

# ACADEMIC FRAMEWORK



COMPREHENSIVE





## OFFICE OF THE INTERIM SUPERINTENDENT

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Memphis-Shelby County Schools has created a data-driven culture that serves as the backdrop for strategic decision-making and informed solution-based decisions. The information gleaned from data, research-based strategies, and performance outcomes provides our district with amazing opportunities to offer high-quality educational options to every student.

A key staple within our rich data-driven culture is the identification and analyzation of Key Performance Indicators (KPIs). These indicators are steeped in trends and practices that offer a roadmap leading to areas of opportunity that influence the advancement of our students.

When thinking of our mission which is to prepare all students for success in learning, leadership, and life, it is important to acknowledge our pursuit in closing achievement gaps and our commitment to move from a district of intervention to innovation.

The implementation of three strategic initiatives will help advance our efforts to achieve our goals. The initiatives are:

**Strategic Initiative 1:** Strengthen Early Literacy (K-2) and Continuing Literacy (3-12)

If our students are going to be successful, they have to be strong readers. This is why we are enhancing initiatives to strengthen early literacy in kindergarten through second grade, and continued literacy in grades 3-12.

**Strategic Initiative 2:** Recruit, Retain, Immerse, and Entrench

We aim to recruit and retain the best District leaders and teachers in the nation, immerse them in professional development to embrace and teach foundational literacy skills, and entrench them in the community and classroom.

**Strategic Initiative 3:** Relevant, Rigorous, and Equitable Academics

We are creating relevant and equitable academic choices and learning environments to ensure scholars are prepared for the global workforce.

This report, and the information contained therein, is a reminder of our areas of success and areas of growth. We are encouraged by the gains achieved during this past academic school year and intend to continue to pursue our ambitious and aggressive plans to ensure the success of the Memphis-Shelby County Schools students.

Our aim is to enhance the lives of those we serve, and as we continue to implement strategies that boost student productivity, we will experience a foreseeable future of continued growth and success.

Sincerely,

**Tutorial "Toni" Williams**

Interim Superintendent

Memphis-Shelby County Schools




# 2022-2023 MSCS ACADEMIC LIFELINE FRAMEWORK

Memphis-Shelby County Schools Academic Division








In 2015, then Shelby County Schools (SCS now Memphis-Shelby County Schools or MSCS) announced a 10-year strategic plan, Destination 2025, designed to improve the quality of public education and create a more knowledgeable, productive workforce. According to Destination 2025, by 2025, 80 percent of seniors will be college- and career-ready; 90 percent of students will earn their high school diploma on time; and 100% of college- and career-ready graduates will enroll in a postsecondary opportunity. MSCS remains committed to these goals, but also recognizes the need to act decisively due to the educational gaps revealed during the COVID-19 pandemic. Moving forward, the district will preserve the spirit of Destination 2025, while reimagining the key commitments that will drive the work, serving all students within the MSCS portfolio, in an updated vision called “**Reimagining 901.**”

## THE THREE CORNERSTONES OF “REIMAGINING 901”

Reimagining Education	Reimagining Schools	Reimagining Communities
 <ul style="list-style-type: none"> <li>• Lower Adult-Student Ratios</li> <li>• Transformative Professional Development                             <ul style="list-style-type: none"> <li>• Wraparound Supports</li> </ul> </li> <li>• High-Quality Opportunities</li> </ul>	 <ul style="list-style-type: none"> <li>• New 21<sup>st</sup> -Century Structures</li> <li>• Renovated Athletic Facilities</li> <li>• Investments in Efficiency and Safety                             <ul style="list-style-type: none"> <li>• Upgraded Infrastructure</li> </ul> </li> </ul>	 <ul style="list-style-type: none"> <li>• Enhanced Strategic Partnerships</li> <li>• Adult Literacy and Family Support                             <ul style="list-style-type: none"> <li>• Community Growth and Development</li> </ul> </li> <li>• Maximizing Surplus Properties</li> </ul>

## TRANSFORMATIONAL CATEGORIES

The following categories of focus will support MSCS in a transformation aligned with **Reimagining 901** to support district improvement:

- 
**Academics**  
 Provide all MSCS students with access to consistent, high-quality instruction and personalized supports delivered by teachers with knowledge of content and the standards.
- 
**School Leadership**  
 Increase recruitment, coaching, and professional development of new and experienced school leaders to develop their skills as turnaround leaders.
- 
**Teachers**  
 Attract, develop, support, and retain high quality teachers across the district, particularly in high-need schools.
- 
**Students Engaged and Ready to Learn**  
 Deliver targeted support to address non-academic needs, such as social-emotional, mental, and physical health and wellbeing to help children be more ready to learn.
- 
**Urgency of the Situation**  
 Collaborate with the school communities to make necessary changes and improvement in high-need and turnaround schools.
- 
**Families and Alumni as Partners**  
 Empower and equip families and alumni to become informed advocates for the students.

## GUIDING PRINCIPLES

Reimagining 901 is built upon the following guiding principles that are central to this work:

- Community Input / Buy-In
- Grounding in Student Achievement
- Embracing Values and Beliefs
- Continuous Improvement
- System-Wide Equity
- Commitment & Respect
- Effective Communication and Transparency
- Collective Action with Stakeholder Input

## TIMELINE OF PREVIOUS STRATEGIC PLANNING EFFORTS

As MSCS continues to learn from the past, the district is committed to reimagining the future of our students. Listed below are key events that have occurred in MSCS that had a significant impact on the progress of implementing key initiatives with consistency so far.

<p>The Achievement School District (ASD) was created to assume authority over a segment of the lowest performing schools in Tennessee.</p>	<p><b>2011</b></p>
<p>Families and students experienced the exodus of six suburban towns from the newly consolidated Shelby County Schools system.</p>	<p><b>2013</b></p>
<p>The Tennessee General Assembly made a critical decision that the spring test results would not be used against students, teachers, and public-school districts. They agreed that the test results would only count if it benefited students, educators, and districts.</p>	<p><b>2014</b></p>
<p>The Tennessee General Assembly made a critical decision that the spring test results would not be used against students, teachers, and public-school districts. They agreed that the test results would only count if it benefited students, educators, and districts.</p>	<p><b>2016</b></p>
<p>The Tennessee General Assembly made a critical decision that the spring test results would not be used against students, teachers, and public-school districts. They agreed that the test results would only count if it benefited students, educators, and districts.</p>	<p><b>2018</b></p>
<p>The COVID-19 Pandemic required MSCS to alter in-person schooling.</p>	<p><b>2020</b></p>

## FAULT LINES: AREAS OF OPPORTUNITY FOR MSCS

The following metrics are the greatest areas of opportunity and growth for MSCS. These needs were identified by district leaders and will be monitored closely throughout **Reimagining 901**.

### Academic Achievement

- **TCAP achievement rates** are improving but are **below State norms**.
- **Chronic out-of-school rates** have recently **increased** and are well **above State norms**.
- District average **daily attendance rate** by 20-day periods have **decreased** in comparison to the previous year.

### Culture and Climate

- On the Panorama Student Perception Survey, **Classroom Engagement and Learning Strategies** received **unfavorable responses** from the 6-8 and 9-12 grade bands.

### Diversity, Equity, and Inclusion

- **AP courses participation disparities** persist across race/ethnicity and economic status.
- **On-time completion rates in English I** disparities persist for Hispanic students.

### Graduation and College/Career Readiness

- **ACT composites** are and have been **below average**.
- **ACT college ready rates** are and have been **below average**.
- **Graduation rates** have been **stagnant** recently.
- **Disparities** persist in **graduation rates between female and male** students.
- **Ready graduate rates** have **improved** but are below State norms.
- MSCS students' **industry recognized credentials** **increased** from 174 in 2016-17 to 6,697 in 2021-22. Thus, revealing **MSCS's untapped capacity** to generate 10,000 industry recognized credentials in 2022-23.

### Professional Development

- **Teacher vacancies** on the first day of school are **lower than** in the previous year.



## GOALS & VISION MOVING FORWARD



### Transitioning from Fault Lines to Vision

Shelby County, Tennessee, is a diverse, thriving community of more than one million citizens. Shelby county's population has increased nearly 10% in a decade. Driving such growth, there is a county-wide commitment to literacy and education which began in 2021, a commitment called Reimagining 901.

### A Reimagined District




Memphis-Shelby County Schools (a new name given to the reimagined District) has leveraged federal stimulus funding, local government dollars, and the commitment of the business and philanthropic communities. Memphis-Shelby County Schools has embarked on a journey to ensure that all students in the MSCS portfolio are performing on grade level by the time they enter middle school, graduating nearly all students who entered high school, and preparing graduates for success in college and careers.



*“The year is 2030, not even ten years from now”*




### Vision

To build a stronger 901, by 2030 schools will:

-  Serve as a staple of the community by promoting pride and building the history of 901.
-  Bring people together and help establish strong, trusting relationships.
-  Provide safe environments for learning.
-  Attract families and businesses which boost the economy and become community hubs.
-  Help students, parents, and teachers connect more easily.
-  Help develop students into leaders, who then, in turn, stay in the community and continue to build and nurture families and businesses.

### Goals

Overall arching goals of Reimagining 901:

-  Increase and improve student achievement and growth by using effective and transformational strategies
-  Implement foreign language immersion opportunities for all students
-  Maximize digital 1:1 access
-  Connect students to the broader community
-  Improve learning facilities through new buildings and strategic combinations
-  Enhance community partnerships
-  Strengthen connections between District-run schools and charter schools, and share lessons from charter schools' best practices

## KEY INITIATIVE 1: STRENGTHEN EARLY LITERACY AND CONTINUING LITERACY

As part of the **Reimagining 901** plan, the board and the administrative team selected three Key Initiatives that will guide progress. The first Key Initiative centers around literacy and strengthening literacy both for early learning (Grades PK-2) and beyond (Grades 3-12).

### Why Literacy?

Literacy is vital to every child's education. Because the ability to read and write efficiently will greatly inform a child's future, it is imperative students are offered high-quality educational options that will improve their chances to succeed. Conversely, poor literacy acquisition may have negative effects that extend well beyond the school years. Learning deficits could have emotional and social impacts, lead to financial burdens, and impede college or career opportunities once a student graduates from high school.

### Early Literacy









MSCS's early literacy strategies are focused on preparing teachers to teach students how to decode letters and sounds, create meaning as words are strung together in sentences, and then comprehend the concepts and ideas embedded in written text. Letter awareness, sound sensitivity, and phonological and phonemic awareness are critical aspects of teaching students to read.

### Continuing Literacy

A focus on continuing literacy beyond Grade 3 will ensure students develop the capacity to make meaning, apply critical thinking skills, and retain knowledge from any type of complex text so that they reach their fullest potential in secondary schools, institutions of higher education, and the workforce.

### STRATEGIES

MSCS's vision for improved literacy instruction relies on teacher preparation to support students in increasing their literacy development. MSCS has outlined the following strategies to ensure success in this Key Initiative:

-  Reduce adult-to-student ratio in K-12 English Language Arts
-  Engage deeply in the work of foundational reading skills instruction
-  Support literacy through virtual education and flawless logistics
-  Build teacher capacity to understand how children learn to read
-  Expose students and parents to the foundational tools of literacy
-  Ensure literacy-rich environments and learning opportunities for students
-  Provide consistent, intensive, and personalized tutoring
-  Plan a new and improved Summer Learning Academy for 2022-2023 school year

## Grade-Level-Specific Literacy Supports

MSCS recently introduced district-wide initiatives that include the following components to support students, teachers, and leaders in delivering and receiving high quality instruction strategically designed to meet the cognitive demands of the literacy standards.

### Elementary Supports

- 3<sup>rd</sup> Grade Commitment Team
- Ready Reading student workbooks
- Reading Prescriptions
- iReady
- Literacy Laureates
- Literacy Rich Environments Model
- Instructional & Educational Advisors
- Monthly professional learning for Specialized Education Assistants

### Middle School Supports

- Senior Reading Advisors to execute Reading Horizons
- Reading Prescriptions
- iReady
- Ready Reading student workbooks
- ELA Question Bank
- Directed Teaching Model

### High School Supports

- Senior Reading Advisors to execute Reading Horizons
- Reading Prescriptions
- Edgenuity
- FLVS students and teacher resources
- Common Lit student and teacher resources
- Directed Teaching Model



## KEY INITIATIVE 2: RECRUIT, RETAIN, IMMERSE, ENTRENCH

The second Key Initiative centers around strategic recruitment, induction, sustaining, and engagement so MSCS can retain high-quality faculty, staff, and administrators. This initiative will help foster a diverse, engaged, and passionate workforce through professional engagement and community development.

### Recruitment

MSCS HR recognize the importance of leveraging multiple strategies to attract and recruit individuals into the education profession. Our recruitment strategic plan includes heavy participation in key activities which are essential in creating a positive work environment and strengthening our employees' commitment to the MSCS culture of excellence. These strategies advance the District's goal of becoming an 'employer of choice.'

### Induction










The MSCS HR Office of Induction and Development has implemented the Teacher Comprehensive Induction Program (TCIP) that begins with all new hires attending the New Teacher Academy (NTA) prior to starting in any MSCS school or workplace. The TCIP also includes wraparound induction supports in partnership with our partner EPPS.

### Sustain and Engage

MSCS will ensure that there is intentionality in ensuring that high-impact strategies are implemented to sustain (strengthen/support) employees so they can be retained. As a critical lever within the overall talent strategy, the teacher retention component includes intensive leader development and retention accountability at the school level (retention and workplace culture/climate data). MSCS HR will work publicize a multitude of district level employee wraparound service offerings to equip leaders with tools to address wellness and engagement needs.

## STRATEGIES

Faculty, staff, and administrator recruitment initiatives should ensure students have access to high-quality, diverse, and motivated educators. The following strategies will support MSCS in this initiative:

-  Maximize existing partnerships with teacher residency programs like Teach for America
-  "Grow-Our-Own" teacher and principal pipelines
-  Provide mentoring and support for employees to obtain licensure and post-secondary degrees
-  Identify professionals in other fields who wish to change careers to become teachers
-  Create teaching pipelines that start with existing MSCS students
-  Reduce adult-to-student ratios in K-2 classrooms
-  Expand partnerships with education training programs at local colleges and universities
-  Create central office pathways for current MSCS employees seeking a principalship or other administrative opportunity
-  Create innovative strategies to communicate wellness and engagement supports to all employees

## Examples of Key Activities (\*ESSER FUNDED)

### Strategic Recruitment

- Enhanced Attraction and Marketing Strategy: Teach Today, Reach Tomorrow Campaign \*\*
- Residency Partnerships (TFA, MTR, and Aspiring Teachers Program Relay)
- TDOE Grow Your Own Programs
- MSCS Special Education and Spanish Teacher Pipeline \*\*
- CCTE Teaching as a Profession High School Pipeline (dual enrollment)\*\*
- 'School Leader Pipeline Programs\*\*

### Comprehensive Induction

- New Teacher Academy (all employees)\*\*
- 1:1 Mentoring Program (enhanced investment in mentoring stipends, supports and accountability) \*\*
- Aspiring Teacher Program Induction Supports (Permit check-ins, Praxis and EdTPA tutoring/supports) \*\*
- Monthly Mentor and School Leader mandatory PD \*\*

### Sustain and Engagement

- Retention Task Force (Cross-functional team dedicated to driving the direction/accountability of the overall retention strategy)
- Leadership Retention Support PD and Targeted Cohort
- Induction and Retention Plan required for all schools (Leader Guide Provided by HR)
- Total Rewards (Employee Wellness, Engagement and Wraparound Support Plan)

## KEY INITIATIVE 3: RELEVANT, RIGOROUS, AND EQUITABLE ACADEMICS

The third Key Initiative centers around preparing students with 21<sup>st</sup> Century skills and ensuring they are college- or career-ready in our current global environment. Importantly, this Key Initiative requires MSCS to evolve and innovate alongside modern industry and post-secondary institutions.

### Student Engagement

To instill a love of learning in our students, MSCS will ensure that the students will connect to the relevance in what they are learning, how they are learning, and where they are learning. Instructional content will support students in their learning and will connect closely to the world around them. Notably, students will engage in “global classroom,” an idea that classrooms can be more than the four walls of a building, and learning can extend beyond school boundaries. Traditional classroom learning can limit a student’s access to a variety of programs and courses, particularly at the secondary level.

### Family Engagement



MSCS will work to maximize the agency that families have in their student’s learning and overall academic trajectory. The goal of MSCS is to ensure all four-year-old children have access to quality Pre-K by the 2031-32 school year.

### Upgrades & Redesign

Major building projects will support this district initiative. Learning spaces across the district will be updated or redesigned to create high-quality school facilities.

### STRATEGIES

Teaching and instructional initiatives should create learning spaces that provide equitable, relevant, and rigorous education for all students in the MSCS portfolio. The following strategies will support MSCS in this initiative:

-  Expanded emphasis on social-emotional learning and attendance supports
-  Enhance community engagement supports
-  Expand opportunities for creativity, arts curriculum, theater, and performance
-  Increase the effectiveness of and access to English language instruction
-  Create innovative high school programming and expand access to advanced courses
-  Enhance ACT preparation opportunities for students pursuing post-secondary education
-  Develop transition programs for Elementary-to-Middle and Middle-to-High School
-  Expand access to digital devices to create equity in technology

### Innovative Initiatives

#### Instructional Innovation

- Expand student access to a diverse selection of virtual course offerings
- Expand outdoor Learning Spaces
- Expand the Foreign Language program
- Expand the Theatre and Visual Arts program
- Elementary to Middle and Middle to High School Transition Program

#### Community Engagement

- Provide academic and non-academic wraparound services to support students and families in under-resourced communities
- Build a strategic focus on challenges and solutions for recruiting new students, retaining current students, and reclaiming students who have left MSCS managed schools

#### College and Career Readiness

- Expand access to advanced academic offerings
- Expand access to College, Career, and Technical Education programs of study
- Expand internship and apprenticeship opportunities for students.
- Enhanced student preparedness for and access to post-secondary opportunities.



## ACCOUNTABILITY



### Building a Data-Driven Decision-Making Culture

- MSCS leaders will engage school and district-level staff in building a districtwide culture of inquiry that values the use of data for sound decision-making.
- MSCS will engage in discovering the power of data for promoting student growth and achievement.
- Data-driven decision-making will be based on gathering data to understand if a school or district is meeting its purpose and vision.
- MSCS leaders will review data in quarterly STAT meetings, Stock Take meetings, and the ongoing review of dashboards.

*“As the strategies are implemented, accountability will move to the next level.”*

### Data Meetings

MSCS leadership has planned the following data meetings to be held across the district. Data meetings will ensure that district and school leadership and staff are held accountable for student learning.

#### Superintendent's Academic Leadership Team (SALT)

**Goal:** The Executive Leadership Team will utilize the SALT meeting forum as an opportunity to examine instructional data to understand who's succeeding in MSCS, who's not, and why.

#### Cabinet Leaders Sessions

**Goal:** Chief of Staff will utilize the stat sessions with Cabinet Leaders each week to discuss the top ten strategies to ensure that we have Return on Investment with key strategies.

#### Audit/Finance Meeting

**Goal:** Chief of Finance will update the Superintendent and board monthly using the structure of the Audit/Finance meeting to discuss key strategies associated with ESSER.

#### STAT Meetings

**Goal:** The Deputy Superintendent along with the Chief Academic Officer, Chief of Schools, and the Executive Director of Accountability will review data and action steps in quarterly STAT Meetings.

#### School Walks

**Goal:** The Deputy Superintendent along with the Chief Academic Officer, Chief of Schools, and the Executive Director of Accountability will conduct school walks.

#### Data Week

**Goal:** ILDs and principals will participate monthly in “Data Week” to review school-wide data.

## EXPECTED YEAR OVER YEAR OUTCOMES

Indicator	State 2018-2019	MSCS 2018-2019	State 2019-2020	MSCS 2019-2020	State 2020-2021	MSCS 2020-2021	Milepost 2024-2025	Goal 2030
Students graduate on time.	89.7%	79.3%	89.6%	77.7%	NA	77.7%	82.0%	90.0%
Students earn Tennessee's Ready Graduate designation.	40.7%	20.9%	40.5%	20.7%	NA	NA	45.0%	80.0%
Students read on grade level before entering middle school.	35.5%	24.3%	NA	NA	31.4%	14.7%	40.0%	74.0%
Students' math skills are on grade level before entering middle school.	45.4%	34.5%	NA	NA	32.2%	9.8%	35.0%	70.0%



Please use the QR above or visit <https://tinyurl.com/MSCSESSER> to access our ESSER Literature link or Briefs compendium. This document contains full reports on the performance of critical strategic framework initiatives.

Success in MSCS comes from the strategic action taken by all District stakeholders as we work together to Reimagine 901. The following appendix provides a look at the comprehensive, strategic map of our Lifeline Initiative Framework.






## SPRING 2022 TCAP RESULTS

ACADEMIC PROFICIENCY SCORES FOR MEMPHIS-SHELBY COUNTY SCHOOLS, THE ACHIEVEMENT SCHOOL DISTRICT AND THE STATE OF TENNESSEE.

