates must be enrolled in an accredited post-bacc teacher preparation program to be eligible. The study used data for 21,206 teachers to estimate the causal impact of the Fellowship on teacher’s decision to teach and persist in low-performing schools. The study found that the award increased the likelihood of new teachers going to low-performing

¹⁵ The Woodrow Wilson National Fellowship Foundation, 2015.

¹⁶ Henry, Bastian, and Smith, 2012.

schools by 28 percentage points. It also found that recipients were more likely to remain in their schools than non-recipients.

- **California’s Assumption Program of Loans for Education:** Provided loan forgiveness between \$11,000 and \$19,000 in exchange for teaching at least four years in a California low-performing school. Participants were found to have higher retention rates than the state average and the study suggests that 2 out of 7 participants would not have taught at those schools without the incentive.¹⁷
 - **Illinois Student Teaching Commission:** provided \$5000 toward loan payments for each year of postsecondary education in exchange for one year of teaching for each \$5000 payment. 86% of participants repaid their loans through teaching while 14% repaid through other careers.¹⁸
- Recruitment bonuses
 - **Talent Transfer Initiative (TTI):** A nationwide IES experiment evaluated by Mathematica provides Tier I evidence of benefits to low-performing schools from within-district transfer incentives offered to highly effective teachers. Teachers who ranked in the top 20 percent within their grade and subject in terms of raising student achievement (determined through value-added) were identified and offered a \$20,000 bonus for agreeing to teach for at least two years in schools with low average test scores.¹⁹
 - Findings:
 - Almost 88 percent of targeted vacancies were filled by high value-added teachers.

¹⁷ Steele, Murnane, and Willett, 2010.

¹⁸ Illinois Student Assistance Commission, 2003.

¹⁹ Glazerman et al., 2013.

- TTI had a positive impact on reading and math test scores in elementary classrooms in each of the two years after the transfer
- Teacher retention rates were higher during the payout period. Retention rate differences between transfer and non transfer teachers was not statistically significant after the payout period ended.
- Sample: The sample included 10 school districts, 7 of which contributed elementary and middle schools and 3 which contributed one or the other. 114 schools participated in the study. The average school was 80 percent low income. 85 teacher teams were in the treatment group and 80 teacher teams were in the control group. Teacher teams were randomly assigned to treatment and control groups and are defined as all teachers in a particular grade and subject area.
- Method: The experiment included comparisons of randomly assigned equivalent groups of classrooms with and without the intervention to compare outcomes after one and two years. Data used in the study included teacher and principal surveys, student achievement records and TTI implementation records.
- Retention Bonuses
 - Research on retention bonuses offered to effective teachers in Tennessee provides Tier II evidence of effectiveness. Priority schools were eligible to apply for \$5000 retention bonuses to give to level 5 teachers that agreed to remain at that school for the year.
 - Findings:
 - Level 5 teachers that receive the bonus are 23% more likely to remain in their campus than teachers just below the level 5 cutoff point.
 - Level 5 tested teachers are 24.3% more likely to remain in their campus than tested teachers just below the level 5 cutoff point.

- Sample: The sample included 56 priority schools and 321 eligible teachers from those schools. Priority schools are those in the bottom 5 percent of schools regarding student achievement data.²⁰
- Building a committed staff
 - A compilation of 10 case studies in 35 turnaround schools finds Tier IV evidence that school leaders in turnaround schools should focus on creating a staff that is committed to working in a challenging turnaround environment. Successful turnaround schools had a shared common purpose and schools leaders carefully selected staff members committed to that purpose. They also made staffing changes to support building a committed staff as necessary. The study suggests that having a cohesive staff may lead to improvements in instruction, increased staff collaboration and teacher satisfaction.
 - Suggestions for building committed staff:
 - School leaders should take steps to assess staff commitment to school vision and goals.
 - School leaders should spend time learning teachers' individual skills, background knowledge, goals and personality and make efforts to match each teacher to their "best fit" position based on teacher responses. This may include modifying job descriptions, shifting teachers to new positions within the school or creating new positions.
 - School leaders should replace staff who are resistant to turnaround efforts.²¹
 - Developing climates of support and development
- **Teacher-Administration Collaboration:** There is Tier IV evidence that collaboration between teachers and administrators, instead of a more top-down approach to the relationship may have positive effects on student outcomes.
 - Recommended school organizational features to improve collaboration:

²⁰ Springer, Swain, and Rodriguez, 2014.

²¹ Herman, R. et al. 2008.

- An instructional guidance system in which curriculum and assessment are aligned within grades and across grades with meaningful teacher involvement.
 - A system to improve teachers' professional capacity through ongoing support. One example includes opening up teachers' classroom work to examination by colleagues and external partners.
 - Strong ties between staff, parents, and community service providers with an integrated support network for students.
 - An individualized and student-centered learning environment that responds to student needs.
 - School leadership that is focused on cultivating teachers, families, and the community so that all are invested in school success.
 - Schools with strong rankings in each of the above areas were more likely to improve than schools with weak rankings in those areas. Principal leadership was key to initiating and maintaining these changes. ²²
- Examples of Successful Models:
- **Cincinnati, Ohio:** Since the 1980s Cincinnati schools have utilized team-based instructional approaches, innovating compensation systems and teacher career ladders. In 2003 the district began using Community Learning Centers (CLCs) in which local providers offered health services, after school services, tutoring and other school supports. In the 2009-2010 school year Cincinnati became the first district to reach an *effective* rating on Ohio's school report card system and from 2009-2013 the district remained the state's highest achieving urban school district, even as poverty rates increased. ²³
 - **IMPACT DC:** A multiple-measure teacher evaluation system used in DC public schools provides Tier 2 evidence that rigorous teacher

²² Anrig, "How We Know Collaboration Works."

²³ Ibid.

evaluation systems can improve the effectiveness of a district's workforce through selective retention. An evaluation of IMPACT DC finds that the individualized nature of the system is effective at identifying highly-effective teachers and increasing the likelihood that teachers labeled as ineffective will voluntarily leave the district.

- Basic Structure:
 - i. Rigorously scored observations based on the district's Teaching and Learning Framework (system that defines effective instruction)
 - ii. Teacher's value-added scores (non-tested teachers use rating from a yearly growth goal)
 - iii. A Commitment to School Community measure assessed by administrators using district guidelines.
 - iv. Core Professionalism score given by principals based on district guidelines.
- Method: regression discontinuity design using DCPS teacher-level data on general education K-12 teachers.
- Findings:
 - i. IMPACT creates substantial differences in teacher ratings compared to other teacher evaluation systems.
 - ii. On average, in 2011-2012 3.8 percent of all DCPC teachers were dismissed due to their IMPACT rankings, suggesting that IMPACT was successful at shaping a highly effective workforce.
 - iii. Teachers just under the IMPACT "*Effective*" threshold were 9 percentage points less likely to be retained.²⁴
- A major caveat of this program and its evaluation is that the DC metropolitan area has a population only slightly smaller

²⁴ Dee and Wyckoff, 2015.

than the entire state of Tennessee, with twice as many college graduates, leading to a uniquely rich labor pool of potential teachers from which to draw replacements. Therefore the benefits of selective teacher replacement in DC may not generalize to many districts in Tennessee, especially those in rural areas.

Talent Management Interventions

Study	Evidence Tier	Intervention	Findings
The Woodrow Wilson National Fellowship Foundation. (2015). Answering the Call for Equitable Access to Effective Teachers: Lessons Learned From State-Based Teacher Preparation Efforts in Georgia, Indiana, Michigan, New Jersey, and Ohio.	Tier III	Woodrow Wilson Fellowship: provides a one year \$30,000 service scholarship to candidates who complete a Master’s in a STEM teacher prep program and agree to teach in a high needs school for three years.	Wilson Fellows found to be more effective at raising math test scores and persisted in high needs schools at nearly double the rate of non-fellows.
Henry, G, Bastain, K, & Smith, A. (2012). Scholarships to Recruit the ‘Best and Brightest’ Into Teaching: Who Is Recruited, Where Do They Teach, How Effective Are They, and How Long Do They Stay? <i>Educational Researcher</i> 41(3).83–90	Tier II	North Carolina Teaching Fellows: recruits high school students and provides \$6500 scholarships to enroll in an enhanced teacher preparation program in exchange for agreeing to teach at least 4 years in North Carolina	Fellows had higher retention rates than non-fellows and were more effective as measured by test scores.
Steele, J., Murnane, R, & Willett, J. (2010). Do Financial Incentives Help Low-Performing Schools Attract and Keep Academically Talented Teachers? Evidence from California. <i>Journal of Policy Analysis and Management</i> . 29(3).451–78	Tier II	California’s Assumption Program of Loans for Education: Provided loan forgiveness between \$11,000 and \$19,000 in exchange for teaching at least four years in a California low-performing school	Participants were found to have higher retention rates than the state average and the study suggests that 2 out of 7 participants would not have taught at those schools without the incentive

Talent Management Interventions (continued)

<p>Steele, J., Murnane, R., & Willett, J. (2010). Do Financial Incentives Help Low-Performing Schools Attract and Keep Academically Talented Teachers? Evidence from California. <i>Journal of Policy Analysis and Management</i>. 29(3),451–78</p>	<p>Tier II</p>	<p>California Governor’s Teaching Fellowship: Provided \$20,000 scholarship to attract academically talented newly licensed teachers to teach schools in the bottom 5% of the state’s Academic Performance Index for at least four years.</p>	<p>The award increased the likelihood of new teachers going to low-performing schools by 28 percentage points. It also found that recipients were more likely to remain in their schools than non-recipients.</p>
<p>Glazerman, S., Protik, B., Teh, J., & Bruch, J. Max. (2013). Transfer Incentives for High Performing Teachers: Final Results from a Multisite Experiment. National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. (NCEE 2014-4003).</p>	<p>Tier I</p>	<p>Talent Transfer Initiative (TTI): Teachers who ranked in the top 20 percent within their grade and subject area were offered a \$20,000 bonus for agreeing to teach for at least two years in schools with low average test scores.</p>	<p>Almost 88 percent of targeted vacancies were filled by high value-added teachers. TTI had a positive impact on reading and math test scores in elementary classrooms in each of the two years after the transfer.</p>
<p>Springer, M.G., Rodriguez, L, Swain, W. “Effective Teacher Retention Bonuses: Evidence From Tennessee.” <i>Tennessee Consortium On Research, Education and Development</i>. (2014). 1-25.</p>	<p>Tier II</p>	<p>Retention Bonuses: Priority schools were eligible to apply for \$5000 retention bonuses to give to level 5 teachers that agreed to remain at that school for the year.</p>	<p>Level 5 tested teachers were 24.3% more likely to remain in their campus than tested teachers just below the level 5 cutoff point.</p>
<p>Dee, T. W, J. (2013). Incentives, Selection, and Teacher Performance Evidence from IMPACT. National Bureau of Economic Research. No. 19525</p>	<p>Tier II</p>	<p>IMPACT DC: A multiple-measure teacher evaluation system used in DC public schools.</p>	<p>On average, in 2011-2012 3.8 percent of all DCPC teachers were dismissed due to their IMPACT rankings, suggesting that IMPACT was successful at shaping a highly effective workforce.</p>

Quality Instruction

A. Overview

The effectiveness of most educational interventions ultimately depends on whether these interventions meaningfully change students' experiences in classrooms, where learning occurs. Among the most direct interventions are those that target teachers' work in these classrooms, broadly defined as instructional practice.