### ACADEMIC PROFICIENCY SCORES

	ELA	MATH
	<b>22%</b>	<b>13%</b>
<b>ASD (STATE-RUN)</b>	<b>9%</b>	<b>6%</b>
<b>TN</b>	<b>36%</b>	<b>30%</b>

**#TRENDING UP**



**OUR STRATEGIC FRAMEWORK IS ALREADY SHOWING RESULTS. MSCS STUDENTS ARE GROWING, OVERCOMING LEARNING LOSS, AND ACHIEVING IN MATH AND READING ACROSS ALL GRADE BANDS.**

# APPENDIX A



**FRAMEWORK STRATEGIES**



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## Contents

Foundational Literacy Skills .....	5
Strategy: Increase literacy subgroup performance through the use of high-quality instructional materials and the implementation of high yield literacy strategies. ....	5
Strategy: Provide Literacy Instructional Advisors resources to support K - 2 teachers with the implementation of foundational skills. ....	5
Strategy: Reduce student to adult ratio and increase student support in all K-2 classrooms. ....	5
English Language Arts Supports.....	6
Strategy: Utilize 17 Reading Advisors to support literacy instruction in identified middle and high schools for students struggling in reading and language arts. ....	6
Strategy: Utilize Learning Loss Coaches to support instruction throughout the district by focusing on standards-based instruction and modeling for teachers throughout the district. ....	6
Strategy: Accelerate academic growth and achievement through the adoption of standards-based and skill-based instructional materials in English Language Arts. ....	7
Virtual Education and Logistics .....	7
Strategy: Implement a comprehensive digital pedagogical model that integrates standards-aligned blended learning into classrooms. ....	7
Build Teacher Capacity.....	7
Strategy: Build teacher capacity by providing multi-tiered professional development (Content Academy - K-12, Instructional Practices, Foundational Skills) to support teachers, school leaders and parents/guardians in their individual and collective effort to promote early literacy (K-2) and continuing literacy (grades 3-12) development. ....	7
Expose Students and Parents to the foundational tools of literacy .....	8
Strategy: Strengthen student and parent knowledge of the foundational tools of literacy through engagement in quarterly parent sessions. ....	8
Ensure literacy rich environments and learning opportunities for students.....	8
Strategy: Ensure literacy-rich environments are viable in K-2 classrooms to stimulate all students to participate in authentic language and literacy activities. ....	8
High Dosage, Low Ratio Tutoring.....	9
Strategy: Implement/offer a 1:10 tutor/student ratio for before and after school tutoring for.....	9
grades K-12. ....	9
Strategy: Implement high dosage/low ratio tutoring during the school day (offer a 1:3 tutor/student ratio). ....	9
Summer Learning Academy .....	9
Strategy: Implement Summer Learning Academy by providing a minimum of 4 weeks of additional reading instruction as well as intervention.....	9
Academic Strategy: Strategic Teacher Retention & Establishing Sustainable Teacher Recruitment Models.....	12
Strategy: Implement and expand a variety of strategies designed to recruit and retain the best district leaders and teachers in the nation, immerse them in professional development to embrace and teach. ....	12

Specifically reduce student to adult ratio and increase student support.....	13
Strategy: Reduce student to adult ratio and increase student support in all K-2 classrooms. ....	13
Proximity Strategy .....	13
Strategy: Hire and deploy 63 Proximity EOC teachers for strategic co-teaching, small group rotations, and intensive workshops in high school English I, Algebra I, and Biology. ....	13
Central Office Pathways (PL&S Department) .....	13
Strategy: School Leadership: Create an equity and servant leadership-centered principal pipeline for school leaders. ....	13
Strategy: Central Office Leadership: Create an equity and servant leadership-centered principal pipeline for school leaders. ....	14
Strategy: Executive Leadership: Develop an executive leadership pathway for junior and senior leaders.....	14
AP and Dual Credit/Enrollment Courses.....	16
Strategy: Expand access to advanced academic offerings.....	16
High School Innovation.....	17
Strategy: Provide K-12 district managed schools with the opportunity to engage in one of three Transformational School Models: Leadership, Social Justice Programs, and Environmental. ....	17
Strategy: Expand Outdoor Learning Spaces in a select number of schools which will provide flexible learning options for teachers and students by the end of 2022-23 school year. ....	17
Strategy: Continue to use Naviance for middle and high school students to develop robust career pathway opportunities. ....	17
Virtual Schools Expansion/1:1 Device Management .....	18
Strategy: Expand student access to a diverse selection of virtual course offerings. ....	18
ACT Preparation.....	18
Strategy: Continue to provide college readiness and ACT tutoring concerning skills and content. ....	18
Transformational Models .....	18
Strategy: Expand the number of students participating in programs of study under the Agriculture Career Cluster. ....	18
Strategy: Expand access to College, Career, and Technical Education Programs of study.....	19
Strategy: Expand Internship and Apprenticeship opportunities for students. ....	19
Strategy: Align MSCS College, Career and Technical Education programs of study with local workforce needs....	19
Strategy: Expand the Foreign Language program by developing students into well-rounded citizens that are linguistically and culturally competent, successful, and who exhibit the ability to compete in a global economy (Language Expansion). ....	20
Theatre and Performing Arts Expansion.....	20
Strategy: Expand the Theatre and Visual Arts program by implementing successful afterschool opportunities at pilot schools, in addition to itinerant staffing models to enrich teaching strategies with Arts Integration and expanding engagement with cultural community arts opportunities. ....	20
Elementary to Middle and Middle to High School Transition Program .....	20
Strategy: Implement a transition program to springboard them into the next grade and to prepare them for successful performance in middle school and high school.....	20

---

Expand Social-Emotional Learning & Attendance Supports .....	21
Strategy: Increase support for homeless students and those with adverse childhood experiences.....	21
Strategy: Provide additional support in improving attendance and truancy rates, as well as improving culture and climate (discipline, registration, truancy). .....	21
Strategy: Expand Social-Emotional Learning to include Re-set rooms, evening mental health centers, universal screening for all students, additional behavior specialists, and additional support for students with adverse childhood experiences. ....	21
Community Engagement Supports .....	22
Strategy: Provide academic and non-academic wraparound services to support students and families in under-resourced communities aiming to become a one-stop shop for students and families.....	22
Community Engagement Supports: Student Recruitment/Student decline due to the Pandemic .....	22
Strategy: Build a strategic focus on challenges and solutions for recruiting new students, retaining current students, and reclaiming students who have been lost to other educational service providers. ....	22
English Language Instruction .....	23
Strategy: Expand English Language Development instruction, ESL Summer School and before and after tutoring utilizing programs to address learning loss and assist students in being successful in the classroom and gain language proficiency.....	23
Strategy: Expand the ability to communicate with parents of English Learners by increasing translation services. ....	23
Strategy: Provide additional ELL staff to increase academic performance of English Learners. ....	23





## Key Initiative One:

### Strengthening Early K-2 & Continuing Literacy 3-12

- Aligned to Reimagining Education
- SMARTIE Goal and KPIs:

By the end of the 2022-23 school year, MSCS will increase literacy for all students through rigorous professional learning for teachers, 1:1 coaching support to bolster foundational literacy instruction, and the use of high-quality instructional materials and high yield literacy strategies aligned to the needs of all student subgroups, grounded in the science of reading. This will be evidenced by the following Key Performance Indicators:

- % of K-8 students achieving on-track or mastery in quarterly literacy diagnostics
- % of 3<sup>rd</sup> Grade Students achieving Meeting Expectations or Exceeding Expectations on 2023 TCAP
- % of K-2 teachers supported by Instructional Literacy Advisors
- % of K-2 teachers exhibiting instructional growth according to Early Literacy Walkthrough Tool
- % of ELA teachers attaining TVAAS level 3, 4 or 5 by the end of the school year
- % of students recommended for tutoring enrolled in MSCS tutoring opportunities

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# Initiatives and Strategies

## Initiative 1 -Strengthen Early (PK-2) and Continuing Literacy (3-12):

Our early literacy strategies are focused on preparing teachers to teach students how to decode letters and sounds, create meaning as words are strung together in sentences and then comprehend the concepts and ideas embedded in written text. Letter awareness, sound sensitivity, phonological and phonemic awareness are critical aspects of teaching students to read.

Literacy is more than learning to read. A focus on continuing literacy beyond grade three will ensure students develop the capacity to make meaning, apply critical thinking skills, and retain knowledge from any type of complex text, so that they reach their fullest potential in middle and high school, institutions of higher education and the workforce.

### Foundational Literacy Skills

**Strategy: Increase literacy subgroup performance through the use of high-quality instructional materials and the implementation of high yield literacy strategies.**

#### Performance Metric:

By the end of school year 2022 – 2023, the district will:

- Achieve at least Level 4 TVAAS across subgroups on English Language Arts TCAP assessment
- Increase the percentage of students achieving Met and Exceeded performance across subgroups by at least 6-7 percentage points

#### Expected Outcomes:

- Accelerate academic growth and achievement across subgroups in ELA
- Reduce the number of students in the below and approaching categories across subgroups

**Strategy: Provide Literacy Instructional Advisors resources to support K - 2 teachers with the implementation of foundational skills.**

#### Performance Metrics:

By the end of school year 2022 – 2023, the district will:

- Achieve at least Level 4 TVAAS across subgroups on English Language Arts TCAP assessment
- Increase in percentage of students achieving Met and Exceeded performance on English Language Arts by 6-7 percentage points
- Increase the percentage of students achieving Met and Exceeded performance across subgroups by at least 6-7 percentage points

#### Expected Outcomes:

- Accelerate academic growth and achievement through the adoption of standards-based and skill-based instructional materials in English Language Arts
- Accelerate academic growth and achievement for all student subgroups

**Strategy: Reduce student to adult ratio and increase student support in all K-2 classrooms.**

#### Performance Metrics:

By the end of school year 2022 – 2023, the district will:

- Increase in student mastery (Target: 6-7% increase in Met and Exceeded for students in 3<sup>rd</sup> grade on TNReady by 2022-23)
- Increase in academic performance on K-2 formative assessments

- Decrease in K-2 Teacher Vacancies (Target 5% reduction in teacher vacancies in 2022-23)
- Improve culture and climate (K-2 student discipline, Panorama Student Survey results)

**Expected Outcomes:**

- Support the implementation of small group instruction and intervention
- Increase enrollment in Memphis-Shelby County Schools
- Support Implement small group instruction and intervention
- Reduce unemployment
- Contribute to reducing the poverty rate

## English Language Arts Supports

**Strategy: Utilize 17 Reading Advisors to support literacy instruction in identified middle and high schools for students struggling in reading and language arts.**

**Performance Metrics:**

By the end of school year 2022 – 2023, the district will:

- Achieve at least Level 4 TVAAS on English Language Arts TCAP assessment
- Increase in percentage of students achieving Met and Exceeded performance on English Language Arts by 6-7 percentage points
- Increase the percentage of students achieving Met and Exceeded performance across subgroups by at least 6-7 percentage points
- Achieve a pre-test to post-test gain of 20 percentage points on the Reading Horizons diagnostic for high school students
- Gain an average of 100 lexiles from pre-test to post-test on Reading Horizons diagnostic for high school students

**Expected Outcomes:**

- Accelerate academic growth and achievement of standards-based and skill-based instructional materials in English Language Arts
- Accelerate academic growth and achievement for students with disabilities

**Strategy: Utilize Learning Loss Coaches to support instruction throughout the district by focusing on standards-based instruction and modeling for teachers throughout the district.**

**Performance Metrics:**

By the end of school year 2022 – 2023, the district will:

- Achieve at least Level 4 TVAAS on English Language Arts TCAP assessment
- Increase in percentage of students achieving Met and Exceeded performance on English Language Arts 6-7 percentage points
- Increase the percentage of students achieving Met and Exceeded performance across subgroups by at least 6-7 percentage points

**Expected Outcomes:**

- Increase teacher capacity to plan and deliver instruction informed by whole group, small group, and one-on-one setting best practices in each grade band (PreK-5, 6-8, 9-12)
- Increase teacher capacity to present students with performance-based objectives informed by the demands of state standards
- Increase teacher capacity to leverage curriculum-driven opportunities to make sense of unfamiliar general and domain specific academic vocabulary

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**Strategy: Accelerate academic growth and achievement through the adoption of standards-based and skill-based instructional materials in English Language Arts.**

**Performance Metrics:**

By the end of school year 2022 – 2023, the district will:

- Increase to a TVAAS Level 4 on English Language Arts TCAP assessments
- Increase the percentage of students achieving Met and Exceeded performance on English Language Arts TCAP assessments by at least 6-7 percentage points
- Increase in performance on ESSA accountability measures for students with disabilities who are identified as at-risk or below grade level

**Expected Outcomes:**

- Increase in school, student, and district performance
- Increase of skills mastery

### **Virtual Education and Logistics**

**Strategy: Implement a comprehensive digital pedagogical model that integrates standards-aligned blended learning into classrooms.**

**Performance Metrics:**

By the end of school year 2022 – 2023, the district will:

- Increase in student achievement by 6-7 percentage points in Reading Language Arts
- Increase access to courses by 10 percentage points

**Expected Outcomes:**

- Expand online coursework
- Increase equity of access to a diversity of coursework
- Increase ready graduates and post-secondary attainment rates
- Decrease future textbook costs

### **Build Teacher Capacity**

**Strategy: Build teacher capacity by providing multi-tiered professional development (Content Academy - K-12, Instructional Practices, Foundational Skills) to support teachers, school leaders and parents/guardians in their individual and collective effort to promote early literacy (K-2) and continuing literacy (grades 3-12) development.**

**Performance Metrics:**

By the end of school year 2022 – 2023, the district will:

- Achieve at least Level 4 TVAAS on English Language Arts TCAP Assessment
- Increase in percentage of students achieving Met and Exceeded performance on English Language Arts by 6-7 percentage points
- Increase the percentage of students achieving Met and Exceeded performance across subgroups by at least 6-7 percentage points

**Expected Outcomes:**

- Increase teacher capacity to plan and deliver instruction informed by whole group, small group, and one-on-one setting best practices in each grade band (PreK-5, 6-8, 9-12)



- Increase teacher capacity to present students with performance-based objectives informed by the demands of state standards
- Increase teacher capacity to leverage curriculum-driven opportunities to make sense of unfamiliar general and domain specific academic vocabulary

### **Expose Students and Parents to the foundational tools of literacy**

**Strategy: Strengthen student and parent knowledge of the foundational tools of literacy through engagement in quarterly parent sessions.**

**Performance Metrics:**

By the end of 2022 – 2023 school year, the district will:

- Provide at least 4 (quarterly) opportunities for parents to engage in sessions centered on foundational tools of literacy
- Increase the percentage of K-2 students “On Track” in ELA at least by 6-7 percentage points on the universal screener benchmark from Fall 2022 to Spring 2023
- Achieve a median typical growth score of 120% from Fall to Spring on the iReady diagnostic

**Expected Outcomes:**

- Increase at-home literacy support by empowering parents to utilize foundational literacy tools
- Increase summative data on the universal screener
- Decrease literacy learning loss created by COVID-19 school closures

### **Ensure literacy rich environments and learning opportunities for students**

**Strategy: Ensure literacy-rich environments are viable in K-2 classrooms to stimulate all students to participate in authentic language and literacy activities.**

**Performance Metrics:**

By the end of school year 2022 – 2023, the district will:

- Designate a literacy-rich model classroom in every elementary and K-8 school
- Increase the percentage of K-2 students “On Track” in ELA on the universal screener benchmark by at least 6-7% from Fall 2022 to Spring 2023
- Achieve a median typical growth score of 120% from Fall to Spring on the iReady diagnostic

**Expected Outcomes:**

- Increase number of students immersed in language-and literacy-rich environments and learning experiences
- Increase opportunities for students to build and practice literacy skills in meaningful ways
- Increase teacher implementation of instructional best practices in literacy
- Increase summative data on the universal screener
- Decrease literacy learning loss created by COVID-19 school closures

## High Dosage, Low Ratio Tutoring

**Strategy: Implement/offer a 1:10 tutor/student ratio for before and after school tutoring for grades K-12.**

### Performance Metrics:

By the end of the 2022 – 2023 school year, the district will:

- Increase 6-7 percentage points on pre and post assessments using iReady diagnostic, EOC, and ACT testing for elementary, middle, and high school students in the bottom 20% with a 95% participation rate
- Increase 6-7 percentage points on pre and post assessments using iReady diagnostic, EOC, and ACT testing for elementary, middle, and high school students with a participation rate of 95% participation

### Expected Outcomes:

- Increase student achievement/growth in elementary, middle, and high
- Close the learning gaps created by COVID closures

**Strategy: Implement high dosage/low ratio tutoring during the school day (offer a 1:3 tutor/student ratio).**

### Performance Metrics:

By the end of the 2022-23 school year, the district will:

- Increase by 6-7 percentage points on pre and post assessment results for elementary and middle students in the bottom 15% who meet tutoring participation criteria

### Expected Outcomes:

- Increase student achievement and growth in elementary, middle, and high
- Close the learning gaps created by COVID closures

## Summer Learning Academy

**Strategy: Implement Summer Learning Academy by providing a minimum of 4 weeks of additional reading instruction as well as intervention.**

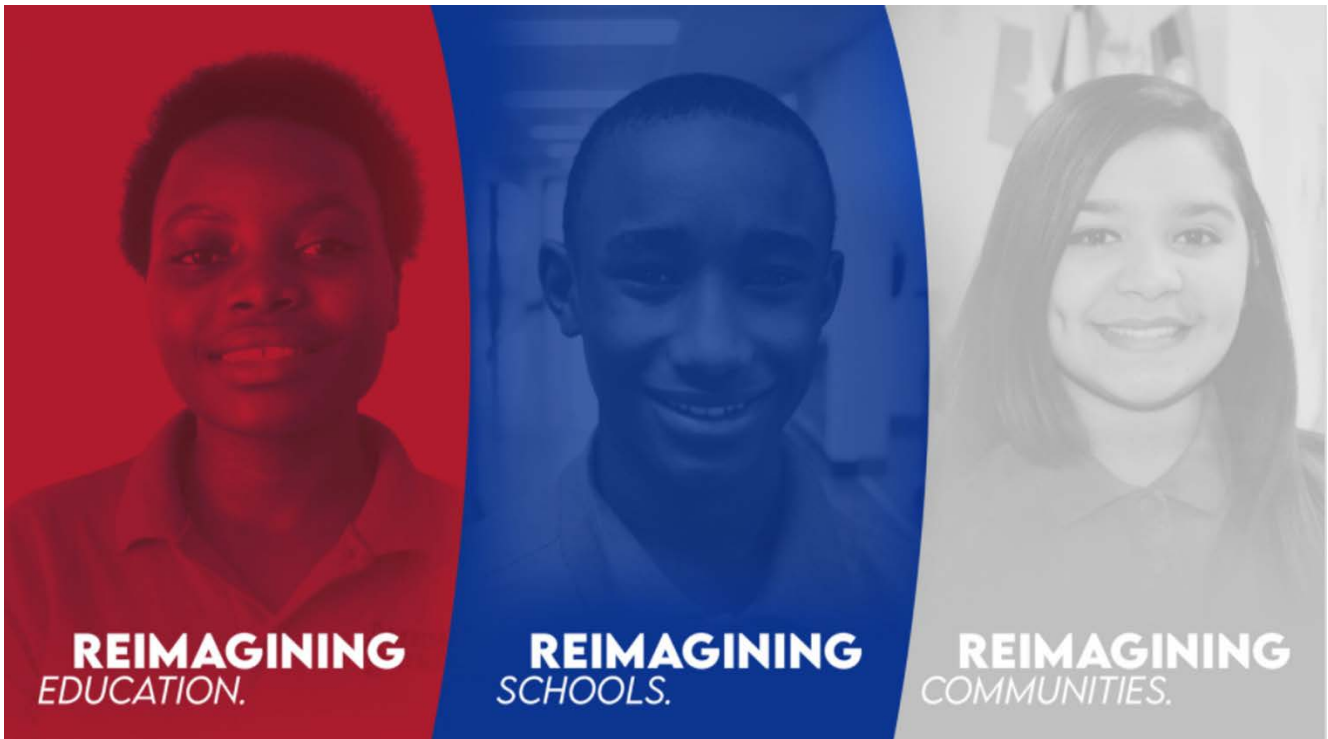
### Performance Metrics:

By the end of the 2022 – 2023 school year, the district will:

- Increase student mastery by 6-7 percentage points on the Summer Learning Academy pre and post assessment, for students who attend at least 95% of the program

### Expected Outcomes:

- Increase mastery of prerequisite skills
- Increase summative data (TCAP) performance (student, school, and district)



## Key Initiative Two: Recruit, Retain, Immerse, and Entrench

- Aligned to Reimagining Education
- Aligned to Reimagining Schools
- SMARTIE Goal and KPIs:

By the end of the 2022-23 School year, all MSCS students, in every school will receive high quality instruction, from a qualified, well-supported teacher in a school building led by a principal selected and trained in the principles of equity and inclusion. This will be evidenced by the following Key Performance Indicators:

- % of teachers attaining a TVAAS level 3, 4 or 5 based on student growth
- # of End of Course Tested subject vacancies by school (9-12)
- # of K-2 vacancies by school
- # instances of progressive discipline (K-2)
- % Increase in annual Insight (Teacher) and Panorama (Student) culture and climate surveys
- % Teachers retained from end of school year 2022-23 to start of school year 2023-24
- # MSCS Principal Pipeline cohort graduates
- % of Principal Pipeline cohort graduates who attain school leadership roles for school year 2023-24

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# Initiative 2: Recruit, Retain, Immerse, and Entrench

Prior to the COVID-19 Pandemic, national estimates indicated that within the first five years of teaching, 40-50% of teachers leave the field for several reasons. These alarming figures have skyrocketed because of the pandemic. In schools that serve students of extreme poverty demographics across the U.S., the attrition rate for teachers averages up to 55%. At the National level, fewer than 1% of teachers receive an adequate comprehensive induction into the field of education, which allows them to work collaboratively with other teachers.

To effectively meet and exceed our academic goals, there must be a systemic human capital strategy that addresses personnel needs throughout the employee life cycle. The Memphis-Shelby County Schools Department of Human Resources will lead the charge in close partnership with school and district leaders focusing on strategic **recruitment, induction, sustaining, and engagement (RISE)**. These facets must be fully addressed and require full ownership from and accountability from all MSCS leaders/employs so the district can attract and retain high-quality faculty, staff, and administrators. This initiative will help foster a diverse, engaged, and passionate workforce through professional engagement and community development.

## Recruitment

MSCS HR recognizes the importance of leveraging multiple strategies to attract and recruit individuals to serve in the district as an educator. Our recruitment strategic plan includes heavy participation in key activities which are essential in creating a positive work environment and strengthening our employees' commitment to the MSCS culture of excellence. These strategies advance the district's goal of becoming an 'employer of choice.' As we reimagine our schools and programs, we are also reimagining the type of professional that steps into our classrooms. MSCS is committed to recruiting a diverse talent pool that mirrors our community and has a strong commitment to meeting our students' needs.

## Induction

The MSCS HR Office of Induction and Development has implemented the Teacher Comprehensive Induction Program (TCIP) that begins with all new hires attending the New Teacher Academy (NTA) prior to starting in any MSCS school or workplace. The TCIP also includes wraparound induction support in partnership with our partner EPPS.

## Sustain

MSCS will ensure that high-impact employee development strategies are implemented to sustain (strengthen/support) and retain high quality teachers, staff, and leaders. As a critical lever within the overall talent strategy, the teacher retention component includes intensive leader development and retention accountability at the school level (retention and workplace culture/climate data). All teachers, staff and leaders will also be strengthened by way of robust professional development that begins with comprehensive induction, ongoing professional development, and targeted support. The goal is to develop our staff in a manner that ensures that they embrace and teach foundational literacy skills as well as contribute to the community and classroom.

## Engage

MSCS HR will lead the implementation of a multifaceted district level employee wraparound service model that has various offerings to equip leaders with tools to address employee wellness and engagement needs. In addition, schools and departments will develop and implement yearly site-based engagement plans that include their efforts to engage employees throughout the school year. This facet will be measured on the principal's evaluation from multiple metrics (Insight Data, Panorama Engagement Data, Retention Data, TEAM Evaluation and NIE Evaluation).

## Examples of Key Activities:

1. **Innovative Recruitment Efforts**
  - a. Enhanced Marketing Strategy
  - b. Strategic Compensation Strategy
  - c. Special Education and Spanish Licensure Initiative



- d. Para-Pro Testing Launch (2022-23)
- e. Substitute Teacher Initiative
- f. Retired Teacher/Adjunct Professor Recruitment

**2. District Induction Overhaul**

- a. Teacher Comprehensive Induction Program (TCIP)
- b. New Teacher Academy
- c. Leader and Mentor Monthly PD (Including MSCS Induction and Retention Leader Guide)
- d. Targeted support for high attrition schools/leaders
- e. Central Office Employee Induction Program (EIP)

**3. Pipelines and Partnerships**

- a. TN GYO Partnership
- b. MSCS Aspiring Teachers Program (Relay Residency)
- c. Teach for America
- d. Memphis Teacher Residency
- e. EPP Collaboratives (Student and Practicum Teachers)
- f. Memphis Teachers of Excellence (High School Pipeline)

**4. Central Office Pathways (PL&S Department)**

- a. School leader pipeline, school immersion opportunities for central office personnel

**Academic Strategy: Strategic Teacher Retention & Establishing Sustainable Teacher Recruitment Models**

**Strategy: Implement and expand a variety of strategies designed to recruit and retain the best district leaders and teachers in the nation, immerse them in professional development to embrace and teach.**

**Performance Metrics:**

- Decrease the average days to fill position rates by May 2023 from 30 to 15 workdays by implementing a refined ATS (Applicant Tracking System) based staffing recruitment plan
- Increase the number of early contacts by 10% by May 2023
- Increase the percentage of permit teachers passing licensure exam (teachers) vs. prior years by May 2023, by 10%
- Decrease the mentee/mentor ratio to 1:1 (baseline 1:12) Feedback from mentors and mentees (Beginning-of-year, mid-year, and end-of-year) Monthly mentee observation logs Teacher retention numbers; look at region over-all by May 2023
- Increase retention and performance data (yearly evals and/or academic outcomes) for staff who have gone through the comprehensive induction program (vs. cohort data from previous years) by 10% (First year Teacher retention and TEM Performance outcomes by May 2023)

**Expected Outcomes:**

- Improve teacher/staff retention = greater effectiveness
- Recruitment of high-quality talent
- Development of current staff

## Specifically reduce student to adult ratio and increase student support

**Strategy: Reduce student to adult ratio and increase student support in all K-2 classrooms.**

### Performance Metrics:

By the end of the school year 2022 – 2023, the district will:

- Increase in student mastery (Target: 6-7% increase in Met and Exceeded for students in 3<sup>rd</sup> grade on TNReady by 2022-23)
- Increase in academic performance on K-2 formative assessments
- Decrease in K-2 Teacher Vacancies (Target 5% reduction in teacher vacancies in 2022-23)
- Improved culture and climate (K-2 student discipline, Panorama Student Survey results)

### Expected Outcomes:

- Support the implementation of small group instruction and intervention
- Increase enrollment in Memphis-Shelby County Schools
- Support small group instruction and intervention
- Reduce unemployment
- Contribute to reducing the poverty rate

## Proximity Strategy

**Strategy: Hire and deploy 63 Proximity EOC teachers for strategic co-teaching, small group rotations, and intensive workshops in high school English I, Algebra I, and Biology.**

### Performance Metrics:

By the end of the school year 2022-2023, the district will:

- Engage students with Proximity teachers at least one hour per week or 12 minutes a day to increase EOC scores.

### Expected Outcomes:

- Enhance teacher understanding of blended learning model
- Students scoring “below” on EOC testing will decrease by 3 percentage points for students engaging in proximity learning in Algebra I, Biology, and English I.

## Central Office Pathways (PL&S Department)

**Strategy: School Leadership: Create an equity and servant leadership-centered principal pipeline for school leaders.**

### Performance Metrics:

By the end of the school year 2022-2023, the district will:

- Increase scores using the Principal Pipeline Self Study Guide for Districts from Beginning (1.99) to Advancing (3.0-3.99) on the Principal Pipeline Seven Domains rubric by 2024.
- Ensure all Pipeline Fellows earn at least a 3.0 using the TEAMS rubric for administrators by 2024.
- Ensure a 70% promotion rate for Pipeline Fellows.

### Expected Outcomes:

- Increase student achievement and growth
- Expand equity in school leadership

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**Strategy: Central Office Leadership: Create an equity and servant leadership-centered principal pipeline for school leaders.**

**Performance Metrics:**

By the end of the school year 2022-2023, the district will:

- Develop a comprehensive, aligned principal pipeline that will develop and support central office staff to lead schools by Spring of 2023
- Select a consultant for the pipeline by Spring of 2023
- Establish a cohort by July of 2023

**Expected Outcomes:**

- Increase student achievement and growth
- Expand equity and diversity in leadership

**Strategy: Executive Leadership: Develop an executive leadership pathway for junior and senior leaders.**

**Performance Metrics:**

By the end of the school year 2022-2023, the district will:

- Develop a plan of study for the pipeline by Spring 2023
- Select a consultant for the pipeline by Spring of 2023
- Establish a cohort by July 2023

**Expected Outcomes:**

- Enhance organizational leadership
- Astute in change management
- Increase equity and diversity in leadership



## Key Initiative Three:

### Relevant, Rigorous, and Equitable Academics

- Aligned to Reimagining Schools
- Aligned to Reimagining Communities
- SMARTIE Goal and KPIs

By the end of the 2022-23 School year, through exposure to equitable and rigorous coursework and effective intervention, all MSCS students will demonstrate increased achievement and growth on national, state and local assessments in all subject areas, and all student subgroups. This will be evidenced by the following Key Performance Indicators:

- % of students achieving Meeting Expectations or Exceeding Expectations on the 2023 TCAP and EOC tests
- % of students achieving TN Ready Graduate status before or upon graduation
- % of students graduating on time across all student subgroups
- # of Advanced Academics and College Career and Technical Education courses per high school
- % of classrooms effectively implementing blended learning model

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## Initiative 3: Create relevant, rigorous, and equitable academic choices and learning environments to ensure scholars are prepared for the global workforce.

The world has changed rapidly around us in the last decade, but school systems have struggled to evolve at the same pace. If we are to instill a love of learning in our students, then we must create relevance in what they are learning, how they are learning, and where they are learning. A global classroom must be more than the four walls of a building and arbitrary school boundaries should not limit a student's access to a variety of programs and course access, particularly at the secondary level.

To maximize the agency parents have over their child's academic trajectory, we will ensure by 2031, all four-year-old children have access to quality Pre-K. By 2026, we will eliminate the barriers and inequities exacerbated by school boundaries and create choice program seats in *all middle and high schools* that will be accessed by student applications and a school choice lottery.

Creating relevant, rigorous and equitable academic choices, MSCS will ensure scholars are prepared by:

- Providing beyond zip code access choice programs, quality seats and more Pre-K
- Reimagining 901 facilities, programs and feeder patterns
- Preparing global ready graduates with the utilization of digital devices

### AP and Dual Credit/Enrollment Courses

**Strategy: Expand access to advanced academic offerings.**

#### Performance Metrics

- By the end of school year 2022-23, the district will ensure each traditional high school has at least 5 SDC/DE courses, 8 by 23-24, and 10 by 24-25
- By the end of school year 2022-23, the district will ensure each traditional high school has at least 3 Pre-AP/AP/Virtual AP courses, 5 by 23-24, and 8 by 24-25
- By the end of school year 2022-2023, the district will increase the percent of students meeting Ready Graduate criteria by 5 percentage points
- By January 2023, 88% of ninth grade students identified in the baseline enrollment report will take the PSAT 8/9 as a universal screener for identification for advanced academics course offerings, improving to 90% by 2023-24
- By January 2023, 85% of eighth grade students identified in the baseline enrollment report will take the PSAT 8/9 as universal screener for identification for advanced academic course offerings increasing in subsequent years. (This year is the first administration for 8th graders.)
- By the end of the 2022-23 school year, increase the percentage of students enrolled in advanced courses (combination of honors, Pre-AP, AP/Virtual AP, DC, DE) by two percentage points



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**Expected Outcomes:**

- Increase equity in learning
- Improve post-secondary readiness
- Increase the number of students earning Ready Graduate status

## High School Innovation

**Strategy: Provide K-12 district managed schools with the opportunity to engage in one of three Transformational School Models: Leadership, Social Justice Programs, and Environmental.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Decrease student discipline/behavior referrals in select schools by 5%
- Increase student retention in select schools by 5%
- Increase of select Insight Survey question responses by 5%
- Increase student attendance by 5% in select schools by the end of the 2023-24 school year

**Expected Outcomes:**

- Improve culture and climate at schools
- Improve responses on the Panorama Survey
- Improve responses via Insight Survey

**Strategy: Expand Outdoor Learning Spaces in a select number of schools which will provide flexible learning options for teachers and students by the end of 2022-23 school year.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Decrease student Discipline/Behavior referrals by 5% in select schools
- Increase the Insight Survey by 5% in select schools concerning the question – My School is a good place to teach and learn; Leaders at my school set clear expectations for family and community engagement Panorama Survey (for environmental models only)
- Increase student attendance by 5% in select schools by the end of the 2023-24 school year

**Expected Outcomes:**

- Allow for scheduling flexibility in select schools
- Provide opportunities for successful learning for students who struggle in a traditional classroom setting

**Strategy: Continue to use Naviance for middle and high school students to develop robust career pathway opportunities.**

**Performance Metrics**

By the end of 2022-2023 school year, the district will:

- Increase the percentage of 8<sup>th</sup>-12<sup>th</sup> graders to complete assessments from 52% to 70%
- Increase the percentage of 8<sup>th</sup>-12<sup>th</sup> graders to identify career favorites from 26% to 40%
- Increase the percentage of 9<sup>th</sup>-11<sup>th</sup> graders to complete ACT Diagnostic test from 61% to 80%
- Increase the percentage of 9<sup>th</sup>-12<sup>th</sup> graders selecting their favorite careers from 26% to 40%
- Increase the percentage of 8<sup>th</sup>-11<sup>th</sup> graders to complete course plans from 76% to 100%
- Increase the percentage of 8<sup>th</sup>-12<sup>th</sup> graders log ins at least once from 95% to 100%

**Expected Outcomes:**

- Increase fidelity of implementation with key student planning and exploration tasks for college and career goals

**Virtual Schools Expansion/1:1 Device Management**

**Strategy: Expand student access to a diverse selection of virtual course offerings.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Increase the number of full-time virtual students enrolled in advanced online coursework by 5%
- Increase the number of advanced courses available to students who do not have access to advanced coursework by 5%
- Increase the number of EPSOs obtained by MSCS students via enrollment in advanced coursework by 5%
- Increase Ready Graduates, enrolled in full-time online coursework, by 5% by 2022-23; 7% by 2023-24; and 9% by 2024-25
- Increase the number of middle school students engaging in part-time online coursework by 20%
- Increase the percent of students meeting Ready Graduate criteria by 5 percentage points

**Expected Outcomes:**

- Enhance safe and accessible educational environments by providing every student with a digital 1:1 learning device
- Continue learning despite closures (i.e. inclement weather, summer and calendar breaks) and incidents requiring individuals to quarantine
- Increase access to a high-quality online learning option and virtual school experience

**ACT Preparation**

**Strategy: Continue to provide college readiness and ACT tutoring concerning skills and content.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Increase the average ACT composite of 11<sup>th</sup> graders to at least 16
- Increase the percent of students meeting Ready Graduate criteria by 6-7 percentage points

**Expected Outcomes:**

- Enhance student preparedness for and access to post-secondary opportunities
- Increase attendance with students who attend ACT tutoring 95% of the prescribed time

**Transformational Models**

**Strategy: Expand the number of students participating in programs of study under the Agriculture Career Cluster.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Increase the percentage of students meeting the criteria for Ready Graduate designation by 6-7 percentage points

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**Expected Outcomes:**

- Enhance student preparedness and access to post-secondary opportunities
- Improve culture and climate of schools

**Strategy: Expand access to College, Career, and Technical Education Programs of study.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Increase the percentage of students meeting the criteria for Ready Graduate designation by 6-7 percentage points

**Expected Outcomes:**

- Enhance student preparedness and access to post-secondary opportunities
- Improve culture and climate of schools

**Strategy: Expand Internship and Apprenticeship opportunities for students.**

**Performance Metrics**

By the end of school year 2022 – 2023, the district will:

- Increase the percent of students participating in Internship and Apprenticeship opportunities by 6-7 percentage points
- By September 1, 2023, the district will increase the overall percent of MSCS High schools offering Work-Based Learning programs to 85%

**Expected Outcomes:**

- Enhance student preparedness for and access to post-secondary opportunities

**Strategy: Align MSCS College, Career and Technical Education programs of study with local workforce needs.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Increase the number of MSCS Signature Partnerships by 30 percentage points
- Increase the number of pipelines MSCS Partnerships by 10 percentage points
- Increase the number of MSCS Graduates transitioning into post-secondary opportunities by 6-7 percentage points

**Expected Outcomes:**

- Enhance student preparedness for and access to post-secondary opportunities

**Strategy: Create a pipeline program to develop highly qualified educators for MSCS vacancies.**

**Performance Metrics**

By the end of the school year 2022–2023, the district will:

- Increase the number of students enrolled in the Teaching as a Profession program 25% by September 1, 2023

**Expected Outcome:**

- Enhance student preparedness for and access to post-secondary opportunities

**Strategy: Expand the Foreign Language program by developing students into well-rounded citizens that are linguistically and culturally competent, successful, and who exhibit the ability to compete in a global economy (Language Expansion).**

**Performance Metrics**

- By 2022-23, the number of elementary schools (30) will be prepared to offer the world language program for Pre-K Students will grow from 5 to 35
- By 2022-23, all elementary schools offering world language programs (30) will be paired with a partner school and have a weekly schedule for assigned teachers
- By 2023-24, all elementary schools offering world language programs (30) have a Flex program for grades K-2

**Expected Outcomes:**

- Increase the number of students speaking two languages
- Increase the number of students linguistically and culturally competent

**Theatre and Performing Arts Expansion**

**Strategy: Expand the Theatre and Visual Arts program by implementing successful afterschool opportunities at pilot schools, in addition to itinerant staffing models to enrich teaching strategies with Arts Integration and expanding engagement with cultural community arts opportunities.**

**Performance Metrics**

By the end of the 2022-2023 school year, the district will:

- Increase the number of students enrolled in Dance Education (ES, MS, HS)
- Increase the number of students enrolled in Theater (HS)
- Increase the number of students enrolled in Instrumental Music (MS and HS) by 20%
- Increase number of MSCS schools that offer the Elementary Dance Pilot
- Increase number of MSCS schools that participate in Arts Integration Pilot
- Beginning in 2024-25, 100% of students in Arts Integration Pilot attend a minimum of one extracurricular experience with a cultural institution/arts agency

**Expected Outcomes:**

- Increase student enrollment in performing arts courses and opportunities
- Expand quality offerings at pilot schools
- Increase student access to dance and theatre classes and programs
- Improve school culture and climate

**Elementary to Middle and Middle to High School Transition Program**

**Strategy: Implement a transition program to springboard them into the next grade and to prepare them for successful performance in middle school and high school.**

**Performance Metrics**

By the end of the 2022-2023 school year, the district will:

- No more than a 15% discipline referral rate for 6<sup>th</sup> and 9<sup>th</sup> grade students participating in the transition program
- Increase attendance rate by 5% of 6<sup>th</sup> and 9<sup>th</sup> grade students participating in the transition program

**Expected Outcomes:**

- Increase attendance with 6<sup>th</sup> and 9<sup>th</sup> grade students
- Decrease referral rates of 6<sup>th</sup> and 9<sup>th</sup> grade students

**Expand Social-Emotional Learning & Attendance Supports**

**Strategy: Increase support for homeless students and those with adverse childhood experiences.**

**Performance Metrics**

By the end of the 2022-2023 school year, the district will:

- Increase the percent of homeless students served by homeless liaison by 5%
- Increase the academic achievement scores of homeless students in ELA and Math by 6-7%
- Increase the attendance rates for homeless students by 5%

**Expected Outcomes:**

- Increase the percent of homeless students served by Homeless Liaisons and create safe spaces for students

**Strategy: Provide additional support in improving attendance and truancy rates, as well as improving culture and climate (discipline, registration, truancy).**

**Performance Metrics**

By the end of the 2022-2023 school year, the district will:

- Increase in the use of progressive disciplinary practices (Re-Set Room, Counseling, etc.) to reduce the number of suspensions by 3%-5% in schools with Reset Classrooms and behavior specialists
- Increase in documented SART teams in PowerSchool by 5%

**Expected Outcomes:**

- Improve culture and climate of schools
- Increase attendance rates and attendance accuracy

**Strategy: Expand Social-Emotional Learning to include Re-set rooms, evening mental health centers, universal screening for all students, additional behavior specialists, and additional support for students with adverse childhood experiences.**

**Performance Metrics**

By the end of the 2022-2023 school year, the district will:

- Increase in use of progressive disciplinary practices and supports (Re-Set Room, Counseling, etc.)
- Reduce out-of-school suspensions in schools with Reset Rooms by 3%; 5% reduction for schools with both Reset Rooms and behavior specialists
- Increase in culture and climate scores on relevant sections of the Panorama/Insight Surveys
- Increase 5% in Tier 2 and Tier 3 behavior supports provided to students (restorative circles, behavior intervention plans, etc.)
- Increase in student attendance
- Decrease in the number of student discipline incidents

**Expected Outcomes:**

- Improve culture and climate of schools
- Create safe spaces for students and adults



- Increase attendance rates and attendance accuracy

## Community Engagement Supports

**Strategy: Provide academic and non-academic wraparound services to support students and families in under-resourced communities aiming to become a one-stop shop for students and families.**

### Performance Metrics

By the end of school year 2022-2023, the district will:

- Increase the frequency of usage of Resource Centers and total number of families serviced annually by 20%
- Increase to and maintain 90% community confidence
- Increase attendance/participation in family engagement programming by 10%
- Increase availability of family support services delivered to non-English speaking families
- Increase service patterns and referrals to partner agencies for student and family case management for English learners by 10%
- Increase numbers and types of referrals to wraparound service agencies (e.g., adult education, employment/job readiness, housing, and utility assistance)
- Increase the distribution of clothing (e.g., uniforms, winter wear) and necessities (e.g., toiletries, school supplies)
- Increase homework help and tutorial service participation among targeted students by 10%

### Expected Outcomes:

- Establish welcoming spaces that can be utilized by a mixture of diverse families and community members
- Provide services that are grounded in a strengths-based approach, are culturally sensitive and, when possible, linguistically competent, or offered in languages that reflect the families and communities being served
- Establish centers as integral parts of the community — serving as a link between families, schools, service partners, and the community — and sustain strong partnerships with a variety of other community-based providers, leaders, and key stakeholders in order to adequately address local needs

## Community Engagement Supports: Student Recruitment/Student decline due to the Pandemic

**Strategy: Build a strategic focus on challenges and solutions for recruiting new students, retaining current students, and reclaiming students who have been lost to other educational service providers.**

### Performance Metrics

By the end of school year 2022-2023, the district will:

- Utilize Student Recruitment Coordinators at each school site to implement/develop unique and customized recruit and retain action plan within the school community with at least 5 different touch points with parents to implement the strategies for the 22-23 school year
- Deploy Student Recruitment Ambassadors at each school site (100%) to raise internal and external awareness of their school's environment and programming options
- Implement a digital marketing campaign targeting electronic methods for city and county-wide saturation to display positive imagery showcasing MSCS students, families, and alumni to increase awareness of the benefits of attending Memphis-Shelby County Schools
- Utilize program leads such as optional, arts, CTE, athletics, and school-based contacts to assist with district-wide recruit, retain, and reclaim strategies

- Create data jackets and trend reports for feeder pattern schools to better determine matriculation patterns for individual schools and monitor withdrawal data to identify and target district “hotspots” for immediate intervention

**Expected Outcomes:**

- Increase student enrollment percentages
- Increase visibility of MSCS as a premier school district through varied marketing mediums
- Decrease student withdrawals to other educational providers

**English Language Instruction**

**Strategy: Expand English Language Development instruction, ESL Summer School and before and after tutoring utilizing programs to address learning loss and assist students in being successful in the classroom and gain language proficiency.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Reduce the number of quarter/course failures at least by 10%
- Achieve a median typical growth score of 120% from Fall to Spring on the iReady diagnostic
- Increase percentage of students that are showing growth on universal screener by 6-7% and WIDA Model Benchmarking WIDA ACCESS by 6-7%
- Achieve at least Level 4 TVAAS on English Language Arts TCAP assessment
- Increase in the percentage of students achieving Met and Exceeded performance on English Language Arts TCAP assessments by at least 6-7%
- Increase the percentage of students achieving Met and Exceeded performance across subgroups by at least 6-7 percentage points

**Expected Outcomes:**

- Improve academic grade level performance for ELs Improved English proficiency growth through proficiency

**Strategy: Expand the ability to communicate with parents of English Learners by increasing translation services.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Increase percentage of students meeting growth standard to at least 35%
- Increase family engagement to 90% of EL families contacted in their native language to participate in school/district activities

**Expected Outcomes:**

- Improve parent engagement and participation at schools with the assistance of a translation service to discuss academic/proficiency progress and provide an opportunity to engage in communication with district staff

**Strategy: Provide additional ELL staff to increase academic performance of English Learners.**

**Performance Metrics**

By the end of school year 2022-2023, the district will:

- Reduce the number of quarter/course failures at least by 10%
- Achieve a median typical growth score of 120% from Fall to Spring on the iReady diagnostic

- 
- Increase percentage of students that are showing growth on universal screener by 6-7% and WIDA Model Benchmarking WIDA ACCESS by 6-7%
  - Achieve at least Level 4 TVAAS on English Language Arts TCAP assessment
  - Increase in the percentage of students achieving Met and Exceeded performance on English Language Arts TCAP assessments by at least 6-7 percentage points
  - Increase the percentage of students achieving Met and Exceeded performance across subgroups by at least 6-7 percentage points

**Expected Outcomes:**

- Improve academic grade level performance for ELs Improved English proficiency growth through proficiency

# Accountability

As the strategies are implemented, accountability will move to the next level. Memphis-Shelby County School leaders will engage school and district-level staff in building a districtwide culture of inquiry that values the use of data for sound decision-making. MSCS will engage in discovering the power of data for promoting student growth and achievement. Data-driven decision-making will be based on gathering data to understand if a school or district is meeting its purpose and vision. Data will be reviewed in quarterly STAT meetings, Stock Take meetings, and the ongoing review of dashboards.