The following studies intended to improve teachers' instructional practice through increasing their skill or motivation.

- **Teacher Training Programs:**

National Board of Professional Teaching Standards: The National Board of Teaching Standards (NBTS) creates standards and assessments for experienced teachers to become National Board Certified (NBC). Though teachers self-select for the opportunity for NBC, and though it is designed more as an assessment to endorse existing skills than a skill development program, teachers' training for the assessment along NBTS standards and the receipt of endorsement may increase their skill and motivation for instructional excellence.

Research suggests the following on the relationship between National Board Certification and teacher effectiveness:

- NBC teachers have higher value-added than non-NBC teachers even when controlling for other teacher characteristics (Tier III).²⁵
- NBC teachers rate higher on measures of instruction (Tier III).²⁶
- NBC teachers demonstrate less "burnout," an indicator of motivation and attrition.²⁷

- **Teacher mentorship:**

Instructional Partnership Initiative (IPI): One promising intervention for developing teachers' instructional practice using existing school resources is teacher mentorship. IPI in Tennessee began as an experiment in which teachers with a low evaluation rating in a

²⁵ Cowan and Goldhaber, 2016.

²⁶ Sato, Wei, and Darling-Hammond, 2008.

²⁷ Pucella, 2011.

dimension paired with teachers with a high rating in the same dimension. The improvement of low-rated teachers in the treatment schools provides Tier I evidence that purposeful teacher mentorship can improve teacher effectiveness.²⁸

- **Teacher evaluation**

One of the mechanisms by which teacher evaluation systems can improve the teaching workforce (in addition to the selective retention describe under the “Talent Management” pillar) is improving the performance of evaluated teachers. This improvement can occur through increasing teachers’ motivation to earn high evaluation ratings, or through improving teachers’ practice through meaningful feedback given as part of the evaluation process.

Cincinnati Public Schools Teacher Evaluation System: Beginning in the 2000-01 school year, Cincinnati Public Schools implemented the Teacher Evaluation System (TES) to more formally evaluate K-12 teachers. At the heart of the TES was an observational rubric based on the Danielson Framework for Teaching. Quasi-experimental analysis (Tier II) finds that in terms of value-added contributions to student achievement, math teachers improved in response to this new evaluation system.²⁹

²⁸ Papay et al., 2016.

²⁹ Taylor and Tyler, 2012.

Quality Instruction Interventions

Study	Evidence Tier	Intervention	Findings
Cowan, James, and Dan Goldhaber. "National Board Certification and Teacher Effectiveness: Evidence From Washington State." <i>Journal of Research on Educational Effectiveness</i> 9, no. 3 (July 2, 2016): 233–58.	Tier III	National Board Certification: Assessment of teacher knowledge and practice based on National Board of Professional Teaching Standards.	National Board Certified teachers more effective in terms of value-added contributions to student achievement than otherwise similar non-certified teachers.
Sato, Mistilina, Ruth Chung Wei, and Linda Darling-Hammond. "Improving Teachers' Assessment Practices Through Professional Development: The Case of National Board Certification." <i>American Educational Research Journal</i> 45, no. 3 (September 1, 2008)	Tier III	National Board Certification	National Board Certified teachers rated higher on measures of instructional practice.
Pucella, Tanya Judd. "The Impact of National Board Certification on Burnout Levels in Educators." <i>The Clearing House: A Journal of Educational Strategies, Issues and Ideas</i> 84, no. 2 (January 28, 2011): 52–58.	Tier III	National Board Certification	National Board Certified teachers demonstrate lower levels of career fatigue.
Papay, John P., Eric S. Taylor, John H. Tyler, and Mary Laski. "Learning Job Skills from Colleagues at Work: Evidence from a Field Experiment Using Teacher Performance Data." Working Paper. National Bureau of Economic Research, February 2016.	Tier I	Instructional Partnership Initiative (IPI)	Experimental evidence of improvement for low-rated teachers assigned to same-school mentor teachers rated highly in the same dimension.
Taylor, Eric S., and John H. Tyler. "The Effect of Evaluation on Teacher Performance." <i>The American Economic Review</i> 102, no. 7 (December 1, 2012): 3628–51	Tier II	Cincinnati Public Schools Teacher Evaluation System	Quasi-experimental evidence that mid-career teachers improved in response to more structured, feedback-rich evaluation.

Student Supports

A. Overview

In addition to academic achievement, student success requires developing non-academic competencies and relationship-building skills. Student supports in these fields include social and emotional learning, strategies for reducing chronic absenteeism, credit recovery programs, early-warning student response systems, and family and community involvement.