The following data meetings will be held across the district to ensure that all are held accountable for student learning:

- The Executive Leadership Team will utilize the Superintendent's Academic Leadership Team (SALT) meeting forum as an opportunity to examine instructional data to understand who's succeeding in MSCS, who's not, and why.
- Chief of Staff will utilize the stat sessions with Cabinet Leaders each week to discuss the top ten strategies to ensure that we have Return on Investment with key strategies.
- Chief of Finance will update the Superintendent and board monthly using the structure of the Audit/Finance meeting to discuss key strategies associated with ESSER.
- The Deputy Superintendent along with the Chief Academic Officer, Assistant Superintendents, and the Executive Director of Accountability will review data and action steps in quarterly STAT Meetings, as well as conduct school walks.
- ILDs and principals will participate monthly in "Data Week" to review school wide data.

## Examples of Data Dashboards in the District:



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## Academic Framework Glossary

<b>Academic Achievement</b>	Performance is the extent to which a student, teacher or institution has achieved their short or long-term educational goals.
<b>Academics</b>	Relating to, or associated with an academy or school especially of higher learning
<b>Achievement Gap</b>	Refers to any significant and persistent disparity in academic performance or educational attainment between different groups of students
<b>ACT Preparation</b>	An educational course, tutoring service, educational material, or a learning tool designed to increase students' performance on standardized tests such as the American College Testing (ACT)
<b>Additional Targeted Support and Improvement (ATSI) Schools</b>	A subset of TSI schools that require additional targeted support because of significant low-performing subgroups
<b>Adult-Student Ratios</b>	The number of students for every adult or teacher in an educational setting. Ex: 10:1 indicates that there are 10 students for every one teacher
<b>Advanced Placement (AP) Credit</b>	Allows students to take college-level courses and the related Advanced Placement (AP) exam, to potentially earn college credit while still in high school
<b>Adverse Childhood Experiences (ACEs)</b>	Potentially traumatic events that occur in childhood
<b>Apprenticeship</b>	Work-based learning programs in which industry professionals and educational institutions partner to align on-the-job training with curriculum and instruction
<b>Aspiring Teacher Program</b>	A program that was developed and designed for current educators who desire to complete their licensure requirements to become a full-time teacher
<b>Beliefs</b>	An acceptance that a statement is true or that something exists
<b>BHNA</b>	Black, Hispanic, and Native American
<b>Blended Learning</b>	The practice of using both online and in-person learning experiences when teaching students
<b>Building Teacher Capacity</b>	Any effort being made to improve the abilities, skills, and expertise of educators



<b>Cabinet Leaders</b>	It consists of district leaders that report directly to the superintendent and are responsible for guiding student success and building the strategic vision of Memphis-Shelby County Schools
<b>CCTE (College &amp; Career Technical Education)</b>	Provides students and adults with the academic and technical skills, knowledge and training necessary to succeed in future careers and develop skills they will use throughout their careers
<b>Central Office Pathways</b>	School immersion opportunities for central office personnel
<b>Charter Schools</b>	A public school that operates as a school of choice
<b>Chronically absenteeism</b>	Chronically absent means being absent for 10% or more of the enrolled school days in a school year, whether absenteeism is due to unexcused, excused, or disciplinary absences.
<b>Classroom Learning Strategies</b>	Strategies that represent the most fundamental skills that effective teachers use on a daily basis to build a successful classroom environment
<b>Classroom Teacher-Student Relationships</b>	The academic relation between teachers and their students
<b>Climate</b>	Refers to the quality and character of school life
<b>College and Career Readiness</b>	Students exit high school with the knowledge, skills, and dispositions needed to be successful in post-secondary education and/or training that lead to gainful employment
<b>Community Perceptions</b>	The attitudes and beliefs held about a school by members of the community with a vested interest in seeing the school succeed
<b>Community Engagement</b>	Stakeholders support, share their opinions, identify issues and collaborate on responses as part of a meaningful decision-making process
<b>Compendium</b>	A collection of concise but detailed information about a particular subject, especially in a book or other publication
<b>Continuous Improvement</b>	The process cycle of school improvement with the major components of creating the vision, gathering data related to that vision, analyzing the data, planning the work of the school to align with the vision, implementing the strategies and action steps outlined in the plan, and gathering data to measure the impact of the intervention
<b>Cornerstones</b>	An important quality or feature on which a particular thing depends or is based
<b>Critical Thinking Skills</b>	Making reasoned judgments that are logical and well-thought out
<b>Culture</b>	The beliefs, perceptions, relationships, attitudes, and written and unwritten rules that shape and influence every aspect of how a school functions

<b>Data Driven Decision Making</b>	A system of teaching and management practices that focuses on students' day-to-day learning and overall achievement
<b>Decode</b>	The ability to apply your knowledge of letter-sound relationships, including knowledge of letter patterns, to correctly pronounce written words
<b>Differentiation</b>	Tailoring instruction to meet individual needs
<b>Directed Teaching Model</b>	A model to teach students that focuses on carefully planned and well-developed lessons created around clearly explained teaching tasks and small learning increments
<b>Disparities</b>	A difference in level or treatment, especially one that is seen as unfair
<b>Diversity</b>	Recognizes the differences between people and includes different factors, such as religion, political orientation, sexual orientation, gender identity, age, race, ethnicity, language, socio-economic status, and family structure
<b>Domain specific academic vocabulary</b>	Words that are used across all content areas
<b>Dual Credit (DC)</b>	Programs allow secondary students to earn college credit for courses taken while they are in high school
<b>Dual Enrollment (DE)</b>	Dual enrollment refers to students being enrolled—concurrently—in two distinct academic programs at the same time
<b>Early Literacy</b>	A child's knowledge of reading and writing before they actually learn to read and write
<b>Economically Disadvantage (ED)</b>	A student whose household income is below average, which in turn the student(s) qualifies for specified resources, such as free/reduced lunch
<b>Edgenuity</b>	A standards-based online learning resource for school districts produced by Imagine Learning, which teaches kindergarten through 12th-grade in core, elective, credit recovery, technical, and career subjects, through both remedial and accelerated work
<b>Educational Advisors</b>	Delivers at a high level of competency in maintaining standards of excellence in an assigned curricular area, so that students may derive the greatest academic and personal benefit for the learning experience
<b>ELlevation</b>	Web-based software platform is designed to make EL administrators and educators more productive, collaborative, and effective
<b>English Learner (EL)</b>	A student who is in the process of acquiring English proficiency and has a first language other than English or in addition to English
<b>Entrench</b>	To take over something unfairly, improperly or unlawfully

<b>Equity</b>	Providing all students with the opportunity with equal access to support and resources in order to be successful
<b>ESSA (Every Student Succeeds Act)</b>	A federal K-12 education law of the United States. ESSA was signed into law in 2015 and replaced the previous education law called “No Child Left Behind” requires every state to develop a concise and easily understandable “State Report Card” that is accessible online and provides parents important information on test performance in reading, math, and science
<b>Evaluation</b>	A systematic process of determining to what extent instructional objectives have been achieved
<b>FLVS (Florida Virtual School)</b>	A self-paced online curriculum designed for student engagement and achievement that allows students to master key concepts
<b>Formative Assessments</b>	A planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary learning outcomes and supports students to become self-directed learners
<b>Foundational Tools of Literacy</b>	Represents the foundation of skills, experiences, and instructional practices that prepare students for reading proficiency and—as a result—for later academic and life success
<b>General vocabulary</b>	Vocabulary that occurs frequently in all kinds of texts and everyday language
<b>ILDs (Instructional Leadership Director)</b>	An instructional leader who supervises, supports, and develops principals to set and attain high level of student achievement
<b>ILPs (Individual Learning Plan)</b>	Outlines services for English language learners; intended to be living documents that reflect a student's current progress, goals, and needs
<b>Immerse learning</b>	Learning refers to any education approach that teaches by placing a student directly in an environment
<b>Inclusion</b>	Involves supporting students with disabilities through individual learning goals, accommodations, and modifications so that they are able to access the general education curriculum (in the general education classroom) and be held to the same high expectations as their peers
<b>Initiatives</b>	Programs, services, facilities, and learning communities that support the academic needs and goals
<b>Instructional Culture Insight Survey</b>	A tool to collect and aggregate teacher feedback to help principals set priorities around instructional culture
<b>Instructional Planning</b>	Planning that includes what students will learn and how they will learn it
<b>Instructional Advisors</b>	Delivers at a high level of competency in maintaining standards of excellence in the assigned curricular areas such as Social Studies, Math, Science, World Language, Fine

	Arts or ELA, so that students may derive the greatest academic and personal benefit for the learning experience
<b>Instructional Innovation</b>	New processes, products, or approaches to learning experience design, delivery, or assessment
<b>Instructional Practices</b>	How information is delivered by teachers, received, and experienced by students; The four instructional practices are: Performance Based Objective, Academic Vocabulary, Gradual Release, and Writing
<b>Instructional Walk-through</b>	A brief, structured, non-evaluative classroom observation by the principal that is followed by a conversation between the principal and the teacher about what was observed
<b>Internship</b>	A form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional or community setting
<b>Intervention</b>	The use of a specific program or set of steps to target an academic need
<b>iReady</b>	An online assessment and instruction that helps teachers provide all students a path to proficiency and growth in reading and mathematics
<b>iStation</b>	A computer-adaptive diagnostic and screening assessment for reading, math, and Spanish literacy that is designed to support instructional decision-making, increase engagement, and improve educational outcomes
<b>Key Performance Indicators (KPIs)</b>	A type of performance indicators that help you understand how your organization or department is performing and allows you to understand if the organization is headed in the right direction
<b>Kindergarten Readiness</b>	What a student should know and be able to do when they start school
<b>Learning Strategies</b>	Are operations and actions that students use in order to optimize the processes of obtaining and storing information and course concepts
<b>Lexile level</b>	Method used by schools to measure a student reader's ability
<b>Literacy</b>	The ability to read and write
<b>Literacy enriched environments</b>	Demonstrates how literacy is useful in everyday life by allowing children to interact with print/texts independently and with educators
<b>Literacy Laureates</b>	Each elementary and K-8 school has a designated Foundational Literacy Laureate (FLL) who coaches, supports, and guides their K-2 colleagues in best practices for early literacy instruction.

<b>Literacy Rich Environment</b>	A print-rich environment that supports all four domains of language: reading, writing, speaking and listening
<b>Median Score</b>	The number which appears in the center of a set of numbers when they are placed in numerical order
<b>Metrics</b>	Tools designed to facilitate decision-making and improve performance and accountability through collection, analysis, and reporting of relevant performance-related data
<b>Multi-tiered professional development</b>	A framework used to give targeted support to teachers and school leaders
<b>Naviance</b>	A college and career readiness platform that helps students connect academic achievement to post-secondary goals and success
<b>Organizational Leadership</b>	A management approach in which leaders help set strategic goals for the organization while motivating individuals within the group to successfully carry out assignments in service to those goals
<b>Panorama Survey</b>	A survey instrument that elevates student voice on school climate, teaching and learning, relationships, and belonging
<b>Pedagogical Effectiveness</b>	Refers to a student-centered teaching and learning (SCL) approach where educators are reflective in their theory, practice and policy implementation in teaching/learning, resulting to positive impacts in the learners
<b>Pedagogical model</b>	Describes what effective teachers do in their classrooms to engage students in intellectually challenging work. It provides an overview of the learning cycle and breaks it down into five domains or phases of instruction: Engage, Explore, Explain, Elaborate and Evaluate
<b>Peer Culture</b>	A stable set of activities or routines, artifacts, values, and concerns that children and youth produce and share with peers
<b>Performance management</b>	The process which links people and jobs to the strategy and objectives of the organization
<b>Performance metric</b>	Figures and data representative of an organization's action and abilities, and overall quality
<b>Phonemic Awareness</b>	The ability to identify and manipulate individual sounds (phonemes) in spoken words
<b>Phonological Awareness</b>	The awareness of and ability to work with sounds in spoken language, sets the stage for decoding, blending, and, ultimately, word reading
<b>Post-secondary opportunities</b>	Includes education and training by institutions of higher education (two- and four-year colleges and universities), as well as other career training and technical education programs



<b>Principal Pipeline</b>	A districtwide strategy to develop a large, ongoing supply of effective school leaders
<b>Professional Development</b>	The set of tools, resources, and training sessions for educators to improve their teaching quality and effectiveness
<b>Proficiency</b>	A learner has demonstrated competence in relation to knowledge and/or a set of skills related to identified standards
<b>Progressive Discipline</b>	A method of discipline that uses graduated steps for dealing with problems related to a student's conduct or performance that do not meet clearly defined standards and policies
<b>Project Graduation</b>	A non-traditional academic program designed to meet the educational, social, and behavioral needs of students; PG offers credit recovery and accelerated graduation and earn core content and elective credits in the evening
<b>Proximity</b>	A comprehensive e-learning program designed to build foundational skills through intervention and instruction.
<b>Quartiles</b>	The values that divide an ordered data set into four (approximately) equal parts
<b>Reading &amp; math prescriptions</b>	A guide that provides teachers with standards alignment and pacing in reading and math
<b>Reading Horizons</b>	Reading Horizons develops a phonics based, English reading program for individuals, schools, and institutions throughout the United States, and the world
<b>Response to Instruction and Intervention for Behavior (RTI2-B)</b>	RTI2-B helps schools create a positive culture for students and staff with the goal of improving academic and behavioral outcomes for ALL students
<b>Response To Intervention (RTI)</b>	A multi-tier approach to the early identification and support of students with learning academic and behavior needs
<b>Rigorous</b>	A term used by educators to describe instruction, schoolwork, learning experiences, and educational expectations that are academically, intellectually, and personally challenging
<b>SALT</b>	A group of district leaders, administrators, directors, and other district personnel who review and make important governance decisions regarding the district to support and improve the overall needs of the district initiatives and student achievement
<b>School Leadership</b>	Leadership is a process of influence leading to the achievement of desired purposes
<b>School Walk-Throughs</b>	A formal or informal observation used to analyze teacher performance and give them actionable feedback on their teaching strategies
<b>Scope and Sequence</b>	A term used to identify the amount of content an educator will teach for participants (Scope) and the order in which they teach the selected content (Sequence)

<b>Senior Reading Advisor</b>	Senior Reading Advisors (SRA) are a cohort of select middle and high school teachers who have been strategically placed in seventeen high need schools to deliver daily high-quality, direct instruction to select middle and high school students who demonstrate severe deficits in literacy.
<b>Skills based instruction</b>	Students are taught a specific skill
<b>Small Group Instruction</b>	When you teach the students in small groups ranging from 2-6 students
<b>SMARTIE Goal</b>	A goal that is strategic, measurable, ambitious, realistic, time-bound, inclusive, and equitable
<b>Social-Emotional Learning</b>	SEL helps learners develop skills, attitudes, and knowledge to identify and regulate emotions, cultivate positive relationships, and make responsible decisions
<b>Socioeconomic</b>	Encompasses not just income but also educational attainment, financial security, and subjective perceptions of social status and social class
<b>Specialized Education Assistants</b>	Classroom teacher assistants whose primary role is to assist teachers in closing the literacy gaps in grades K-2 by focusing on basic early literacy skills
<b>Stakeholders</b>	Refers to anyone who is invested in the welfare and success of a school and its students, including administrators, teachers, staff members, students, parents, families, community members, local business leaders, and elected officials such as school board members, city councilors, and state representatives
<b>Standards based instruction</b>	A process for planning, delivering, monitoring and improving academic programs in which clearly defined academic content standards provide the basis for content in instruction and assessment
<b>STAT Meetings</b>	A meeting that is held for reviewing the progress of any project or program
<b>Strategic Initiative</b>	A strategic initiative is designed to solve this problem; instead of declaring a general goal or desire, the strategic initiative has a very specific goal that is constrained by well-defined parameters
<b>Strategies</b>	A teaching practice that shows students how to learn the content or skills they need to acquire
<b>Student Achievement</b>	The measurement of a student's overall academic achievement and learning over a particular period of time
<b>Student Engagement</b>	The degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education
<b>Student Survey</b>	A method of gathering, processing, and evaluating your students' opinions about the school's educational practices

<b>Subgroups</b>	A subordinate group whose members usually share some common differential quality
<b>Summer Learning Academy</b>	Provides additional reading and math instruction as well as intervention and physical activity during the summer months
<b>Suspension Rate</b>	The number of students who have received one or more suspensions divided by the number of students enrolled at any time during the school year
<b>Teacher Recruitment</b>	The process by which a district/school ensures that it has the largest and strongest pool of qualified applicants for a position
<b>Teacher Retention</b>	Relates to the goal of keeping staff in the workplace and reducing employee turnover
<b>Third (3rd) Grade Commitment</b>	A collaborative effort between schools, parents and community towards ensuring we all work together to best help MSCS students reach reading readiness before the third grade
<b>Transformational Models</b>	The framework we use to help leaders understand their organizations and also guide a successful redesign
<b>Transformative Professional Development</b>	Assures that all educators can benefit from professional learning although they may approach it with different levels of skill and understanding
<b>TVAAS (Tennessee Value Added Assessment System)</b>	The Tennessee Value-Added Assessment System (TVAAS) measures the impact schools and teachers have on their students' academic progress.
<b>Universal Screening</b>	The process of collecting valid and reliable data multiple times a year with all students
<b>Values</b>	The regard that something is held to deserve; the importance, worth, or usefulness of something
<b>Virtual Education and Logistics</b>	A method of teaching that is taught either entirely online or when elements of face-to-face courses are taught online through learning management systems and other educational tools and platforms
<b>Vision</b>	Provides a vivid picture of the school's values and objectives
<b>WIDA (World Class Instructional Design &amp; Assessment)</b>	Develops and provides proven tools and support to help multilingual learners, and their educators, succeed
<b>Wraparound Supports</b>	Supports necessary to achieve the desired outcome that are developed through a team approach

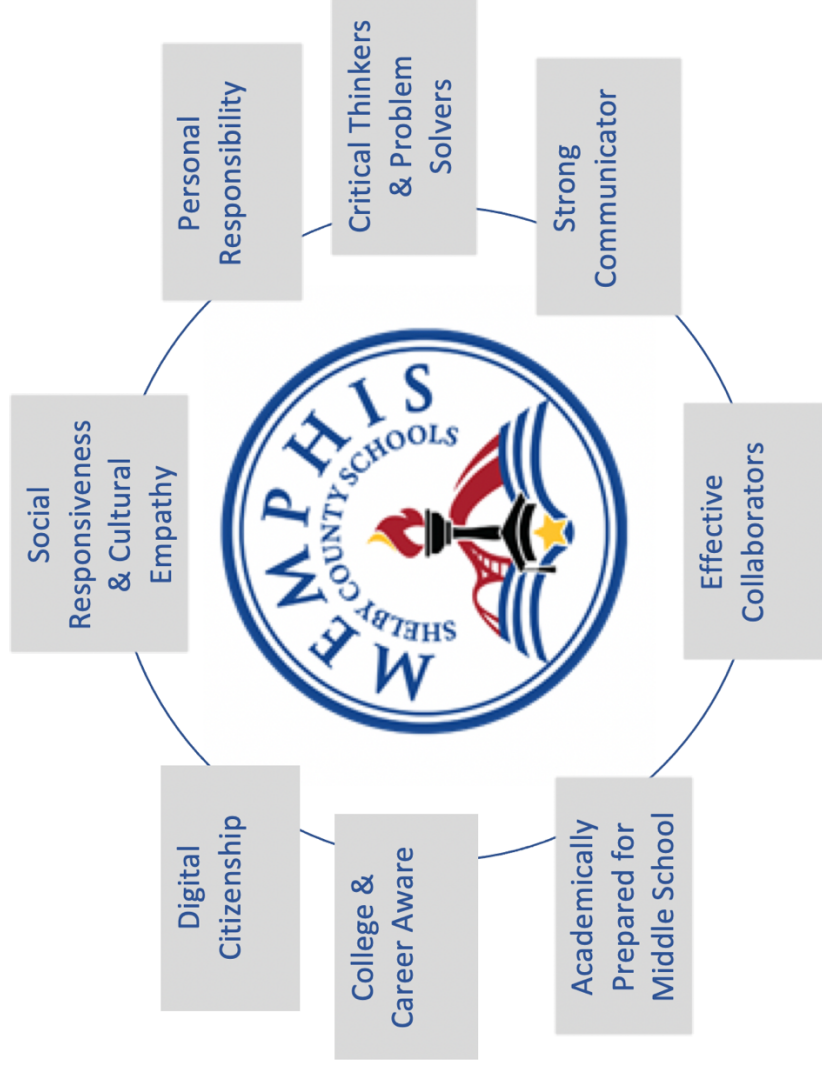


A photograph of a library bookshelf filled with books. In the foreground, the silhouette of a student is visible, looking towards the books. The image is overlaid with a blue curved shape in the top-left corner and a red curved shape in the bottom-left corner. The title 'PORTRAIT OF A STUDENT' is centered over the bookshelf.