B. Evidence

- SEL Interventions: Social and emotional learning (SEL) involves teaching character competencies that help students relate to and communicate with others and allow them to develop self-awareness and self-motivation. SEL interventions are designed to complement the cognitive competencies students learn in the classroom. They are often used by schools to promote positive student behaviors and relationships with peers.
 - Elementary SEL Interventions
 - **Playworks:** provides coaches in low-income schools who lead organized play during recess and class times. Researchers conducted a randomized control trial in 29 schools and found that the Playworks program led to significant, positive effects in areas including:
 - Students' use of positive, encouraging language
 - Teachers' perceptions of student safety at school
 - Fewer incidents of bullying and exclusionary behavior
 - **Tools for Getting Along:** in-class curriculum for upper elementary students focused on anger management and promoting a positive classroom environment. The program allows students to learn and practice steps for problem-solving. A replication study of the program was conducted in 135 classrooms across 20 schools and found positive, main effects in social problem-solving, behavioral adjustment, and reduced aggression for students who received the TFGA instruction.

- **Michigan Model for Health:** comprehensive health curriculum for fourth and fifth grade students covering social and emotional skills, prosocial behavior, drug use, and aggression.³⁰ The program consists of 24-28 SEL lessons taught by students' classroom or health teacher. Using student survey responses from before and after program implementation, researchers found that students who received the MMH curriculum showed a positive, significant increase in interpersonal skills and social and emotional health, and a statistically significant decrease in aggressive behavior.³

C. Combating chronic absenteeism

- No matter how strong a school's curricular and instructional programs, they will not benefit students unless those students show up to school. In addition to each absence's direct costs to learning, chronic absenteeism (usually defined as students missing more than ten percent of days enrolled) can be an early warning of a student's disengagement from school and a threat to their educational attainment.³¹ Research on programs and policies to combat chronic absenteeism is still emerging, but the below summarizes some of the Tier IV evidence we have to-date.
- Baltimore (2007 to 2011). As summarized by Balfanz and Byrnes⁴, Baltimore City Public Schools reduced district-wide chronic absenteeism from 34 percent to 16 percent over four years. They report that the district's efforts consisted of:
 - Consolidating middle schools into K-8 or 6-12 configurations.
 - Aggressive tracking, monitoring and responding to chronic absenteeism.
 - Partnership with the city and non-profit groups in a campaign to increase attendance.
- Balfanz and Byrnes⁴ also summarize commonalities in efforts that have made progress in reducing chronic absenteeism.
 - These key features are:

³⁰ O'Neill and Jones, 2011.

³¹ Balfanz and Byrnes, 2012.

- Frequent measurement and tracking.
 - Diagnostic tools to identify reasons students are chronically absent.
 - Problem-solving efforts around addressing specific absence reasons.
 - Relationship-building with chronically absent students and their families.
 - Multi-sector and community participation.
 - Incentives for good attendance, including recognition and rewards.
 - Self-monitoring and reflection on these efforts to invest in what is working and fix what is not.
- Specific programs cited include:
 - "Diplomas Now," a multi-organizational partnership, saw absenteeism decreases of 31-83% across middle and high schools in multiple US cities. The program includes welcoming students to school, calling to check on those who do not show up, and connecting students with community support services including counseling, health care, and housing.
 - An AttenDANCE, as part of Diplomas now, is incentive for middle schoolers. Requiring 95% attendance rates to attend the dance reduced chronic absenteeism 10 points in a year.
 - New York City's Chronic Absenteeism Task Force, led by then-mayor Michael Bloomberg. The program included 1) wake-up and get-to-school calls from celebrities, 2) in-school Success Mentors, 3) weekly principal-led attendance meetings to review data and devise responses, 4) community messaging on public transportation.
 - Hanover Research³² has also published a set of tips, largely based on Balfanz and Byrne's work. They summarized five steps to reduce absenteeism:

³² Hanover Research, 2016.

- Start early. Chronic absenteeism in elementary school is associated with both poor short-term achievement as well as lower long-term attainment, making early identification and intervention with students at risk vital.
- Involve families and the community. Use publicly-available communication channels and partner with social support services.
- Create mentorship programs. Relationships with adults can both encourage attendance and prevent students' attendance patterns from going unnoticed.
- Use incentives. Recognize general success, not just perfection. Use both high and low-cost rewards. Align incentives for students, teachers, and parents.
- Monitor attendance data. The first step is often assessing the scope of the problem. Continued monitoring is necessary to track progress and know where to target efforts.

D. Credit recovery programs

- Students who miss or fail courses early in their high school career are at a greater risk of dropping out than their peers.³³ Credit recovery refers to a student completing and receiving credit for a required course that they previously failed or did not complete.
 - AIR and UChicago Consortium³⁴ researchers randomly assigned 1,224 ninth graders in Chicago public schools who failed Algebra I to either an online credit recovery course or a face-to-face course. Their (Tier I) key findings include:
 - Students in the online course were less likely to pass the course and recover credit than their peers in the face-to-face course (66% passing vs. 76% passing).

³³ Herlihy, 2007.

³⁴ Heppen et al., 2017.

- Students in the online course considered it more difficult and less clear than students in the face-to-face course, and reported a lower liking of and confidence in math.
- The researchers found no significant differences between online and face-to-face students in pass rates of subsequent math courses or likelihood of being on-track for graduation.
- The Education Commission of States³⁵ published a set of components for districts and schools looking to implement successful credit recovery programs (Tier IV):
 - Require that schools offer credit recovery options, and make credit recovery programs available on multiple platforms (online, in-person, etc.)
 - Align program with state standards
 - Program should be self-paced
 - Provide multiple course options for recovering credits
 - Consider requiring proficiency-based credit
 - Evaluate programs on a regular basis and make adjustments to maximize student success
- Few rigorous studies have focused on the effectiveness of credit recovery programs. The U.S. Department of Education noted that more research is needed on the causal effect of credit recovery on high school graduation before determining conclusions on its overall effectiveness.³⁶

E. Early warning and multi-tiered student response systems

- Early warning systems allow district and school leaders to use research-based indicators to identify students who are at-risk of failing or dropping out of school.³⁷ The most common indicators used by schools include the “ABCs”:

³⁵ Zinth, 2011.