# PORTRAIT OF A STUDENT



## Memphis Shelby County Schools Portrait of An Elementary School Graduate



### Social Empathy & Cultural Responsiveness

- Empathetic listener
- Developing self-awareness that enables students to understand themselves as well as the perspective of others
- Ability to understand how someone else feels
- Ability to define culture and describe cultural practices
- Ability to differentiate their culture from the culture of their peers without making judgments on cultures that are different from their own
- Ability to acknowledge differences while remaining inclusive in activities and social groups

### Personal Responsibility

- Demonstrates honesty and trust worthiness
- Able to self-manage behaviors and reactions
- Developing self-awareness and self-discipline
- Ability to acknowledge past infractions while exhibiting growth in similar situations in the future
- Demonstrates an understanding of personal accountability

### Critical Thinkers & Problem Solvers

- Demonstrates reasoning to solve problems
- Demonstrate the ability to interpret and analyze information
- Demonstrates the ability to develop an argument or claim in a supportive manner without arguing
- Uses a wide range of creative solutions to solve problems

### Strong Communicators

- Listens for understanding
- Can communicate ideas and thoughts verbally and in writing
- Uses accountable talk to participate in conversations in a meaningful and productive way without negative discourse

### Effective Collaborators

- Can collaborate with others to discuss and solve problems in a productive manner
- Demonstrates ability to collaborate with others without creating an uncomfortable learning environment amongst peers

### Academically Prepared for Middle School

- Demonstrates mastery of grade level standards across content areas
- Understands the importance of being prepared for class in terms of work and attitude
- Participates in 5<sup>th</sup> grade academic enrichment courses as eligible
- Participates in organizations and programs that enhance knowledge and encourage growth in academic areas

### College & Career Aware

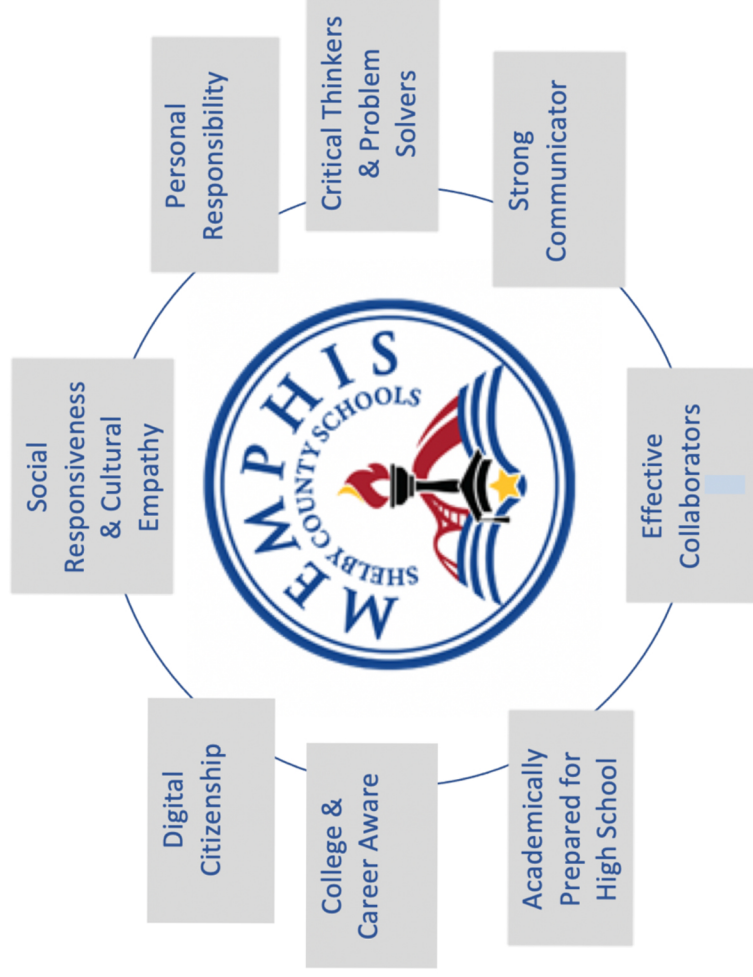
- Explores a variety of careers
- Have knowledge of personal interests and nonpreferred activities
- Have knowledge of multiple careers

### Digital Citizenship

- Demonstrates an understanding of how to appropriately care for and use technology
- Uses technology appropriately to complete academic tasks
- Maintaining safe practices while utilizing technology responsibly
- Stays focused while using technology (staying on appropriate websites, handling the task at hand)



## Memphis Shelby County Schools Portrait of A Middle School Graduate



### Social & Cultural Empathy

- Appreciation and consideration of the differences and similarities of another's cultural or social beliefs in comparison to one's own
- Possesses self-awareness that enables understanding with themselves, and the perspectives of others
- Active listener who understands diverse perspectives, needs, and situations

### Personal Responsibility

- Demonstrates personal integrity, honesty, and ethical behavior
- Able to self-manage behaviors and reactions in challenging or difficult situations
- Demonstrates self-awareness and self-discipline

### Critical Thinkers & Problem Solvers

- Asks questions to gain needed information
- Demonstrates reasoning when solving problems
- Gathers, interprets, analyzes, and evaluates evidence, arguments, and claims
- Uses a wide range of creative techniques, skills, and solutions to solve problems

### Strong Communicators

- Listens for understanding
- Effectively articulates ideas and thoughts through verbal and written communication
- Can communicate through a variety of mediums effectively
- Uses accountable talk to effectively participate in conversations where they agree or disagree with others, ask questions, share opinions, or discuss a specific point in a meaningful way.

### Effective Collaborators

- Can effectively collaborate with others to solve problems, create solutions, and facilitate new outcomes

### Academically Prepared for High School

- Demonstrates mastery of grade level standards across content areas
- Understands academic responsibility and how academic choices shape future options and success
- Participates in honors courses, high school coursework, and World Languages options as eligible

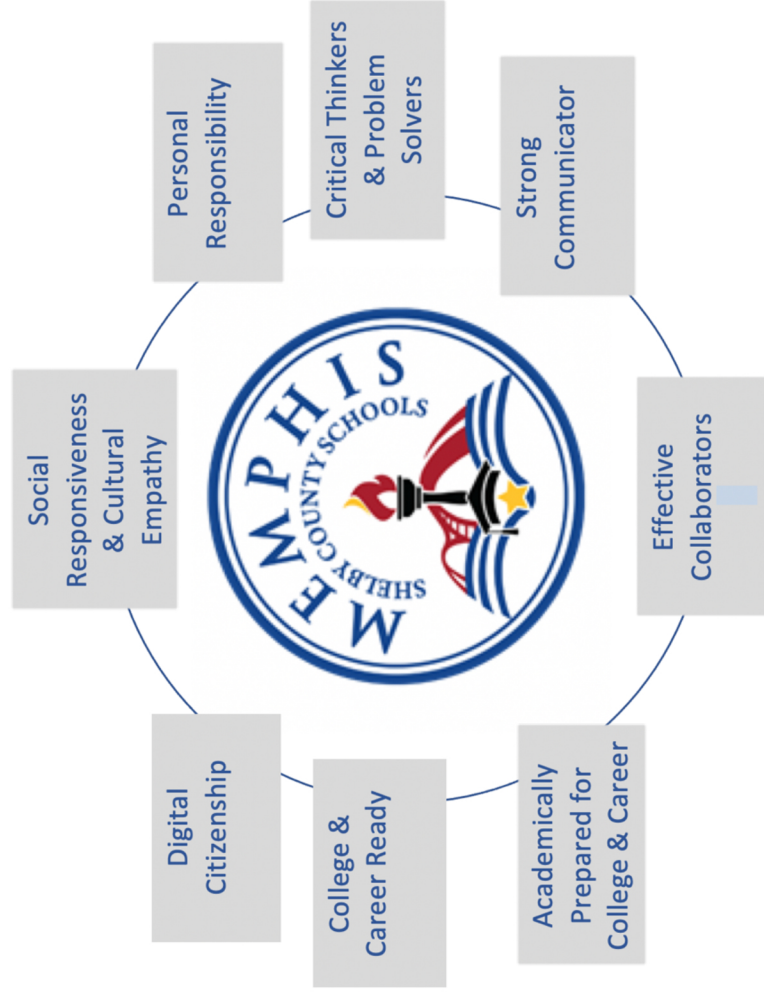
### College & Career Aware

- Participates in the creation and completion of a Four-Year Plan with the guidance counselor
- Participates in career interest inventories and/or career exploration courses

### Digital Citizenship

- Uses technology tools effectively and efficiently to complete tasks (research; create products; use applications)
- Demonstrates an understanding and adherence to district acceptable use policies

## Memphis Shelby County Schools Portrait of A High School Graduate



### Social & Cultural Empathy

- Active listener who understands, is responsive to, and appreciates diverse perspectives, needs, and situations
- Possesses self-awareness that enables understanding with themselves, and the perspectives and viewpoints of others
- Appreciation and consideration of the differences and similarities of another's cultural or social beliefs in comparison to one's own

### Personal Responsibility

- Demonstrates and practices honesty, personal integrity, and ethical behavior
- Able to self-manage and regulate behaviors and reactions in challenging or difficult situations
- Demonstrates and practices self-awareness and self-discipline
- Ability to reflect on past behaviors, accept responsibility for poor choices, and proactively make better decisions in the future.

### Critical Thinkers & Problem Solvers

- Asks targeted questions to obtain necessary information
- Demonstrates and applies sound reasoning when analyzing and solving problems
- Effectively gathers, interprets, analyzes, and evaluates evidence, arguments, and claims to support a position or decision without negative discourse
- Uses a wide range of creative techniques, skills, and solutions to solve problems and develop solutions

### Strong Communicators

- Actively listens for understanding and asks clarifying questions
- Effectively articulates ideas and thoughts through verbal, written, and visual communication
- Can effectively communicate through a variety of mediums effectively utilizing various techniques depending upon the situation, audience, and need
- Uses accountable talk to effectively participate in conversations where they agree or disagree with others, ask questions, share opinions, or discuss a specific point in a meaningful way to develop new understandings for themselves or others

### Effective Collaborators

- Can effectively collaborate with others to solve problems, create solutions, and facilitate new outcomes that are both effective and agreed upon by the participating parties

### Academically Prepared for College & Career

- Demonstrates mastery of grade level standards across content areas
- Understands academic responsibility and how academic choices shape college and career options
- Participates in honors courses, AP coursework, and IB options as eligible

### College & Career Ready

- Executes the successful completion of a Four-Year Plan
- Participates in career interest inventories and/or career exploration courses
- Participates in internship opportunities when available
- Creates and develops a plan to pursue goals related to career ambitions
- Understands the employability skills needed to secure and maintain an entry level position in a career field of interest
- Understands the basic steps of completing a job search related to long-term career goals and planning

### Digital Citizenship

- Uses technology tools effectively and efficiently to complete tasks and present information (research, create products, use applications)
- Demonstrates an understanding and adherence to district acceptable use policies without violations



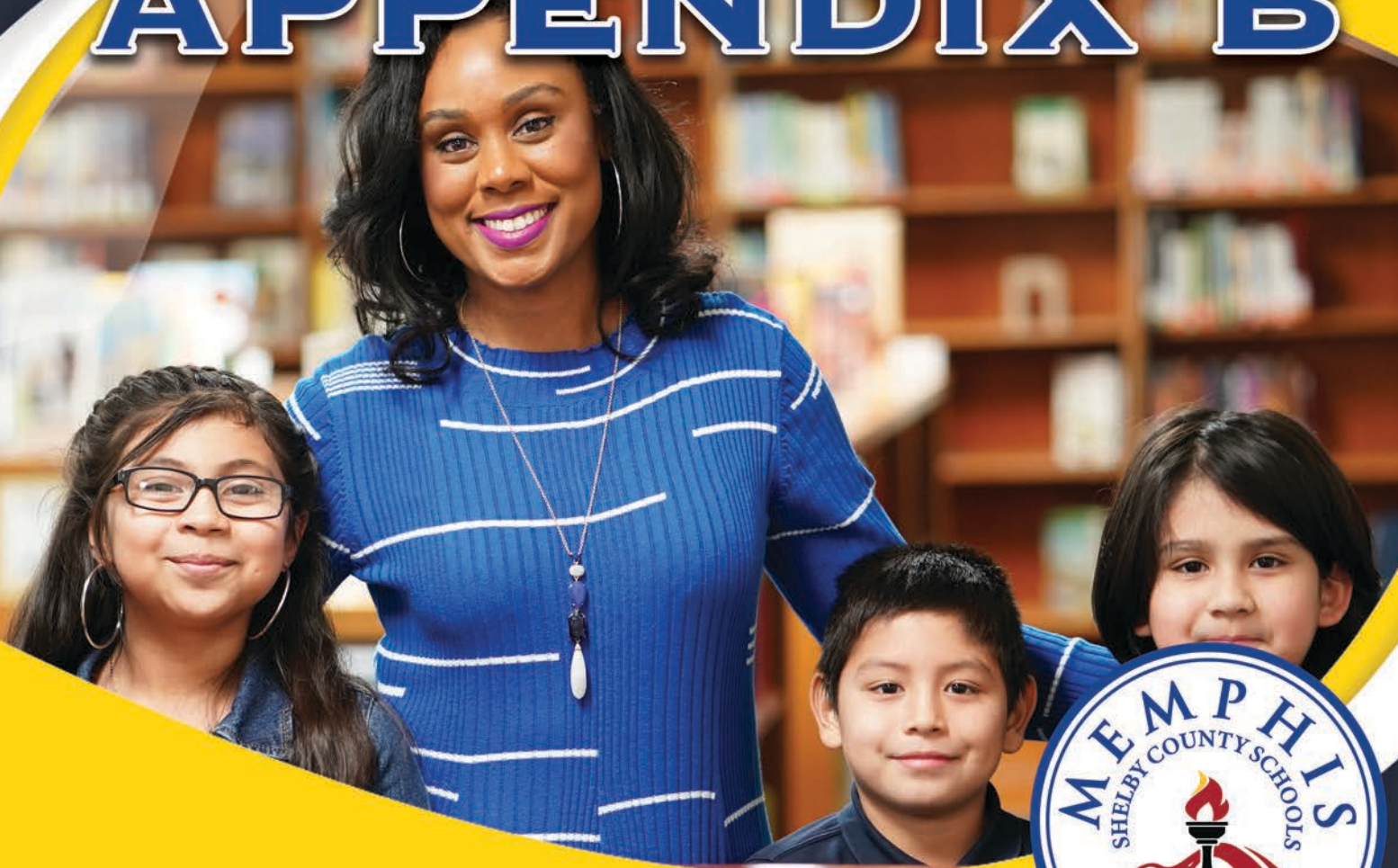
Elementary	Middle	High
<p><b>Social Empathy &amp; Cultural Responsiveness</b></p> <ul style="list-style-type: none"> <li>• Empathetic listener</li> <li>• Developing self-awareness that enables students to understand themselves as well as the perspective of others</li> <li>• Ability to understand how someone else feels</li> <li>• Ability to define culture and describe cultural practices</li> <li>• Ability to differentiate their culture from the culture of their peers without making judgments on cultures that are different from their own</li> <li>• Ability to acknowledge differences while remaining inclusive in activities and social groups</li> </ul>	<p><b>Social Empathy &amp; Cultural Responsiveness</b></p> <ul style="list-style-type: none"> <li>• Active listener who understands diverse perspectives, needs, and situations</li> <li>• Possesses self-awareness that enables understanding with themselves, and the perspectives of others</li> <li>• Appreciation of the differences and similarities of another's cultural or social beliefs in comparison to one's own</li> </ul>	<p><b>Social &amp; Cultural Empathy</b></p> <ul style="list-style-type: none"> <li>• Active listener who understands, is responsive to, and appreciates diverse perspectives, needs, and situations</li> <li>• Possesses self-awareness that enables understanding with themselves, and the perspectives and viewpoints of others</li> <li>• Appreciation and consideration of the differences and similarities of another's cultural or social beliefs in comparison to one's own</li> </ul>
<p><b>Personal Responsibility</b></p> <ul style="list-style-type: none"> <li>• Demonstrates honesty and trust worthiness</li> <li>• Able to self-manage behaviors and reactions</li> <li>• Developing self-awareness and self-discipline</li> <li>• Ability to acknowledge past infractions while exhibiting growth in similar situations in the future</li> <li>• Demonstrates an understanding of personal accountability</li> </ul>	<p><b>Personal Responsibility</b></p> <ul style="list-style-type: none"> <li>• Demonstrates honesty, personal integrity, and ethical behavior</li> <li>• Able to self-manage behaviors and reactions in challenging or difficult situations</li> <li>• Demonstrates self-awareness and self-discipline</li> <li>• Ability to reflect on past behaviors and make better choices in the future</li> <li>• Understands and accepts personal accountability</li> </ul>	<p><b>Personal Responsibility</b></p> <ul style="list-style-type: none"> <li>• Demonstrates and practices honesty, personal integrity, and ethical behavior</li> <li>• Able to self-manage and regulate behaviors and reactions in challenging or difficult situations</li> <li>• Demonstrates and practices self-awareness and self-discipline</li> <li>• Ability to reflect on past behaviors, accept responsibility for poor choices, and proactively make better decisions in the future.</li> </ul>
<p><b>Critical Thinkers &amp; Problem Solvers</b></p> <ul style="list-style-type: none"> <li>• Demonstrates reasoning to solve problems</li> <li>• Demonstrate the ability to interpret and analyze information</li> </ul>	<p><b>Critical Thinkers &amp; Problem Solvers</b></p> <ul style="list-style-type: none"> <li>• Demonstrates consistent reasoning and questioning when solving problems</li> <li>• Effectively gathers, interprets, analyzes, and evaluates evidence, arguments, and claims.</li> </ul>	<p><b>Critical Thinkers &amp; Problem Solvers</b></p> <ul style="list-style-type: none"> <li>• Asks targeted questions to obtain necessary information</li> <li>• Demonstrates and applies sound reasoning when analyzing and solving problems</li> </ul>

<ul style="list-style-type: none"> <li>• Demonstrates the ability to develop an argument or claim in a supportive manner without arguing</li> <li>• Uses a wide range of creative solutions to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates the ability to support an argument or claim without arguing</li> <li>• Uses a wide range of creative techniques, skills, and solutions to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>• Effectively gathers, interprets, analyzes, and evaluates evidence, arguments, and claims to support a position or decision without negative discourse</li> <li>• Uses a wide range of creative techniques, skills, and solutions to solve problems and develop solutions</li> </ul>
<p><b>Strong Communicators</b></p> <ul style="list-style-type: none"> <li>• Listens for understanding</li> <li>• Can communicate ideas and thoughts verbally and in writing</li> <li>• Uses accountable talk to participate in conversations in a meaningful and productive way without negative discourse</li> </ul>	<p><b>Strong Communicators</b></p> <ul style="list-style-type: none"> <li>• Actively listens for understanding</li> <li>• Effectively articulates ideas and thoughts through verbal and written communication</li> <li>• Can communicate through a variety of mediums effectively</li> <li>• Uses accountable talk to effectively participate in conversations where they agree or disagree with others, ask questions, share opinions, or discuss a specific point in a meaningful way.</li> </ul>	<p><b>Strong Communicators</b></p> <ul style="list-style-type: none"> <li>• Actively listens for understanding and asks clarifying questions</li> <li>• Effectively articulates ideas and thoughts through verbal, written, and visual communication</li> <li>• Can effectively communicate through a variety of mediums effectively utilizing various techniques depending upon the situation, audience, and need</li> <li>• Uses accountable talk to effectively participate in conversations where they agree or disagree with others, ask questions, share opinions, or discuss a specific point in a meaningful way to develop new understandings for themselves or others.</li> </ul>
<p><b>Effective Collaborators</b></p> <ul style="list-style-type: none"> <li>• Can collaborate with others to discuss and solve problems in a productive manner</li> <li>• Demonstrates ability to collaborate with others without creating an uncomfortable learning environment amongst peers</li> </ul>	<p><b>Effective Collaborators</b></p> <ul style="list-style-type: none"> <li>• Can effectively collaborate with others to solve problems, create solutions, and facilitate new outcomes</li> </ul>	<p><b>Effective Collaborators</b></p> <ul style="list-style-type: none"> <li>• Can effectively collaborate with others to solve problems, create solutions, and facilitate new outcomes that are both effective and agreed upon by the participating parties</li> </ul>
<p><b>Academically Prepared for Middle School</b></p> <ul style="list-style-type: none"> <li>• Demonstrates mastery of grade level standards across content areas</li> </ul>	<p><b>Academically Prepared for High School</b></p> <ul style="list-style-type: none"> <li>• Demonstrates mastery of grade level standards across content areas</li> </ul>	<p><b>Academically Prepared for High School</b></p> <ul style="list-style-type: none"> <li>• Demonstrates mastery of grade level standards across content areas</li> </ul>



<ul style="list-style-type: none"> <li>• Understands the importance of being prepared for class in terms of work and attitude</li> <li>• Participates in 5<sup>th</sup> grade academic enrichment courses as eligible</li> <li>• Participates in organizations and programs that enhance knowledge and encourage growth in academic areas</li> </ul>	<ul style="list-style-type: none"> <li>• Understands academic responsibility and how academic choices shape future options and success</li> <li>• Participates in honors courses, high school coursework, and World Languages options as eligible</li> </ul>	<ul style="list-style-type: none"> <li>• Understands academic responsibility and how academic choices shape college and career options</li> <li>• Participates in honors courses, AP coursework, and IB options as eligible</li> </ul>
<p><b>College &amp; Career Aware</b></p> <ul style="list-style-type: none"> <li>• Explores a variety of careers</li> <li>• Have knowledge of personal interests and nonpreferred activities</li> <li>• Have knowledge of multiple careers</li> </ul>	<p><b>College &amp; Career Aware</b></p> <ul style="list-style-type: none"> <li>• Participates in the creation and completion of a Four-Year Plan with the guidance counselor</li> <li>• Participates in career interest inventories and/or career exploration courses</li> </ul>	<p><b>College &amp; Career Readiness</b></p> <ul style="list-style-type: none"> <li>• Executes the successful completion of a Four-Year Plan</li> <li>• Participates in career interest inventories and/or career exploration courses</li> <li>• Participates in internship opportunities when available</li> <li>• Creates and develops a plan to pursue goals related to career ambitions</li> <li>• Understands the employability skills needed to secure and maintain an entry level position in a career field of interest</li> <li>• Understands the basic steps of completing a job search related to long-term career goals and planning</li> </ul>
<p><b>Digital Citizenship</b></p> <ul style="list-style-type: none"> <li>• Demonstrates an understanding of how to appropriately care for and use technology</li> <li>• Uses technology appropriately to complete academic tasks</li> <li>• Maintaining safe practices while utilizing technology responsibly</li> <li>• Stays focused while using technology (staying on appropriate websites; handling the task at hand)</li> </ul>	<p><b>Digital Citizenship</b></p> <ul style="list-style-type: none"> <li>• Uses technology tools effectively and efficiently to complete tasks (research; create products; use applications)</li> <li>• Demonstrates an understanding and adherence to district acceptable use policies</li> </ul>	<p><b>Digital Citizenship</b></p> <ul style="list-style-type: none"> <li>• Uses technology tools effectively and efficiently to complete tasks and present information (research, create products, use applications)</li> <li>• Demonstrates an understanding and adherence to district acceptable use policies without violations</li> </ul>

# APPENDIX B



ESSER LITERATURE BRIEFS





# Memphis-Shelby County Schools ESSER Literature Briefs

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## Contents

Academics .....	3
Extended Summer Learning .....	3
Tutoring as an Intervention .....	7
Implementing Blended Learning in Classrooms .....	13
Reading Advisors .....	16
RTI & Intervention Materials & Platforms .....	19
Student Readiness .....	19
Social Emotional Curriculum .....	19
Class Size Reduction with Educational Assistants .....	25
College Readiness/ACT Preparation .....	31
AP Course Expansion .....	34
AgriSTEM Program Expansion .....	40
Naviance .....	43
Educators .....	48
Strategic Teacher Retention and Recruitment .....	48
Proximity Learning .....	52



## **Academics**

### **Extended Summer Learning**

*April 2021*

*Author: Hannah L. Pallotta*

#### **Strategy**

Provide an 8-week fifth quarter in the summer of 2021 with a focus on English/Language Arts (ELA) and mathematics.

#### **Description**

Targeted students in grades Kindergarten to 11<sup>th</sup> grade that are below a specific academic threshold will attend an 8-week fifth quarter in the summer of 2021 that focuses on ELA and mathematics instructional support.