³⁶ US Department of Education, 2018.

³⁷ American Institutes for Research, n.d.

attendance and chronic absence, behavioral problems, and course performance and standing.³⁸

- American Institutes for Research (AIR)³⁹ examined the impact of the Early Warning Intervention and Monitoring System (EWIMS). The study randomly assigned 73 schools to treatment and control groups, with treatment schools using the EWIMS. Their evaluation provides Tier I evidence of the following:
 - Reduced chronic absenteeism (10 percent of students in schools with EWIMS were chronically absent compared to 14 percent of students in control schools)
 - Reduced course failure (21 percent of students in EWIMS schools failed at least one course compared to 26 percent in control schools)
 - No measured effect on the percentage of students with low GPAs or suspensions
 - Did not have an impact on student progress based on credits earned or school data culture (the use of data to identify students in need of additional support)

- As summarized by Bruce et. al.⁴⁰, field studies of the implementation of early warning systems (EWS) point to three necessary elements of successful systems (Tier IV):
 - Vision and mission matter: School leaders and personnel must believe that the use of an EWS will lead to improvements in the graduation rate and student performance.
 - Strong technical components: Data must be accurate and streamlined in order for it to be successfully used by school staff.

³⁸ Allensworth and Easton, 2007.

³⁹ Faria et al., 2017.

⁴⁰ Bruce et al., 2011.

- Resources are assembled and maximized: In addition to building an EWS, schools should also build out strong implementation plans so the collected data is used purposefully.
- In addition to creating an Early Warning System, Dynarski et al.⁴¹ offer recommendations and steps for school leaders on using the collected support data (Tier IV):
 - Assign adult advocates to students at risk of dropping out
 - Provide academic support and enrichment for at-risk students
 - Implement social and emotional learning programs to improve classroom behavior
 - Allow for personalization of the learning environment and instructional process

F. Family and Community Involvement

- Engaging and supporting families and community stakeholders is an essential piece of school improvement and success. Research suggests that building connections with external communities enhances students' social capital and school experience.⁴² Strengthening connections outside the school walls helps educational leaders build a culture of support and success for all students.⁴³
 - *Community Involvement*
 - Preston et al.¹³ note that high schools who are successful in connecting to external communities share common practices, including (Tier IV):
 - Using diversified strategies for involving parents from all subgroups

⁴¹ Dynarski, 2008.

⁴² Preston et al., 2017.

⁴³ Anrig, 2015.

- Supporting student initiatives to create linkages between school and external stakeholders
- Build connections with the community that strengthen the school (ie. vocational training opportunities)
- *Parent and Family Involvement*
 - Shaver and Walls⁴⁴ conducted a study examining the effects of parent-school involvement on reading and mathematics achievement for a sample of 335 2nd-8th grade Title I students. The researchers found that students whose parents regularly attended school-based parent workshops made greater gains in reading and math, regardless of students' socio-economic status (Tier III).
 - Smrekar and Cohen-Vogel⁴⁵ studied parental views of involvement through a series of interviews with predominantly minority families in California. Their conclusions are Tier IV evidence and include:
 - School officials' beliefs about parents' level of involvement limits communication between the home and school to confrontations about academic and behavioral problems
 - Replacing parent involvement with the idea of collaboration may help bridge the gap between the home and school
 - Parents often view their role in their child's academic life through two core responsibilities: attending meetings and conferences and assisting with homework
 - Karen Mapp⁴⁶ conducted a study to identify factors that lead to successful educational partnerships between school staff and families. Using parental surveys and interviews at a Boston-area elementary school, Mapp identified several school factors that influence parents to become involved (Tier IV):

⁴⁴ Shaver and Walls, 1998.

⁴⁵ Smrekar and Cohen-Vogel, 2001.

⁴⁶ Mapp, 2003.

- School staff engaged in caring and trustful relationships with parents
- School staff recognized parents as partners in the educational development of children
- “Joining Process”: School leaders and teachers emphasized partnerships throughout the year by welcoming parents with events and personalized calls, honoring their role by asking for parental input and feedback, and connecting with parents regularly about their child’s progress

Student Support Interventions

Study	Evidence Tier	Intervention	Findings
Fortson, Jane et al., (2013). Impact and Implementation Findings from an Experimental Evaluation of Playworks: Effects on School Climate, Academic Learning, Student Social Skills and Behavior. <i>Mathematica Policy Research Reports</i> .	Tier I	Playworks: provides coaches in low-income schools who lead organized play during recess and class times.	Found positive effects in use of positive, encouraging language, teacher perceptions of student safety, and fewer incidents of bullying.
Stephen W. Smith, et al. (2016). Effect of Tools for Getting Along on Student Risk for Emotional and Behavioral Problems in Upper Elementary Classrooms: A Replication Study. <i>School Psychology Review</i> , Vol. 45 (Iss. 1). Pp. 73-92.	Tier I	Tools for Getting Along: in-class curriculum for upper elementary students focused on anger management and promoting a positive classroom environment.	Found positive effects in social problem-solving, behavioral adjustment, and reduced aggression.
O'Neill, J. et al. (2011). Promoting Mental Health and Preventing Substance Abuse and Violence in Elementary Students: A Randomized Control Study of the Michigan Model for Health. <i>Journal of School Health</i> , Vol.81(Iss. 6). Pp. 320-330.	Tier I	Michigan Model for Health: comprehensive health curriculum for fourth and fifth grade students covering social and emotional skills, prosocial behavior, drug use, and aggression.	Positive increase in interpersonal skills and social and emotional health, and statistically significant decrease in aggressive behavior.
Heppen, J. et al. (2017). The Struggle to Pass Algebra: Online vs. Face-to-Face Credit Recovery for At-Risk Urban Students. <i>Journal of Research on Educational Effectiveness</i> , Vol 10 (Iss. 2). Pp. 272-296.	Tier I	Online Algebra I credit recovery course	Students in the online course were less likely to pass and recover credit than their peers in face-to-face courses.

Part II: A Review of Research on Comprehensive Turnaround Reform Models

Early recommendations from research on school turnaround usually relied on data from interviews with teachers, school leaders, and district personnel in a few schools that successfully increased student achievement.⁴⁷ Indeed, a 2008 review of research evidence, conducted by the What Works Clearinghouse, found no studies of turnaround programs that met their standards for high internal validity.⁴⁸ These qualitative case studies documented important, early evidence of what was possible in school turnaround; however, they could not provide strong evidence to support whether turnaround models can be effective when implemented at scale. Table 1 below lists several highly visible early studies and their recommendations.

Table 1. Early Case Studies of School Turnaround and Recommendations (Tier IV)

From *Turning Around Chronically Low-Performing Schools: A What Works Clearinghouse practice guide that reviews 10 case studies examining turnaround practices across 35 schools*⁵

Four Recommendations:

- Signal the need for dramatic change with strong leadership
- Maintain a consistent focus on improving instruction
- Provide visible improvements early in the turnaround process (quick wins)
- Build a committed staff

From *The School Turnaround Field Guide: A synthesis of over 100 interviews with turnaround experts, practitioners, policymakers, researchers, and funders.*⁴⁹

- School level lessons learned:
 - *Planning:*

⁴⁷ Anrig, 2015; Duke, 2006; Herman et al., 2008; Scott, 2009; Yatsko, Lake, Nelson, & Bowen, 2012

⁴⁸ Herman et al., 2008

⁴⁹ Kutash et al., 2010

- Identify school leadership early so as to build in planning time to engage the community, establish the vision, and create a new school culture;
- Prepare to meet student needs that are severe and pervasive
- *Human Capital:*
 - Provide strong support to teachers;
 - Empower school leaders;
 - Develop school leaders with the will, skill and authority to drive change
- *Maintaining Support and Building Sustainability:*
 - Signal change early and build momentum;
 - Build capacity for long-term sustainable results.
- **System-level lessons learned**
 - *Planning:*
 - Articulate a powerful vision for turnaround;
 - View turnaround as a portfolio of approaches, including closure.
 - *Creating Conditions and Building System Capacity:*
 - Create the necessary school-based conditions for success;
 - Develop turnaround-specific capacity;
 - Build systems to track progress;
 - Build systems that allow for sharing across schools

From *Lessons from School Improvement Grants that Worked: A review of early research on turnaround strategies implemented with School Improvement Grants*⁵⁰

Common strategies that proved successful include:

- An intensive focus on improving classroom instruction through ongoing, data-driven collaboration, led largely by teachers with oversight from the principal;

⁵⁰ Anrig, 2015

- A concerted, systematic effort to create a safe and orderly school environment through implementation of research-supported practices that all staff members can learn to adopt;
- Expansion of time dedicated to instruction and tutoring in core academic subjects;
- Strengthening connections to parents, community groups, and local service providers to help support school efforts to build a culture that expects success of all students;
- 5) Confining reliance on outside expert consultants to jump-starting changes that school leaders and teachers can sustain, rather than spending substantial resources on contractors who either micro-manage or provide inadequate assistance.

While the recommendations listed in Table 1 are careful syntheses of expert opinion, they are based on small sample sizes and many stakeholders questioned their generalizability. Notably, the IES practice guide emphasized that all of its recommendations were based on a “low” level of evidence.⁵¹ Nevertheless, many of these recommendations continue to ring true and many have been corroborated by recent research evidence with strong internal validity, allowing for causal conclusions.

General Lessons from Race to the Top-Era Interventions

Following these early recommendations, the latest research on school turnaround has identified how certain approaches can be effective in certain settings, but several important caveats must be kept in mind:

1. **Not all underperforming schools are underperforming in the same way and they may not require the same interventions.** For example, the District and School Transformation (DST) division in North Carolina’s Department of Public Instruction, drawing on experience from over 10 years of supporting school turnaround, emphasizes beginning the turnaround process with a Comprehensive Needs Assessment to serve as a basis for a School Improvement Plan.⁵²

⁵¹ Herman et al., 2008

⁵² Henry, Campbell, Thompson, & Townsend, 2014; Henry, Gary et al., 2015; Thompson, Henry, & Preston, 2016

2. **Turnaround efforts must balance between intensive support with an appropriate level of autonomy both at the district and school level.** For example, the Framework for District Accountability and Assistance was developed in Massachusetts to build capacity in districts using a five-stage cycle that guides schools in developing a plan, implementing and monitoring the plan, evaluating success, analyzing data, and utilizing results to guide future actions⁵³. The cycle allows for intensive support as districts build their own capacity for facilitating school turnaround.
3. Finally, recent research recommendations emphasize that **no turnaround strategy can be effective if poorly implemented.** This caveat is well illustrated in Los Angeles Unified School District’s Public School Choice Initiative where the second cohort of turnaround schools experienced significant gains, while the third cohort experienced significant decreases in student achievement.⁵⁴ Researchers explain that declines in the third cohort are likely due to policy changes that caused confusion in implementation.⁵⁵