#### **Recommendations**

- A significant portion of funds should focus on the instruction of mathematics and reading.<sup>7, 11, 14, 15, 16</sup>
- Funds should be set aside for fostering the participation of disadvantaged students.<sup>7, 11, 12, 14, 15, 16</sup> Districts should encourage students to attend the program consecutive summers to increase the academic impact.<sup>12</sup>
- “Resist the temptation to micromanage programs and give local schools and teachers leeway in how to structure and deliver programs.”<sup>7; 11, 14, 15, 16</sup>
- Begin planning summer programming as early in the year as possible and ensure needed materials are delivered on time.<sup>7, 12, 15, 16</sup>
- Give hiring preference to teachers who have taught past summer programs; “effective and motivated teachers.”<sup>7, 13, 15, 16</sup>

#### **Background**

The summer learning gap is uniquely American; although the summer break is lengthy, it does not significantly lower in-class time to learn in comparison to other nations.<sup>1</sup> A study that assessed summer learning loss found that children’s test scores were on average at least one month lower in the fall than scores taken the previous spring.<sup>2</sup> The summer learning gap does not affect all students equally; as one study observed it is low socioeconomic status (SES) students who show the greatest loss of learning. Jencks and Phillips also estimate that half or more of the gap measured in the 12<sup>th</sup> grade reflects continuity of differences evident at the start of 1<sup>st</sup> grade.<sup>4</sup> However, as noted by Kendi, when speaking of the gap between Black and white students’ scores, it is important to make the distinction that, “the racial problem is the opportunity gap...not the achievement gap.”<sup>5</sup> Because of this, it is evident that some kind of intervention is needed to help students, specifically historically oppressed students, from falling behind. A study done about the cost of summer programming found that districts tend to spend less per-week, per-pupil on summer programming than they do on education during the academic year.<sup>6</sup> “We conclude



## Extended Summer Learning Prepared by the Department of Research & Performance Management

that providing a summer learning program can cost between \$1,109 and \$2,801 per student per summer for a five-week schedule that includes food, transportation, and facilities.” They noted that the key cost driver was staffing so lowering the student-to-instructor ratio has significant cost implications.

### Summer programs have shown mixed results on both the long- and short-term academic benefits.

- A well cited<sup>9, 11, 15, 17, 18</sup> meta-analysis of almost 100 studies<sup>7</sup> found that students who completed remedial summer programs can be expected to score about one fifth of a standard deviation higher than the control group on outcome measures. They also found that middle-class students had more positive effects than students from disadvantaged backgrounds. Summer programs that provided small group or individual instruction produced the largest impact on student outcomes. The study showed that remedial summer programs may have a larger effect on math achievement than on reading. However, the achievement advantage gained by students who attended summer school may diminish over time.
- A study of Durham Public Schools’ summer school program found similar results.<sup>8</sup> Students who needed to pass both the mathematics and the reading portion in order to promote to the next grade only had a one in ten chance of being successful, while students who only needed the mathematics portion stood a much greater chance at promotion. Put differently, reading had a low success rate.
- The long-term effects of summer learning programs are still unknown.<sup>6</sup> “There are not enough studies on large-scale summer learning programs to provide evidence that urban districts’ students make achievement gains commensurate with the district’s investment.”<sup>19</sup>
- Contrasting the above findings that summer programs had better outcomes for math than for reading, another study found that in their study of summer school programs in charter schools in Kansas City, MO, students’ reading achievement increased significantly.<sup>9</sup> Data analysis showed that students’ STAR Reading scale scores increased significantly between pre- and post-tests. Students self-reported that they improved their math skills more than their reading skills, however, the math scores were not available for analysis.
- Locally, the Superintendent’s Summer Learning Academy (SSLA) has been in effect for three years in Memphis-Shelby County Schools. After the second year, the research department evaluated the program to see if any gains achieved during the program persisted.<sup>10</sup> No statistically significant differences were found between the SSLA participants and the comparison cohort, with the exception of NWEA MAP Reading in the spring 2019. This shows that while there were not immediate academic benefits for rising Kindergarteners who participated in SSLA, participation in SSLA combined with a year of Kindergarten instruction gave students a boost in the end of the year reading formative assessment.
- A study more generally about out-of-school-time (OST) programs found that these programs can have positive effects on at-risk students’ reading and mathematics



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achievements.<sup>11</sup> OST programs that have one-on-one tutoring also have positive effects on at-risk students' achievement in reading.

- Lastly, in the longest study of summer learning programs, beginning in 2011 and ending in 2017, researchers tracked outcomes for three years after students entered the second and final year of summer programming.<sup>12</sup> The program offered short-term benefits to students in mathematics after one summer. Those who were high attenders outperformed the control group of students in mathematics in the fall and again the following spring. After two summers in the program, high attenders were rated higher on social-emotional skills than the comparable control group, however this did not continue into spring 2017. They found that three school years after the summer program, high attenders' academic benefits decreased in magnitude and were not statistically significant. Also, they did not find evidence that the program affected anything that was not specifically targeted such as suspension or attendance rates during the school year.

### What does a Successful Summer Program Look Like? Small Class Sizes, Support Services, & Enriching

- Some form of parent involvement produced larger effect than programs without<sup>7</sup>; gaining 'parental buy-in' potentially increases enrollment and attendance.<sup>13</sup>
- Small learning groups were cited often as being successful<sup>7, 9, 12, 13, 14, 15, 20</sup>; Individualized instruction produce the largest impact on student outcomes<sup>7, 9, 11, 14</sup> Classes capped at 20 students were found to be more effective in producing achievement gains.<sup>7, 13</sup>
- Support services were provided (meals, transportation, childcare, etc.)<sup>7, 9, 10, 11, 12, 13, 14, 15, 16</sup> "Policymaker should earmark funds for transportation...and for food services...and to provide childcare for younger family members."
- Teachers have creative freedom with lessons;<sup>7, 9, 13, 14, 15, 16</sup> Teachers are encouraged to use new teaching strategies and use more hands-on activities to encourage student engagement.<sup>9, 13</sup>
- A fun atmosphere; time for educational games, extra-curricular activities, opportunities for enrichment, etc.<sup>7, 9, 10, 11, 12, 13, 14, 15, 16</sup> "The programs provided many students with opportunities that they might not have had otherwise, such as to swim, rock climb, cook, and experience new environments."<sup>12</sup>; <sup>9</sup> "Programs should address the developmental needs of the whole child and offer a variety of activities."<sup>11</sup>
- At least five weeks of programming with at least three hours of instruction per day; increasing the weeks could increase attendance rate.<sup>12, 13</sup> Debate around the amount of hours/weeks a program should be differ greatly<sup>21, 22</sup> but most agree that 5 weeks can produce short-term benefits<sup>12, 13, 21</sup>



## Extended Summer Learning

Prepared by the Department of Research & Performance Management

### References

1. Wiseman, A. & Baker, D. (2004). The American Summer Learning Gap from an International Perspective. In *Summer Learning* (1st ed., 53–66). essay, S&S Learning Materials.
2. Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The Effects of Summer Vacation on Achievement Test Scores: A Narrative and Meta-Analytic Review. *Review of Educational Research*, 66(3), 227–268.
3. Alexander, K. L., Entwisle, D. R., & Olson, L. S. (2007). Lasting Consequences of the Summer Learning Gap. *American Sociological Review*, 72(2), 167–180.
4. Phillips, M., Crouse, J., & Ralph, J. (1998). Does the Black-White Test Score Gap Widen After Children Enter School? *The Black-White Test Score Gap*, edited by Jenck, C. & Phillips, M., 229-72.
5. Kendi, I. X. (2019). *How to be an antiracist*. Bodley Head.
6. McCombs, J. S. (2011). Cost of Summer Programming. In *Making summer count: how summer programs can boost children's learning*. essay, RAND.
7. Cooper, H., Charlton, K. Valentine, J.C., & Muhlenbruck, L. (2000). Making the most of summer school: A meta-analytic and narrative review. *Monographs of the Society for Research in Child Development*, 65(1), 1-118.
8. Haenn, J. (2001, April). *The Effectiveness of Summer School in Getting Students To Function on Grade Level in Gateway Grades*. *Annual Meeting of the American Educational Research Association*. Seattle; WA.
9. Almus, K., & Dogan, B. (2016). A Study of Summer School Enrichment Program in High-Poverty Urban Public Charter School. *Reading Improvement*, 1–16.
10. Sell, M. (2019, August). *Superintendent's Summer Learning Academy: Year 2 Program Evaluation - Student Outcomes*. Shelby County Schools Publications.
11. Lauer, P., Akiba, M., Wilkerson, S., Aphorp, H., Snow, D., & Martin-Glenn, M. (2006). Out-of-School-Time Programs: A Meta-Analysis of Effects for At-Risk Students. *Review of Educational Research*, 76(Summer 2006), 275–313.
12. McCombs, J., Augustine, C., Pane, J., & Schweig, J. (2020). Every Summer Counts: A Longitudinal Analysis of Outcomes from the National Summer Learning Project. *RAND*.
13. McCombs, J. S. (2011). Effectiveness of Summer Learning Programs. In *Making summer count: how summer programs can boost children's learning*. essay, RAND.
14. Cooper, H. (2004). Is the School Calendar Dated? Education, Economics, and the Politics of Time. In *Summer Learning* (1st ed., 3–23). essay, S&S Learning Materials.
15. Cooper, H. (2001). Summer-school: research-based recommendations for policymakers. *SERVE*.
16. Cooper, H. (2003). Summer Learning Loss: The Problem and Some Solutions. *ERIC Digest*.
17. Allington, R. L., McGill-Franzen, A., Camilli, G., Williams, L., Graff, J., Zeig, J., ... Nowak, R. (2010). Addressing Summer Reading Setback Among Economically Disadvantaged Elementary Students. *Reading Psychology*, 31(5), 411–427.
18. McCombs, J. S. (2011). Introduction. In *Making summer count: how summer programs can boost children's learning*. essay, RAND.
19. McCombs, J. S. (2011). Conclusions and Recommendations. In *Making summer count: how summer programs can boost children's learning*. essay, RAND.
20. Boss, S., & Railsback, J., (2002.) Summer School Programs: A Look at the Research, Implications for Practice, and Program Sampler.
21. McLaughlin, B., & Pitcock, S. (2009.) Building Quality in Summer Learning Programs: Approaches and Recommendations.
22. Winship, S., Hollister, M., Howich, J., Sharkey, P., & Wimer, C. (2005.) Promoting Education Achievement and Opportunity Through Summer Scholarships.



## Tutoring as an Intervention

Prepared by the Department of Research & Performance Management

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### Tutoring as an Intervention

May 2021

Author: Shelby G. Roberts, Ph.D.

#### Key Findings

- Tutoring is consistently cited as an effective intervention that provides large, meaningful impacts on student learning even compared to other intervention programs.<sup>1, 2</sup>
- “Tutoring—supplemental one-on-one or small group instruction—has been promoted as an effective method for helping students learn, particularly those who have fallen behind.”<sup>2</sup>
- Elementary tutoring often shows the largest gains, but secondary mathematics tutoring is also effective.
- High-dosage tutoring is the gold standard for tutoring and has shown the largest student gains in reading and math.
  - Tutoring is most effective when delivered during school hours in 30–60 sessions at least 3 times per week.
  - Having tutoring built into student schedules allows for more equitable access to the services as well as consistent usage.
  - Tutors can be paraprofessionals, teachers, or recent, well-trained college graduates.
  - If strategically implemented, high-dosage tutoring can be implemented in a cost-effective manner.

#### Support for Tutoring as an Intervention

- Tutoring is cited as the most effective of all educational interventions followed only in scale by detailed student feedback and progress monitoring and cooperative learning.<sup>1</sup>
- On average effective tutoring can move a student from the 50<sup>th</sup> percentile to the 66<sup>th</sup> percentile on academic gains, a stable gain of about 0.35 standard deviations (SD; which is considered substantial in educational settings) was found across three separate large scale meta-analyses.<sup>1, 2, 3, 4</sup>
- A plethora of tutoring programs exist that have vast differences in their implementation. However, the findings are consistent that “tutoring interventions exert substantial effects on learning across a wide range of program characteristics.”<sup>4</sup>

#### Difference in Student Groups

- Economically disadvantaged students are less likely to sign up for free after-school tutoring.<sup>5</sup>
- While other interventions often show lower effects for students of color, tutoring did not have a significantly different effect for these students compared to their White peers.<sup>1</sup>
- Black students and female students took advantage of free after-school tutoring more often than their Hispanic/Latinx, White, Asian, and male peers.<sup>5</sup>

#### Elementary vs. Secondary Students

- Historically, younger students show the most benefit from interventions for a variety of reasons,<sup>6</sup> and thus tend to exhibit a higher return on investment.<sup>7</sup>





## Tutoring as an Intervention

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- While overall effects for math and reading tutoring programs are similar, reading tutoring tends to be relatively more effective for students in Pre-K through 1<sup>st</sup> grade, while math tutoring tends to be more effective for students in 2<sup>nd</sup> through 5<sup>th</sup> grade.<sup>4</sup>
- Additionally, high-school math tutoring can yield significant gains as well on both math assessment scores and grades.<sup>8</sup>
- Studies on tutoring are more common for elementary grades, thus the impacts of middle-grades and high-school tutoring could potentially be minimized due to their lower frequency of reporting.
- Reading programs focusing on “explicit instruction (e.g., in phonics, decoding, and/or structural analysis)” show strong results in 1<sup>st</sup> grade through 3<sup>rd</sup> grade.<sup>9, 10, 11</sup>

### Best Practices and High Dosage Tutoring

High dosage tutoring (HDT) typically consists of personalized tutoring that takes place multiple times per week during the academic school day and delivers hundreds of hours of tutoring in a single academic year.<sup>12</sup>

- “Based on the current research, high-dosage tutoring seems to be most effective in early grades literacy and high school math.”<sup>13</sup>
- HDT incorporates the following characteristics, which could also be utilized as a best-practices model in after-school programs:

### Frequency

- Ideally, HDT should provide at least 30–60-minute tutoring sessions three times per week.<sup>14, 18</sup>
- Studies have found little evidence that once-a-week tutoring is sufficient to generate meaningful gains.<sup>15, 16, 17, 25</sup>
- 2<sup>nd</sup> through 5<sup>th</sup> grade students showed the most gains when tutoring occurred 3 days per week, while Pre-K–1<sup>st</sup> grade had more gains with 4–5 days per week.<sup>18, 19</sup>
- Students who received at least 35 sessions in a year had significantly larger positive effects than those who participated at a lower rate (increase of 0.13–0.17 SD).<sup>20</sup>

### Group Size

- Ideal group sizes range between 2–3 with any more than 4 students tutoring moving into small group instruction which is not as effective.<sup>14</sup> In grades 2–5, a 3:1 ratio has been shown to be ideal.<sup>4</sup>
- Novice tutors should not work with more than 2 students at a time.<sup>13</sup>
- 1:1 tutoring is the most effective form of tutoring,<sup>10</sup> although this option can prove extremely costly for districts.<sup>2, 24</sup>

### Scheduling

- Tutoring should happen during the school day. Building tutoring into student schedules allows for consistent dosage of tutoring as well as equitable access to these services.<sup>13</sup>
- The impact of during-school tutoring programs (1.0 SD) is twice as large as that of after-school programs (0.4 SD).<sup>4</sup> After school tutoring programs can vary widely in their



## Tutoring as an Intervention

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implementation and their level of fidelity. This results in mixed outcomes for these types of programs.

- In a random assignment study of a national after-school program, no positive effects were found on reading test scores or grades for elementary or middle school students.<sup>21</sup> Most large-scale control-studies find insignificant or minute effects for after-school programs.<sup>27</sup>
- Alternatively, many small-scale after-school tutoring programs have shown moderate student growth as compared to their non-tutored peers.<sup>24, 28, 29</sup>
- Parents indicated that they often selected tutoring programs based to the convenience and transportation logistics, and students who were on free and reduced lunch status signed up for free after-school tutoring at much lower rates.<sup>5</sup>
- Tutors should remain connected with the same students over the course of a year. This allows the students to build a relationship with their tutors and the tutors to understand the students' learning needs.<sup>14</sup>

### Staffing and Training

- A different skill set is needed for tutors compared to teaching a normal size classroom. This lower skill set can likely open the door for effective tutors to be well-trained volunteers and college graduates.
- Teacher-led tutoring shows the strongest gains for students followed by paraprofessionals<sup>a</sup> (with a formal tie to the school and tutoring role), community-volunteer, and parent-volunteers, respectively.<sup>4, 22</sup>
- Tutors should receive high quality intensive training before engaging with students.
  - A four-week intensive training was implemented with college graduates prior to 9 months of on-site tutoring which significantly improved student test scores and grades.<sup>6, 23</sup>
  - Modest, though smaller, effect sizes have been shown in non-experimental tutoring designs for tutors who have a modest amount of training (e.g., 4+ hours) though most of these volunteers were education majors.<sup>24, 26</sup>

### Cost

Cost of tutoring programs can be prohibitive for some districts; however, a few key strategies can vastly decrease the per-pupil expense and even make tutoring one of the most cost-effective school-based interventions.

- Using paraprofessionals including recent college graduates on single- or two-year contracts that are geared as a year of service can show strong benefits at a much lower cost than utilizing teachers.<sup>6</sup>
- Create tutoring pods of 3 students for upper elementary grades where students benefit from peer interaction and can increase the number of students served.<sup>2</sup>
- Frequently track data to best utilize the tutors and hone in on areas where students struggle.

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<sup>a</sup> Recent, well-trained college graduates who worked full time as tutors were classified as paraprofessionals in the meta-analyses.



## Tutoring as an Intervention

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### Current Tennessee Programs

There are three current high-dosage pilot tutoring programs taking place in Tennessee school districts.<sup>13</sup> While only one district is similar to Memphis-Shelby County Schools (MSCS) in size and scope, Memphis-Shelby County Schools should connect with each District to ascertain their success and challenges in order to build off of their models.

- Lenoir City Schools (LCS) near Knoxville has roughly 2.5K students. It sought to combat some of the learning loss associated with pandemic related closures. They piloted a high-dosage tutoring program with 20 juniors and saw almost all students make growth as measured by pre- and post-ACT test. “Both tutors and participants reported strong engagement and found value in the tutoring opportunity.” LCS is planning to pilot an 8<sup>th</sup> grade focused program using juniors as tutors in the fall.
- Metro Nashville Public Schools (MNPS) serves around 85K students. They piloted a tutoring program for seniors in 2020. During the program they saw a 95% attendance rate for tutoring and plan to scale this program. After evaluating and course-correcting challenges in the senior program, MNPS is now piloting a high-dosage tutoring program for 150 students focused on literacy in grades 3–5 and numeracy in grades 6–9 in spring 2021. They are conducting the pilot as a randomized control trial in order to evaluate its effectiveness.
- Trousdale County Schools (TCS) enrolls about 1.3K students. They implemented a high-dosage tutoring program during a scheduling block for Tier 2 first grade students. The block scheduling will continue in Summer 2021 as part of a summer literacy camp program. They plan to implement the program district-wide in the following academic year.

### Endnotes

Short research-based briefs, guides, and publications on tutoring best practices.

1. [High-dosage tutoring: Planning and implementation guide](#) by SCORE Institute of TN.
2. [High-dosage tutoring that works for students](#) by SCORE Institute of TN.
3. [The transformative potential of tutoring for prek-12 learning outcomes: Lessons from randomized evaluations](#) by Latif Jameel Poverty Action Lab.
4. [Accelerated student learning with high dosage tutoring](#) by EdResearch for Recovery.
5. [Toolkit for tutoring programs: Equitable access to quality tutoring](#) by National Student Support Accelerator. (Long guide)



## Tutoring as an Intervention

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### References

1. Dietrichson, J., Bøg, M., Filges, T., & Klint Jørgensen, A. M. (2017). Academic interventions for elementary and middle school students with low socioeconomic status: A systematic review and meta-analysis. *Review of Educational Research*, 87(2), 243–282. <https://doi.org/10.3102/0034654316687036>
2. Nickow, A. J., Oreopoulos, P., & Quan, V. (2021). The transformative potential of tutoring for prek–12. Learning outcomes: Lessons from randomized evaluations. JPAL (Latif Jameel Poverty Action Lab).
3. Ritter, G. W., Barnett, J. H., Denny, G. S., & Albin, G. R. (2009). The effectiveness of volunteer tutoring programs for elementary and middle school students: A meta-analysis. *Review of Educational Research*, 79(1), 3–38. <https://doi.org/10.3102/0034654308325690>
4. Nickow, A., Oreopoulos, P., & Quan, V. (2020). The impressive effects of tutoring on prek-12 learning: A systematic review and meta-analysis of the experimental evidence. Working paper 27476. <https://doi.org/10.3386/w27476>
5. Heinrich, C. J., Meyer, R. H., & Whitten, G. (2010). Supplemental education services under No Child Left Behind: Who signs up, and what do they gain? *Educational Evaluation and Policy Analysis*, 32(2), 273–298. <https://doi.org/10.3102/0162373710361640>
6. Guryan, J., Ludwig, J., Bhatt, M. P., Cook, P. J., Davis, J. M. V., Dodge, K., Farkas, G., Fryer Jr., R. G., Mayer, S., Pallock, H., & Steinberg, L. (2021). Not Too Late: Improving Academic Outcomes Among Adolescents (No. w28531). National Bureau of Economic Research. <https://doi.org/10.3386/w28531>
7. Carneiro, P., & Heckman, J. (2003). Human Capital Policy. In James J. Heckman & A. B. Krueger (Eds.), *Inequality in America: What Role for Human Capital Policies?* (pp. 77–240). MIT Press.
8. Cook, P. J., Dodge, K., Farkas, G., Fryer, Jr., R. G., Guryan, J., Ludwig, J., Mayer, S., Pollack, H., & Steinberg, L. (2015). *Not too late: Improving academic outcomes for disadvantaged youth*. Institute for Policy Research Northwestern University Working Paper WP-15-01.
9. Vadasy, P. F. & Sanders, E. A. (2011). Efficacy of supplemental phonics-based instruction for lowskilled first graders: How language minority status and pretest characteristics moderate treatment response. *Scientific Studies of Reading*, 15(6), 471–497. <https://doi.org/10.1080/10888438.2010.501091>
10. Vadasy, P. F., Sanders, E. A., & Peyton, J. A. (2006). Paraeducator-supplemented instruction in structural analysis with text reading practice for second and third graders at risk for reading problems. *Remedial and Special Education*, 27(6), 365–378. <https://doi.org/10.1177/07419325060270060601>
11. Vadasy, P. F., Sanders, E. A., & Tudor, S. (2007). Effectiveness of paraeducator-supplemented individual instruction: Beyond basic decoding skills. *Journal of Learning Disabilities*, 40(6), 508–525. <https://doi.org/10.1177/00222194070400060301>
12. Shawchuk, S. (2020) *High-dosage tutoring is effective, but expensive. Ideas for making it work*. Retrieved from <https://www.edweek.org/leadership/high-dosage-tutoring-is-effective-but-expensive-ideas-for-making-it-work/2020/08>
13. SCORE Institute (2021) *High Dosage Tutoring: Planning and Implementation Guide*.
14. Robinson, C. D., Kraft, M. A., Loeb, S., & Schueler, B. E. (2021). *Accelerating student learning with high-dosage tutoring*. EdResearch for Recovery.
15. Lauer, P. A., Akiba, M., Wilkerson, S. B., Athorp, H. S., Snow, D., & Martin-Glenn, M. L. (2006). Out-of-school-time programs: A meta-analysis of effects for at-risk students. *Review of Educational Research*, 76, 275–313. <https://doi.org/10.3102/00346543076002275>
16. Ritter, G., & Maynard, R. (2008). Using the right design to get the ‘wrong’ answer? Results of a random assignment evaluation of a volunteer tutoring programme. *Journal of Children's Services*, 3(2), 4–16. <https://doi.org/10.1108/17466660200800008>
17. Miller, S., & Connolly, P. (2013). A randomized controlled trial evaluation of time to read, a volunteer tutoring program for 8-to 9-year-olds. *Educational Evaluation and Policy Analysis*, 35(1), 23–37. <https://doi.org/10.3102/0162373712452628>
18. Gersten, R., Rolfhus, E., Clarke, B., Decker, L. E., Wilkins, C., & Dimino, J. (2015). Intervention for first graders with limited number knowledge: Large-scale replication of a randomized controlled trial.



## Tutoring as an Intervention

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- American Educational Research Journal, 52(3), 516–546.  
<https://doi.org/10.3102/0002831214565787>
19. Sirinides, P., Gray, A., & May, H. (2018). The Impacts of Reading Recovery at scale: Results from the 4-year i3 external evaluation. *Educational Evaluation and Policy Analysis*, 40(3), 316–335.  
<https://doi.org/10.3102/0162373718764828>
  20. Lee, Y. S., Morrow-Howell, N., Jonson-Reid, M., & McCrary, S. (2012). The effect of the Experience Corps® program on student reading outcomes. *Education and Urban Society*, 44(1), 97–118.  
<https://doi.org/10.1177/0013124510381262>
  21. James-Burdumy, S., Dynarski, M., Moore, M., Deke, J., Mansfield, W., & Pistorino, C. (2005). When Schools Stay Open Late: The National Evaluation of the 21st Century Community Learning Centers Program: Final Report. U.S. Department of Education, National Center for Education Evaluation and Regional Assistance. <http://www.ed.gov/ies/ncee>
  22. Parker, D. C., Nelson, P. M., Zaslofsky, A. F., Kanive, R., Foegen, A., Kaiser, P., & Heisted, D. (2019). Evaluation of a math intervention program implemented with community support. *Journal of Research on Educational Effectiveness*, 12(3), 391–412.  
<https://doi.org/10.1080/19345747.2019.1571653>
  23. Fryer, J. R. (2014). Injecting Charter School Best Practices into Traditional Public Schools: Evidence from Field Experiments. *The Quarterly Journal of Economics*, 129, 1355–1407.  
<https://doi.org/10.1093/qje/qju011>
  24. Lindo, E. J., Weiser, B., Cheatham, J.P., & Allor, J.H. (2018). Benefits of structured after-school literacy tutoring by university students for struggling elementary readers. *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 34, 2, 117–131.  
<https://doi.org/10.1080/10573569.2017.1357156>
  25. Slavin, R. E., Lake, C., Davis, S., & Madden, N. (2011). Effective programs for struggling readers: A best evidence synthesis. *Educational Research Review*, 6(1), 1–26.  
<https://doi.org/10.1016/j.edurev.2010.07.002>
  26. Walker, C. S., Kronick, R., & Diambra, J. F. (2007). Assessment of a full-service school, after hours tutoring and enrichment program. *Journal of At-Risk Issues*, 13(2), 21–27.
  27. Mattera, S., Jacob, R., & Morris, P. (2018). *Strengthening children's math skills with enhanced instruction: The impacts of Making Pre-K Count and High 5s on kindergarten outcomes*. MDRC.
  28. Hock, M. F., Pulvers, K. A., Deshler, D. D., & Schumaker, J. B. (2001). The effects of an after-school tutoring program on the academic performance of at-risk students and students with LD. *Remedial and Special Education*, 22(3), 172–186. <https://doi.org/10.1177/074193250102200305>
  29. Chappell, S., Arnold, P., Nunnery, J., & Grant, M. (2015). An Examination of an Online Tutoring Program's Impact on Low-Achieving Middle School Students' Mathematics Achievement. *Online Learning*, 19(5), 37–53. <http://dx.doi.org/10.24059/olj.v19i5.694>



## Implementing Blended Learning in Classrooms

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### Implementing Blended Learning in Classrooms

April 2021

Author: Ashton Toone

#### Strategy

Implementing blended learning in classrooms.

#### Description

Providing tailored coaching support to teachers, paraprofessionals, central office support staff on virtual instruction.

#### Recommendations

- When considering curriculum choices for blended learning, a standardized and comprehensive curriculum has been shown to be most effective for both students and teachers.
- Reconfiguring staff support will require onboarding adjunct positions such as learning coaches to assist with online learning needs.
- For optimal gains in student achievement, students should have opportunities for self-paced work.

#### Overview

In 2016, Evergreen Education Group conducted a case study of nine schools who had integrated the Fuel Education (FuelEd) online curriculum and platform into their existing blended learning or virtual programs. Of the nine programs, five of the schools were whole school programs and the other four were credit recovery and remediation programs. Whole school programs applied a variety of blended learning techniques in order to support the FuelEd curriculum while the credit recovery and remediation programs were situated within traditional public and charter schools in which students participated in only the FuelEd courses to recover credits or improve their academic performance. Though each of the programs were at differing stages of the implementation phase, each of the schools reported improved student outcomes as a result of the FuelEd curriculum.

#### Blended learning allows students to access a variety of course offerings at various paces.

- All of the schools featured in the case study used the FuelEd curriculum as their primary curriculum.
  - The FuelEd course catalog includes core courses, electives, advanced courses, credit recovery and remediation for students in K-12 grades.
  - Crater Lake Charter Academy (CCLA) noted that teachers can customize a student's course through FuelEd to provide a personalized learning plan for students.
    - CCLA follows a block schedule in which students attend 1.5-hour blocks in which students participate in blended learning activities.
- For schools with limited course offerings, FuelEd provided courses that otherwise were unavailable to students at that school.
  - Carver Military Academy school leaders noted that the variety of course offerings encouraged students to stay enrolled as Carver is a choice school.





## Implementing Blended Learning in Classrooms

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- Schools offered a wide range of schedule options that were flexible for students.
  - Of the five whole school programs, all five schools required their students to come on campus for a certain amount of time. The schedule options for the schools were as follows:
    - Elementary and middle school students spend 6 hours per day Monday through Thursday and high school students come as needed; K-8 students appeared on campus Monday-Thursday for 5.5 hour days while grades 9-12 appeared Thursday and Friday for 5.5 hour days; All students attend Monday-Friday in cohorts with staggered start times (8 a.m., 9:30 a.m., and 11:30 a.m.) for 5 hours each day; All students appear on campus on Tuesday and one additional day for 7 hours - grades 9-12 appear on Wednesday and grades K-8 appear on Thursday.
    - The fifth and largest whole school program required K-5 students to attend in-person on Friday and sometimes Wednesday as needed for intervention purposes. Students in grades 6-8 attended on Monday and Wednesday. Unlike the K-8 students, students in grades 9-12 were held to a trimester schedule where they had the option to attend in-person on Tuesday and Thursday.
  - Of the credit-recovery programs, all programs required students to take virtual classes in their campus' respective learning or media labs.
    - Of the four programs, only one program allowed students to complete their courses on the weekend rather than the school day. Other programs offered evening course options.
- Offering customized self-paced work empowers students to become independent workers and manage themselves.
  - Several schools showed student improvement reading and math gains and noted that the gains were due in part to students working independently.
  - The two longest-running FuelEd whole school programs reported an averaged 242% growth in middle school math MAP scores and an averaged 140% of growth for elementary school students comparable to students in traditional schools in their district and state.

**By reconfiguring staffing needs to support blended learning, teachers are able to customize online learning and build better rapport with their students.**

- Teachers responsible for delivering FuelEd courses typically are held to a standard school day. However, schools employ support staff who are responsible for tasks such as coordinating FuelEd enrollment, assisting with technical needs, and providing remedial support as needed.
  - Because Carver Military Academy opted to use FuelEd as a means of course recovery, they employed a coordinator who managed all related needs for the program.
- Poudre School District Global Academy (PGA) allows its teachers to supplement the FuelEd curriculum with offline materials in order to meet student needs.
  - PGA emphasizes utilizing student data in order to build supplemental materials.
  - PGA teachers both teach on-campus and online courses as well as tutor and coach students online. An integral part of PGA's model is parent involvement in the academic coaching process.



## **Implementing Blended Learning in Classrooms**

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- The Springs Studio for Academic Excellence (SSAE) utilizes both the online teachers provided by FuelEd as well as five full-time Student Support Coaches (SSC) to provide remediation and instruction for students who need individualized support.

### **References**

FuelEducation. (2016). *Outcomes of Blended and Online Learning Programs Using Fuel Education Curriculum*. Evergreen Educatoin Group.



## Senior Reading Advisors

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### Reading Advisors

April 2022

Anne Walton Garrison

#### Strategy

Continue employing Senior Reading Advisors to improve the literacy skills of struggling readers in middle and high schools.

#### Description

Memphis-Shelby County Schools (MSCS) instituted the position of Senior Reading Advisor (SRA) in 2018–19. It is designed to be a highly skilled, 12-month instructional position focused on addressing foundational literacy deficits in middle- and high-school students. Select middle and high schools have one SRA position each. These schools offer intensive reading classes, taught by their SRA, for students whose reading skills are significantly below their grade level. The SRA-led classes employ the online program Reading Horizons for part of the instructional content and for benchmarking students' reading progress.

Most, if not all, of the SRAs have extensive classroom instructional experience as well as administrative and/or instructional coaching experience. Beyond teaching struggling readers, SRAs also design and facilitate school-based and District-level content-literacy professional-development sessions for teachers of other subjects in grades 3–12.

#### Synthesis of Literature

The SRA position/program is unique to MSCS, and thus there is not a body of literature evaluating its specific effectiveness. However, the SRA role is similar to other programs that implement highly specialized, literacy-focused teaching positions, and Hanover Research has produced several reports on topics relevant to the SRA approach to improving secondary literacy. This report synthesizes information from the Hanover materials to provide SRA-relevant recommendations.

#### General Practices for Improving Adolescent Literacy<sup>2</sup>

The What Works Clearinghouse (WWC) reviewed National Assessment of Educational Progress (NAEP) scores, along with a host of studies (correlational, longitudinal, quasi-experimental, and experimental) to determine several key recommendations for improving middle and high school literacy. Derived from “strong” or “moderate” evidence subjected to rigorous external peer review, WWC recommended the following (quoted from pp. 5–6):

- **Provide explicit vocabulary instruction:** Both English language arts and content-area classes should include explicit vocabulary instruction, as this helps students learn new words and improves their ability to independently construct meaning from text.
- **Provide direct and explicit comprehension strategy instruction:** Comprehension strategies consist of “routines and procedures that readers use to help them make sense of texts.” Examples of comprehension strategies include asking and answering questions, summarizing, paraphrasing, locating the main idea, and using graphic organizers. In addition to modelling and explaining the strategy, the



## Senior Reading Advisors

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teacher should offer feedback on guided practice and emphasize the importance of independent application.

- **Provide opportunities for extended discussion of text meaning and interpretation:** Aimed at improving reading comprehension and encouraging critical analysis, such discussions may involve small groups of students or an entire classroom. Such discussions should incorporate varied points of view, based on textual evidence, personal experience, and reasoned arguments, expressed during prolonged exchanges with the teacher or other students.
- **Increase student motivation and engagement in literacy learning:** To create confident, lifelong readers, teachers should construct a supportive learning environment that provides useful feedback, treats mistakes as growth opportunities, encourages self-determination, and makes literacy experiences relevant to students' interests and everyday lives.
- **Make available intensive individualized interventions for struggling readers that can be provided by qualified specialists:** When students need more support than a typical classroom teacher can offer, schools should provide intensive interventions through reading specialists or highly-trained teachers. Since no single cause for reading difficulties exists, students may struggle with skills as varied as phonemic awareness, phonics, vocabulary, fluency, word analysis, and/or comprehension. Thus, schools should tailor interventions to the needs of each student.

### Critical Components for Successful Implementation of Middle and High School Reading Intervention<sup>1</sup>

The Consortium on Reading Excellence, Inc. (CORE), a research-focused implementation advisory board, reviewed evidence on the factors associated with the failure of reading interventions. Using that information, they created a framework of critical components for the successful implementation of reading interventions for the average middle and high school. These critical components are:

- **Effective professional development** that features the following characteristics:
  - Provides teachers time and guidance to “design their program, identify helpful tools, and ultimately bring their personal style to established theories” (p. 7).
  - Gives teachers a basic understanding of related theory, “which could take 20 to 40 hours due to reading instruction complexity” (p. 7).
  - Contextualizes theoretical models using “modeling and demonstrations, classroom visits and video media, and... workshops that simulate relevant conditions” (p. 7), allowing teachers to learn in a low-risk setting.
  - Is multidimensional, with “an appreciation for teachers’ and students’ background while also taking into account the larger context of the school environment” (p. 7).
  - Integrates structured feedback and provides ongoing coaching once teachers are in the classroom.
- **Effective and aligned instructional tools** that “enable teachers to transform their professional development into action” (p. 7). According to research from the Southwest Educational Development Laboratory, successful reading intervention



## Senior Reading Advisors

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programs for secondary students feature the following instructional components (quoted from p. 8):

- **Motivation to read**, specifically, intrinsic motivation to persist in a reading task.
- **Decoding skills and fluency**, which includes basic decoding skills and fluency.
- **Language comprehension**, which includes linguistic knowledge, background knowledge, making inferences, and self-regulation.
- **Transacting with text**, engaging in a dialog with the text, especially in making personal connections.
- **Significant systemic reorganization and support** that addresses systemic process issues in a holistic manner. The revamped system should include mechanisms for collective discussion and troubleshooting, monitoring of implementation, ongoing professional development, and coaching for continuous improvement.

### Select Recommendations for Implementing Support Classes in Secondary School<sup>3</sup>

The Education Trust compared instructional practices in four high-impact high schools to instructional practices in demographically similar average-impact schools and found very different approaches between the two groups. “Through additional instructional time, the high-impact schools implemented supplemental academic support while allowing students to stay on track for on-time graduation. Average-impact schools, however, slowed course-taking for struggling students” (p. 6). The Education Trust therefore “cautions against slowing down the coursework progression of students who may struggle in a particular subject area, [as] it may inhibit students from completing college preparatory coursework and catching up to grade-level peers” (p. 6).

Another important finding from the above study was the following:

High-impact schools strategically organize struggling and average-performing students into smaller classes to enable teachers to spend more time with students who are considered to be more at-risk. At high-impact schools, administrators commit to smaller class sizes for struggling students even if it results in larger class sizes for Honors- and AP-level courses in an effort to help the lower-performing students “get to that next level.” Meanwhile, average-impact schools maintain uniform class sizes regardless of students’ proficiency levels. (p. 10)

### References

1. Hanover Research. (2014, June). *Best practices in reading intervention implementation*.
2. Hanover Research. (2015, April). *Effective school-wide literacy strategies for secondary students*.
3. Hanover Research. (2015, August). *Best practices in high school support classes*.



## Social Emotional Curriculum to Support Students Prepared by the Department of Research & Performance Management

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### Student Readiness

#### Social Emotional Curriculum

May 2021

Marie A. Sell, Ph.D.

#### Description

Memphis-Shelby County Schools has purchased Rethink, a curriculum designed to support social emotional learning in a school community. This literature review provides a description of social emotional learning and then covers the following topics:

- The importance of social emotional support for students, especially when coming out of crisis
- Teacher professional development and support needed to understand how social emotional support for students impacts learning and classroom behavior
- The academic outcomes associated with best practices of implementation of a social emotional support curriculum
- Best practices, pitfalls, and lessons learned in implementing a social emotional curriculum

#### What is Social Emotional Learning?

- Social emotional learning (SEL) focuses on five competencies: 1) self-awareness, 2) self-management, 3) social awareness, 4) relationship skills, and 5) responsible decision-making (CASEL).<sup>5</sup> One model suggests that increases in SE competencies learned through school based programming first improve students' positive attitudes toward self and others (short term outcomes) and then increase positive behavior, academic success, and mental health (long-term outcomes).<sup>13</sup>
- Effective SE skills are an integral part of development. Effectively managing SE skills goes beyond supporting students in PK–12 education to providing skills that will be useful when facing challenges in college or the workplace. <sup>19</sup>
- Effective SEL programs feature six criteria including that they are 1) developmentally appropriate; 2) culturally relevant; 3) systemic; 4) comprehensive; 5) evidence-based; and 6) forward thinking. <sup>19</sup>

#### The Importance of Social Emotional Support for Students

- Research<sup>13</sup> on school-based SEL programs has consistently found that they positively impact students' social behaviors and academic progress. Four meta-analyses together analyzed the findings from 459 SEL studies. Two of the meta-analyses examined outcomes immediately after program participation.<sup>8, 28</sup> Both found moderate and significant effect sizes (.57 and .53) for SEL skills for students who participated in SEL programs compared to those who did not. They found small but significant effect sizes (range .19–.33) for attitudes, positive social behaviors, conduct problems, emotional distress, and academic performance with students trained in SEL performing better in all areas compared to non-participating peers.





## Social Emotional Curriculum to Support Students

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- The other two meta-analyses<sup>23, 25</sup> analyzed studies that gathered follow-up data at least seven months after the program ended. These analyses found lasting positive effects from SEL training in all outcome areas (SEL skills, attitudes, positive social behaviors, conduct problems, emotional distress, and academic performance) (effect sizes range .07–.33).
- A summary of early studies examining the impact of SEL curricula on student outcomes found that K–6 grade students involved in programs exhibited fewer risk-taking behaviors (i.e., alcohol or marijuana use), expressed emotions more appropriately, followed rules better, and more often stayed on task compared to students in control groups.<sup>27</sup>
- In a school-to-school comparison, the school implementing a universal SEL program to all students and teachers had significantly fewer instances of internalizing behaviors and significantly more prosocial behaviors among students than the control school. These trends were evident for all students, however students at-risk for social-emotional problems before the program was implemented showed more positive gains in both areas compared to general education students.<sup>11</sup>
- Randomized controlled studies showed that with SEL interventions there were improvements in academic effort and academic achievement using reading, writing, and math scores as indicators.<sup>19</sup>

### Teacher Professional Development and Support

- Despite the research touting the benefits of incorporating SEL curricula into schools, there are very few teacher training programs that include SEL as part of their program requirements.<sup>6, 17</sup> Yet, being effective as an SE teacher requires understanding the conceptual framework and why it is important,<sup>24</sup> being well-trained in the curriculum,<sup>24</sup> and having a certain level of competence in one's own social emotional skills.<sup>4, 22, 29</sup>
- Teachers' own competence and ability to effectively use SE skills allows them to be better role models for students which is especially important in the younger grades;<sup>29</sup> and allows them to more effectively work through any unexpected reactions and responses from students which is especially important for students who have experienced trauma or have been in crisis.<sup>20</sup>
- Additionally, leaders who have higher levels of emotional intelligence (including competence with SE skills) can navigate organizational change better. School administrators can use these skills to help teachers and staff work through school reform efforts or to make changes in school climate/culture.<sup>16</sup>
- School-based SEL programs in which teachers, administrators, and other school personnel are program participants along with students are most effective at creating positive changes in overall school climate.<sup>19</sup> Successful programs allow for long periods of teacher and staff training in SE skills before implementing a curriculum at the school level for students. Not only do teachers need to learn additional skills and curriculum, other school staff face adjustments to their roles as well. For example, school counselors might need to shift their perspective conceptually. Instead of their role being to respond to a problem that occurs, their work would become consulting



## Social Emotional Curriculum to Support Students

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with students to prevent problems from arising.<sup>26</sup> Additionally, school counselors could become strong leaders in supporting SEL practices.<sup>3</sup>

- Ongoing teacher PD and teacher support improved implementation fidelity with teachers who initially had low implementation fidelity initially.<sup>7, 15</sup>
- Bullying prevention programs have been more successful when teachers have had more training and coaching. Students exhibited higher emotional intelligence and earned better behavior grades with increased PD.<sup>21</sup>
- Teachers' beliefs about their own teaching and the level of support they have received is linked to the degree of fidelity to which teachers implement SEL curriculum in their classrooms.<sup>22</sup>

### Academic Outcomes Associated with Best Practices of Implementation

- A study examining implementation of SEL curriculum and student outcomes compared high implementation schools to low-implementation schools in four school districts. Three districts displayed statistically significant differences in student outcomes related to level of curriculum implementation. One district each showed that high-implementation schools had higher math scores (Gr 3–8), reading scores (Gr 3–8), or English I scores. GPA in one district was higher in high-implementing schools but in another district was lower in high implementing schools.<sup>18</sup>
- Student academic achievement increased by 11 percentile points on an index based on report card grades and test scores when SEL programs have been implemented with fidelity.<sup>8, 23</sup>
- A meta-analysis of SEL intervention programs for students with social, emotional, and/or behavioral challenges showed that program participation improved academic outcomes (effect size 0.53) when program implementation adhered to key design elements.<sup>9</sup>
- Lasting positive effects were observed for Kindergarten students who participated in an integrated social emotional awareness and emergent early literacy curriculum in Pre-K that was implemented with moderate to high fidelity. Students in the Pre-K treatment classrooms compared to students in Pre-K control classrooms showed less disruptive behavior, had higher levels of learning engagement and social competence, and better phonemic decoding skills in Kindergarten across all classroom contexts. Additionally, treatment students who ended up in Kindergarten classrooms with a strong emphasis on reading showed stronger letter-word identification and sight word efficiency.<sup>2</sup>
- A meta-analysis of 213 studies<sup>8</sup> identified four practices for developing the new SEL skills that students acquired, including 1) using an sequential and integrated skills curriculum, 2) using active learning to promote the skills, 3) focusing sufficient attention on skill development, and 4) establishing explicit learning goals. Schools that used all four practices showed more improvements in student SEL skills and academic progress than those that used only some of the practices.