What Works? A Review of Effective Turnaround Strategies Across Multiple Settings

In this section, we present a brief overview of school turnaround approaches that have produced significant increases in student achievement, including current practices in Tennessee. These approaches vary in their general theory of action, but many elements are common across different settings and are potentially suitable for the Tennessee context. In Appendix Table 1 below, we list these turnaround strategies along with important, focal research studies supporting their effectiveness. The different models are grouped into three main categories that range in the level of autonomy given to schools: (1) models that give schools wide autonomy then rely on competition and choice; (2) models that give districts and school flexibility with targeted supported; (3) models that help schools and districts implement a focused set of goals, usually with heavy emphasis on developing human capital.

Category 1: Give schools wide autonomy then rely on competition and choice

⁵³ LiCalsi, Christina et al., 2015; Papay, 2015

⁵⁴ Strunk, Marsh, Hashim, Bush-Mecenas, et al., 2016

⁵⁵ Strunk et al., 2016; Strunk et al., 2016.

Three turnaround models most heavily reliant on competition between management providers include the Recovery School District (RSD) in New Orleans, the Public School Choice Initiative (PSCI) in Los Angeles, and the diverse provider model in Philadelphia. In the aftermath of Hurricane Katrina, the state of government took over the school district in New Orleans moving almost all of the city's school into the statewide RSD.⁵⁶ Most of these districts schools were converted to charters; attendance zones were eliminated to create school choice for all families; all educators were fired; union contracts were not renewed; and the local agency role was dramatically reduced from governance to largely a position of oversight. These wide-sweeping reforms produced significant student achievement gains, lasting at least seven years after the reforms began Harris and Larsen, "The Effects of the New Orleans Post-Katrina School Reforms on Student Academic Outcomes."

Less dramatic than the RSD in New Orleans, the PSCI in Los Angeles Unified School District (LAUSD) called for internal and external teams to submit plans to operate the district's lowest-performing (focus) schools Strunk et al., "The Best Laid Plans An Examination of School Plan Quality and Implementation in a School Improvement Initiative." The theory of action behind PSCI relied on competition among applicants for each school site with a careful structure for reviewing and selecting plans. If the LAUSD deemed that no plan was adequate, the district has the option to reconstitute the school and bring in new leadership and new teaching staff. The model yielded insignificant improvements in the first cohort of PSCI schools, significant gains in ELA in cohort 2, and significant decreases in cohort 3. Researchers explain that increased support contributed to positive effects in cohort 2; whereas, policy changes causing confusion in implementation led to decreased student performance in cohort 3.⁵⁷

The success exhibited in both the RSD and PSCI models suggest that competition among school management organizations be a successful driver of school turnaround; however, these models rely on an ample supply of effective educators and school management organizations like Los Angeles and New Orleans (which was able to attract many education reformers interested in the district's innovative model). This reliance on an ample supply of high-quality school management organizations is apparent when comparing the RSD and PSCI to the Diverse Provider Model in Philadelphia where 45 of the district's lowest performing schools were turned

⁵⁶ Ruble, 2015

⁵⁷ Strunk, Marsh, Hashim, Bush-Mecenas, et al., 2016

over to external management organizations.⁵⁸ However, no competition existed among these providers nor were families given choice among the multiple operators. These differences in context are likely reasons why researchers found that the diverse provider schools resulted in no significant gains. Success in these models corroborate earlier recommendations to have strong school management in place before enacting dramatic change (see Table 1); however, these quality management organizations are not available everywhere. Note also that this category of models has only been effective when implemented at the district level, and then only in large, urban districts.

Category 2: Give schools and districts autonomy to plan but provide them with sustained and targeted support.

Flexible models based on a careful balance between support and autonomy are illustrated by the *Act Relative to the Achievement Gap* and School Redesign Grants in Massachusetts. In 2010, Massachusetts passed legislation giving the state and district greater power to intervene in the state's lowest performing schools. The legislation created an Office of District and School Turnaround (ODST). The ODST oversaw three major strategies: (1) district liaisons which coordinated state and district efforts; (2) priority partners which are external organizations supporting turnaround efforts; and (3) school redesign grants (SRG) which were competitively awarded to districts in support of turnaround efforts.⁵⁹ The state offered districts and schools flexibility over how to implement turnaround strategies by asking them to create their own improvement plans, but coupled this autonomy with substantial technical assistance in developing, implementing, monitoring, and evaluating their plan. Impact evaluations find that the state's lower achieving (level 4) schools exhibited large positive gains from over four years.⁶⁰ Moreover, schools receiving an SRG (which included almost all level 4 schools) performed better in both English language arts (ELA) and math than comparison schools.¹⁹

One particularly salient effort in Massachusetts occurred when the state took over the Lawrence Public School (LPS) district. Upon taking over LPS, the state appointed a Receiver and gave him wide authority to alter the collective bargaining agreement, require staff to reapply for their position, and extend the school day or year district-wide Schueler, Goodman, and Deming, "Can

⁵⁸ Gill, Zimmer, Christman, & Blanc, 2007

⁵⁹ LiCalsi et al., 2015

⁶⁰ Papay, 2015

States Take Over and Turn Around School Districts?”. After a semester of gathering information, the Receiver began implementing reforms focused on five primary components: (1) setting ambition expectations; (2) providing differentiated levels of autonomy and support based on each school’s prior performance and capacity; (3) improving human capital by replacing principals and placing all under-performing teachers into “Receiver’s Review” status; (4) expanding learning time by lengthening both the school day and school year; and (5) providing teachers with training on how to use data to drive school improvement. Most saliently, Acceleration Academies were created to target struggling students during school breaks. Evaluations found that the Receiver’s turnaround strategy produced large effects in math and modest effects in ELA during the first two years of implementation.

Tennessee’s own Innovation Zone (iZone) model provides yet another example of a flexible school turnaround strategy that pairs support with autonomy. Tennessee’s iZone model gives schools greater autonomy and increased resources while placing them into “districts within a district”.⁶¹ This model allows the school to remain under local district governance, but also places them into a network of similar schools focused on improving student achievement. The increased autonomy and resources given to iZone schools allowed them to attract more highly effective teachers using recruitment bonuses and performance incentives.⁶² With support from iZone leadership and the community of schools in the iZone, these district schools have shown positive and significant effects on student achievement in math, reading, and science across the first three years of reform.¹⁸

Contrasting with the approach in Massachusetts and Tennessee, Rhode Island also implemented a flexible model where under-performing schools were required to choose a from a list of interventions to implement.⁶³ However, unlike in Massachusetts, the Rhode Island model lacked coherence because districts and schools did not receive continuing support in implementing their chosen interventions. This difference led to insignificant student gains in targeted schools, and schools required to implement more interventions eventually performed worse than similar schools implementing fewer interventions. Lessons from these models corroborate early recommendations to follow dramatic changes with sustained support (see Table 1), but also reveal a need for careful balance between autonomy and support. Moreover, all of these models

⁶¹ Zimmer et al., 2017

⁶² Kho, Henry, Zimmer, & Pham, 2018

⁶³ Dougherty & Weiner, 2017

were supported by increased financial support, which was mostly used to attract, retain, and develop effective educators.

Category 3: Support schools through a focused turnaround process with special emphasis on building the capacity of teachers and leaders.

More focused models with a significant emphasis on capacity building include restructured schools in Philadelphia, Chicago's suite of turnaround models, and North Carolina's Turning Around the Lowest Achieving Schools (TALAS) program. In addition to the previously mentioned Diverse Providers model, turnaround efforts in Philadelphia also included restructured schools managed by a specially created Office of Restructured Schools (ORS). These restructured schools received extra funding, intensive professional development for principals and leadership teams, coaches to train staff in using data for school improvement, monthly professional development for teachers during school hours, and bimonthly benchmarks to monitor student growth.⁶⁴ Notably, the Philadelphia model did not require schools to replace principals or teachers, but much of the improvements in restructured schools are credited to a coherent vision of improvement intently focused on developing capacity among school leadership and staff. This cohesive set of interventions led to restructured schools outgaining the rest of the district in math during all three years of restructuring.²¹

In Chicago, early forms of federal turnaround models including reconstitution, the School Turnaround Specialist Program (STSP), the Academy for Urban School Leadership (AUSL) model, and the Office of School Improvement (OSI) model. All of these models focused on improving school leadership either through intensive development or replacement of the school principal.⁶⁵ For example, the STSP model provided principals with summer trainings and ongoing leadership coaching as they develop turnaround plans for their school.⁶⁶ Additionally, the reconstitution, AUSL, and OSI models relied on replacing the school staff. Overall, these dramatic interventions resulted in significant student achievement gains in reform schools compared to similar schools not experiencing any turnaround interventions. Notably, progress was not observed immediately, but almost all reform schools exhibited student achievement gains within four years.²²

⁶⁴ Gill et al., 2007

⁶⁵ De la Torre et al., 2013

⁶⁶ Player & Katz, 2016

Finally, another successful model is North Carolina’s TALAS program, supported by the state’s District and School Transformation (DST) division. Under TALAS, the DST supports low performing schools with a Comprehensive Needs Assessment serving as a foundation for developing a School Improvement Plan.⁶⁷ Then, the schools are supported in implementing their improvement plans with leadership coaching, instructional coaching, and district-level coaching. Together these intensive support services serve the state’s strategy of developing system-wide human capital. In addition to coaching, TALAS schools may also receive supports such as funding for recruitment performance incentives and assistance with recruitment and retention planning.⁶⁸ While some of the evidence on TALAS is mixed, evidence exists to support the positive and significant impacts of TALAS on student achievement.⁶⁹

These examples across diverse contexts provide convincing evidence that *focused attention on the school leadership and staff can be effective strategies for turning around the lowest-performing schools, especially if these efforts are sustained and targeted toward a coherent plan for school improvement that meets that school’s needs*. These examples support early recommendations to focus on building a committed school staff (see Table 1), but though these models are more focused than other previously discussed strategies, note that schools and districts were also able to plan turnaround strategies suitable for their context (e.g., the Comprehensive Needs Assessment in North Carolina).

Together these models illustrate into how various states and districts have incorporated research recommendations into successful turnaround strategies. They also present evidence that *though no one-size-fits-all solution exists, a cohesive theory of action carefully implemented with attention to available resources (including human capital) can bring about meaningful improvement in our chronically under-performing schools*. Below we further synthesize evidence from these successful models within the Tennessee’s four pillars of school improvement: planning, leadership, instruction, and student supports.

⁶⁷ Henry et al., 2015

⁶⁸ Henry et al., 2014

⁶⁹ Henry et al., 2015

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Appendix

Appendix Table 1.

Effective School Turn Around Strategies and Impact Evaluations

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