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### Best Practices, Pitfalls, and Lessons Learned in Curriculum Implementation

- When new programs are introduced to school staff and teachers, they run the risk of being received as something that will compete with the teaching time necessary for students to meet state academic standards. To alleviate this, SEL programs work best when they are integrated into the curriculum. Additionally, teachers need to fully understand how SEL supports academic progress. An analysis of the overlap of SEL skills and one state's academic standards showed that SEL skills overlapped with approximately 2/3 of the 204 state standards, including listening skills, communication skills, problem identification, and analyzing options and outcomes.<sup>12</sup>
- SEL curricula that are too scripted might be more difficult for teachers to buy into because they do not meet the current and changing needs of the classroom or students. A strategy-based approach, where teachers learn different SEL strategies that can be applied to many contexts and activities as needed throughout the school day, has been well-received by teachers.<sup>1</sup>
- A study<sup>24</sup> that interviewed and surveyed teachers and students found that while teachers viewed their SEL programs to be empowering to students, students took away very different messages. For example, they viewed that being a leader in their classroom equated to being quiet and compliant. To avoid these kinds of disconnections between teachers and students, the author suggested ensuring that teachers fully understood the program, its implementation, and how adjusting it might impact the outcome. Additionally, schools should listen to their students to make sure the program is working as intended.
- The five competencies of SEL skills (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) look different across development. For example, what a 5- or 6-year-old is capable of in terms of self-management is much different than a middle-school student or a high-school student; likewise for responsible decision making. SEL programs with curricula that match development are more effective.<sup>1, 18</sup> Likewise, assessments of student competency with SEL skills should reflect developmental changes in children.<sup>14</sup>
- One expert in promoting SEL skills in schools cautioned that implementation an SEL curriculum takes work on the part of teachers and school administrators and they should be prepared for that expectation.<sup>4</sup>
- Being aware of culture when using SEL curriculum in schools is important to help read social cues accurately.<sup>4</sup>
- Noting parallels between the skills SEL programs can teach and the needs of students who have experienced trauma, one article pointed out the importance of planning implementation. Pawlo and colleagues<sup>20</sup> argued that this is especially important in "urban, high-poverty areas where trauma is highly-prevalent [and] students often struggle to succeed in school (pg. 40)." Careful planning of implementation to allow teachers time for buy in is crucial, especially when teachers and school administrators may be burned out from cycling through different reform initiatives that do not seem to make significant, sustained changes in school success.



## Social Emotional Curriculum to Support Students

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### References

1. Bailey, R., Stickle, L., Brion-Meisels, G., & Jones, S. (2019). *Re-imagining social-emotional learning: Findings from a strategy-based approach*. The Phi Delta Kappan, 100(5), 53-58. Retrieved May 6, 2021, from <https://www.jstor.org/stable/26614883>
2. Bierman, K., Nix, R., Heinrichs, B., Domitrovich, C., Gest, S., Welsh, J., & Gill, S. (2014). Effects of Head Start REDI on Children's Outcomes 1 Year Later in Different Kindergarten Contexts. *Child Development*, 85(1), 140-159. Retrieved May 6, 2021, from <http://www.jstor.org/stable/24030526>
3. Bowers, H., Lemberger-Truelove, M., & Brigman, G. (2017). A Social-Emotional Leadership Framework for School Counselors. *Professional School Counseling*, 21(1b), 1-10. Retrieved May 6, 2021, from <https://www.jstor.org/stable/90023606>
4. Brackett, M., & Heller, R. (2017). *On the science and teaching of emotional intelligence: An interview with Marc Brackett*. The Phi Delta Kappan, 98(6), 20-24. Retrieved May 6, 2021, from <http://www.jstor.org/stable/26386966>
5. CASEL. (no date). *The Collaborative for Academic, Social, and Emotional Learning*. [www.casel.org](http://www.casel.org)
6. Donahue-Keegan, D., Villegas-Reimers, E., & Cressey, J. (2019). Integrating Social-Emotional Learning and Culturally Responsive Teaching in Teacher Education Preparation Programs: The Massachusetts Experience So Far. *Teacher Education Quarterly*, 46(4), 150-168. Retrieved May 5, 2021, from <https://www.jstor.org/stable/26841580>
7. Dufrene, B.A., Noell, G.H., Gilbertson, D.N., & Duhon, G.J. (2005). Monitoring implementation of reciprocal peer tutoring: Identifying and intervening with students who do not maintain accurate implementation. *School Psychology Review*, 34, 74-86.
8. Durlak, J., Dymnicki, A., Taylor, R., Weissberg, R., & Schellinger, K. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development*, 82(1), 405-432. Retrieved May 5, 2021, from <http://www.jstor.org/stable/29782838>
9. Dymnicki, A., Kendziora, K., & Osher, D. (2012). Adolescent development for students with learning disabilities and behavioral disorders: The promise of social emotional learning. In B.G. Cook, M. Tankersley, & T.J. Landrum (Eds.), *Classroom behavior, contexts, and interventions: Vol. 25. Advances in learning and behavior disabilities* (pp. 131-166). Bingley, England: Emerald.
10. Fixen, D.L., Naoom, S.F., Blasé, K.A., Friedman, R.M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network.
11. Kramer, T., Caldarella, P., Young, K., Fischer, L., & Warren, J. (2014). Implementing "Strong Kids" School-Wide to Reduce Internalizing Behaviors and Increase Prosocial Behaviors. *Education and Treatment of Children*, 37(4), 659-680. Retrieved May 4, 2021, from <http://www.jstor.org/stable/44683942>
12. Kress, J., Norris, J., Schoenholz, D., Elias, M., & Seigle, P. (2004). Bringing Together Educational Standards and Social and Emotional Learning: Making the Case for Educators. *American Journal of Education*, 111(1), 68-89. doi:10.1086/424720
13. Mahoney, J., Durlak, J., & Weissberg, R. (2018). *An update on social and emotional learning outcome research*. The Phi Delta Kappan, 100(4), 18-23. Retrieved May 6, 2021, from <https://www.jstor.org/stable/26552480>
14. McKown, C. (2017). Social-Emotional Assessment, Performance, and Standards. *The Future of Children*, 27(1), 157-178. Retrieved May 6, 2021, from <http://www.jstor.org/stable/44219026>
15. McKown, C. (2017). Social-Emotional Assessment, Performance, and Standards. *The Future of Children*, 27(1), 157-178. Retrieved May 6, 2021, from <http://www.jstor.org/stable/44219026>
16. Mihalic, S.F., Fagan, A.A., & Argamaso, S. (2008). Implementing the LifeSkills Training Drug Prevention Program: Factors related to implementation fidelity. *Implementation Science*, 3(5), 1-16.
17. Moore, B. (2009). Emotional Intelligence for School Administrators: A Priority for School Reform? *American Secondary Education*, 37(3), 20-28. Retrieved May 5, 2021, from <http://www.jstor.org/stable/41406313>
17. Nenonene, R., Gallagher, C., Kelly, M., & Collopy, R. (2019). Challenges and Opportunities of Infusing Social, Emotional, and Cultural Competencies into Teacher Preparation: One Program's Story.



## Social Emotional Curriculum to Support Students

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---

- Teacher Education Quarterly*, 46(4), 92-115. Retrieved May 5, 2021, from <https://www.jstor.org/stable/26841578>
18. Osher, D., Friedman, L.B., & Kendziora, K. (2015). *CASEL/NoVo Collaborating Districts Initiative: 2014 Cross-District Outcome Evaluation Report*. American Institutes for Research, Washington DC. Retrieved 5/3/21 from <https://www.air.org/sites/default/files/downloads/report/Cleveland-Cross-DistrictOutcome-Evaluation-Report-2014.pdf>
  19. Osher, D., Kidron, Y., Brackett, M., Dymnicki, A., Jones, S., & Weissberg, R. (2016). Advancing the Science and Practice of Social and Emotional Learning: Looking Back and Moving Forward. *Review of Research in Education*, 40, 644-681. Retrieved May 3, 2021, from <http://www.jstor.org/stable/44668633>
  20. Pawlo, E., Lorenzo, A., Eichert, B., & Elias, M. (2019). *All SEL Should Be Trauma-Informed*. *The Phi Delta Kappan*, 101(3), 37-41. Retrieved May 4, 2021, from <https://www.jstor.org/stable/26837680>
  21. Reyes, M.R., Brackett, M.A., Rivers, S.E., Elbertson, N.A., & Salovey, P. (2012). The interaction effects of program training, dosage, and implantation quality on targeted student outcomes for the RULER approach to social and emotional learning. *School Psychology Review*, 41(1), 82-99.
  22. Schonert-Reichl, K. (2017). Social and Emotional Learning and Teachers. *The Future of Children*, 27(1), 137-155. Retrieved May 6, 2021, from <http://www.jstor.org/stable/44219025>
  23. Sklad, M., Diekstra, R., De Ritter, M., Ben, J., & Gravesteyn, C. (2012). Effectiveness of school based universal social, emotional, and behavioral programs. Do they enhance students' development in the area of skill, behavior, and adjustment? *Psychology and Schools*, 49, 892-909.
  24. Soutter, M. (2019). *Unintended lessons of SEL programs*. *The Phi Delta Kappan*, 100(5), 59-62. Retrieved May 6, 2021, from <https://www.jstor.org/stable/26614884>
  25. Taylor, R., Oberle, E., Durlak, J.A., & Weissberg, R.P. (2017). Promoting positive youth development through school-based social and emotional learning interventions. A meta analysis of follow-up effects. *Child Development*, 88, 1156-1171.
  26. Van Velsor, P. (2009). School Counselors as Social-Emotional Learning Consultants: Where Do We Begin? *Professional School Counseling*, 13(1), 50-58. Retrieved May 5, 2021, from <http://www.jstor.org/stable/42732919>
  27. Weissberg, R., & O'Brien, M. (2004). What Works in School-Based Social and Emotional Learning Programs for Positive Youth Development. *The Annals of the American Academy of Political and Social Science*, 591, 86-97. Retrieved May 5, 2021, from <http://www.jstor.org/stable/4127637>
  28. Wigglesworth, M., Lendrum, A., Oldfield, J., Scott, A., ten Bokkel, I., Tate, K., & Emery, C. (2016). The impact of trial stage, developer involvement and intentional transferability on universal social and emotional learning programme outcomes: A meta-analysis. *Cambridge Journal of Education*, 46, 347-376.
  29. Zinsser, K., Denham, S., & Curby, T. (2018). Becoming a Social and Emotional Teacher: The Heart of Good Guidance. *YC Young Children*, 73(4), 77-83. Retrieved May 4, 2021, from <https://www.jstor.org/stable/26783666>





## Class Size Reduction with Educational Assistants Prepared by the Department of Research & Performance Management

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### Class Size Reduction with Educational Assistants

January 2021

Author: Shelby G. Roberts, Ph.D.

#### Strategy

Reduce adult/student ratio (1:13) in Kindergarten through second grade.

#### Description

All K–2 classrooms will receive a full-time educational assistant that has been supported on foundational skills instruction and best instructional practices.

#### Recommendations

- When reducing class sizes, having additional certified teachers is likely to produce better results than reducing the adult to student ratio with paraprofessionals.
- If paraprofessionals are used, clear expectations of their role must be understood by both the supervising teacher and the paraprofessional.
- On-going, targeted professional development will improve the successfulness of the paraprofessionals in helping students with academic skills.
- Time should be allocated for paraprofessionals to plan with their supervising teacher.<sup>15</sup>
- Paraprofessionals should focus on implementing successful interventions for students in small group and one-on-one settings, but not solely focus on the lowest attaining students.<sup>15</sup>

**Smaller class sizes (with certified teachers) have shown mixed results on both the long- and short-term academic benefits.**

- The TN STAR program from the early 1990's remains the prominent study on small class sizes.<sup>1, 2, 3, 4</sup> It found that small classes (13–17 students) in grades K–3 had a positive, albeit small impact on math and reading in 3<sup>rd</sup> and 5<sup>th</sup> grade. The largest gains were seen in the first year of being enrolled in a smaller class regardless of grade and decreased in the following years.<sup>5, 6, 7</sup>
  - Follow-up studies showed that these students were more likely to enroll in college with Black students, free and reduced lunch recipients, and students from the poorest tertile of districts having even greater effects. They were also 1.6% more likely to earn a college degree.<sup>8</sup>
  - The cost of program however, barely met the threshold for a positive return on investment.<sup>2</sup>
- A large-scale study out of Minnesota used a quasi-experimental design to mimic controls and treatment groups. The authors found a positive effect of class size reduction by 10 students for reading and math on 3<sup>rd</sup> and 5<sup>th</sup> grade achievement scores. However, these effects were extremely small (0.04–0.05 standard deviations), thus the authors stated, “class size reductions are unlikely to lead to sizable increases in student learning.”<sup>3</sup>





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- Another quasi-experimental design used state data from Connecticut schools. This study found no support for smaller class sizes in the earlier grades on 4<sup>th</sup> and 6<sup>th</sup> grade achievement scores. Even effects as small as a 2–4 percent increases in scores were accounted for by other factors not related to class size.<sup>9</sup>
- A longitudinal study did not find support for smaller class sizes over a three-year period in Hong Kong primary schools. Students were enrolled in reduced class sizes for zero, two, or three years at the same school and their 3<sup>rd</sup> grade achievement was compared. Across all schools there were no consistent positive effects of the reduced class sizes, though some within-school positive effects were found.<sup>10</sup>
- In Texas schools, smaller class sizes in grade four and five did show positive effects on student achievement in 4<sup>th</sup> grade and slightly positive effects in 6<sup>th</sup> grade. However, the authors note that the benefits of the small classes pale in comparison to those resulting from improved teacher quality.<sup>11</sup>

“By simply increasing the numbers of [teachers’ assistants] in a school, the attainments of all pupils will not necessarily improve.”<sup>12</sup>

- The STAR experiment mentioned above also investigated regular classrooms (22–25 students) with and without teachers’ aids (TA). It found no evidence that students in a regular-sized class with a teacher and TA performed any better on tests in 3<sup>rd</sup> grade. By 5<sup>th</sup> grade, students in K–3 classes with a TA performed slightly worse on their standardized tests.<sup>6, 7</sup> Because there was no significant difference between the treatment- and control-group, they are often treated the same in follow-up studies.<sup>5, 6</sup>
- A UK based study looked at the amount of TA’s support (as measured by the teacher) on students’ math, science, and reading skills in the mid-2000’s. Students in two cohorts ( $n = 8,200$ ) were tracked over one year on academic skills and other influencing factors. They found no positive effect of the TA support for any subject across any year, and 76% of the results were in a negative direction. Students who often need the most support, such as students with special educational needs, tended to show even starker negative outcomes. Those students who received the most TA support had lower outcomes than those who had received little or no support.<sup>13, 14, 15</sup>

Interventions where paraprofessionals have been successful often have focused training, adequate support, and clear job roles.

- Paraprofessionals (PP) often report confusion about job responsibilities,<sup>16, 17</sup> a lack of planning time with the supervising teacher,<sup>15, 17</sup> and limited training.<sup>15, 19, 30</sup> Studies that address these issues found more success with their use of PPs. An in-depth literature review of reading interventions in K–3 using PPs found that training, direct and on-going supervision and feedback, and scripted lessons were more important than the number or type of sessions for student success.<sup>20</sup>
- A meta-analysis showed that targeted interventions using trained and supported TA’s showed positive results when focusing on one-on-one or small group instruction in literacy for struggling students.<sup>12</sup>



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- One study focused on the effect of fluency training for PPs on student reading. Paraprofessionals participated in five-hour training sessions focused on fluency instruction. They found the training to be effective with more PPs using praise and error correction accurately and to the required extent needed. However, the PPs struggled to maintain consistency with their new skills over multiple lessons. Student reading was not impacted by the PPs' successful training, likely because it remained highly accurate throughout the study.<sup>21</sup>
- Another meta-analysis<sup>22</sup> showed that reading tutoring implemented by PPs improved student reading skills compared to control groups (i.e., no tutoring).<sup>23, 24</sup> However, the studies that also had certified teachers as tutors showed that teachers were more effective than PPs in improving student reading.<sup>25, 26</sup>
- Conversely, a meta-analysis on successful interventions in elementary mathematics found that paraprofessional-led tutoring (either in a small group or one-on-one) was as effective as teacher tutors. It is worth noting that the paraprofessionals had extensive professional development and were similarly credentialed with most holding bachelor's degrees in these studies.<sup>34</sup>
- In another study, targeted professional development and coaching allowed PPs to implement various strategies with efficacy. A two-hour workshop follow by hour long in-person coaching sessions resulted in significant improvements in the fidelity of the PPs' implementation with special education students.<sup>27</sup> It is worth noting that single-day workshops do not provide this increase in effective implementation.<sup>28, 29</sup>

### Behavior modification and reduction can be supported by paraprofessionals with prior training.

- "Paraprofessionals are among personnel most often tasked with providing intervention for children with [disruptive behavior disorders]."<sup>31</sup>
- Paraprofessionals who are receiving professional development training on behavior interventions reported more "operationally defined behavior concerns" than those without training. The training gave the PP's the ability to accurately identify behaviors and appropriate intervention which is essential in modifying student behavior.<sup>32</sup>
- When working with students with different learning needs, one case-study found that training and coaching for PPs ( $n = 3$ ) resulted in more appropriate student behavior and less disruptive behavior for those students.<sup>33</sup>

### Paraprofessionals who move into teaching benefit from their prior experience in the classroom and are retained at higher rates.

- TA's who transition to full-time teaching positions tend to be more racially diverse, older, have lower test scores, and come in through alternative licensures. They persist in the field longer, and their elementary students show higher growth achievement when compared to other novice teachers specifically in reading.<sup>35</sup>
- Teachers coming through the Leap to Teacher program, a paraprofessional to teacher pipeline, showed that six years into the program 60% of participants were still in the profession and in the city.<sup>36</sup> This higher retention rate was echoed in a study that compared paraprofessionals, emergency licensure teachers, and Peace-Corps



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teachers, and found that those teachers who entered the profession through first serving as a PP had the highest retention rates.<sup>37</sup>



## Class Size Reduction with Educational Assistants

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### References

1. Altinok, N., & Kingdon, G. (2012). New evidence on class size effects: A pupil fixed effects approach. *Oxford Bulletin of Economics and Statistics*, 74(2), 203–234.
2. Chingos, M. M. (2013). Class size and student outcomes: Research and policy implications. *Journal of Policy Analysis and Management*, 411–438.
3. Cho, H., Glewwe, P., & Whitley, M. (2012). Do reductions in class size raise students' test scores? Evidence from population variation in Minnesota's elementary schools. *Economics of Education Review*, 31(3), 77–95. <https://doi.org/10.1016/j.econedurev.2012.01.004>
4. Leuven, E., & Løkken, S. A. (2020). Long-Term Impacts of Class Size in Compulsory School. *Journal of Human Resources*, 55(1), 309–348. doi:10.3368/jhr.55.2.0217.8574R2
5. Nye, B., Hedges, L. V., & Konstantopoulos, S. (1999). The long-term effects of small classes: A five-year follow-up of the Tennessee class size experiment. *Educational Evaluation and Policy Analysis*, 21(2), 127–142.
6. Nye, B., Hedges, L. V., & Konstantopoulos, S. (2000). The effects of small classes on academic achievement: The results of the Tennessee class size experiment. *American Educational Research Journal*, 37(1), 123–151
7. Word, E., Johnston, J., Bain, H., Fulton, D. B., Boyd, Zaharias, J., Lintz, M. N., Achilles, CM., Folger, J., & Breda, C. (1990). *Student/Teacher Achievement Ratio (STAR): Tennessee s K–3 class-size study*. Nashville: Tennessee Department of Education.
8. Dynarski, S., Hyman, J., & Schanzenbach, D. W. (2013). Experimental evidence on the effect of childhood investments on postsecondary attainment and degree completion. *Journal of Policy Analysis and management*, 32(4), 692–717. <https://doi.org/10.1002/pam.21715>
9. Hoxby, C. M. (2000). The effects of class size on student achievement: New evidence from population variation. *The Quarterly Journal of Economics*, 115(4), 1239–1285.
10. Galton, M., & Pell, T. (2012). Longitudinal effects of class size reductions on attainment: Results from Hong Kong primary classrooms. *International Journal of Educational Research*, 53, 360–369.
11. Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417–458.
12. Farrell, P., Alborz, A., Howes, A., & Pearson, D. (2010). The impact of teaching assistants on improving pupils' academic achievement in mainstream schools: A review of the literature. *Educational Review*, 62(4), 435–448. <https://doi.org/10.1080/00131911.2010.486476>
13. Blatchford, P., Russell, A. and Webster, R. (2012) *Reassessing the impact of teaching assistants How research challenges practice and policy*. Oxon: Routledge.
14. Giangreco, M. F. (2012). Reassessing the impact of teaching assistants: how research challenges practice and policy. *London Review of Education*. <http://dx.doi.org/10.1080/14748460.2012.729892>
15. Sharples, J., Blatchford, P., & Webster, R. (2016). *Making best use of teaching assistants*. Education Endowment Foundation.
16. Brown, T. S., & Stanton-Chapman, T. L. (2017). Experiences of paraprofessionals in US preschool special education and general education classrooms. *Journal of Research in Special Educational Needs*, 17(1), 18–30.
17. Giangreco, M. F., Suter, J. C., & Doyle, M. B. (2010). Paraprofessionals in inclusive schools: A review of recent research. *Journal of Educational and Psychological Consultation*, 20, 41–57. doi:10.1080/10474410903535356
18. Stewart, E. M. (2019). Reducing ambiguity: Tools to define and communicate paraprofessional roles and responsibilities. *Intervention in School and Clinic*, 55(1), 52–57. DOI: 10.1177/1053451218782431
19. Breton, W. (2010). Special education paraprofessionals: Perceptions of preservice preparation, supervision, and ongoing developmental training. *International Journal of Special Education*, 25, 34–45.
20. Samson, J. F., Hines, S. J., & Li, K. (2015). Effective use of paraprofessionals as early intervention reading tutors in grades K-3. *Mentoring & Tutoring: Partnership in Learning*, 23(2), 164–177.



## Class Size Reduction with Educational Assistants

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---

21. O’Keeffe, B. V., Slocum, T. A., & Magnusson, R. (2013). The effects of a fluency training package on paraprofessionals’ presentation of a reading intervention. *The Journal of Special Education*, 47(1), 14–27.
22. Slavin, R. E., Lake, C., Davis, S., & Madden, N. A. (2011). Effective programs for struggling readers: A best-evidence synthesis. *Educational Research Review*, 6(1), 1–26.
23. Jenkins, J. R., Peyton, J. A., Sanders, E. A., & Vadasy, P. F. (2004). Effects of reading decodable texts in supplemental first-grade tutoring. *Scientific Studies of Reading*, 8, 53–85.
24. Vadasy, P. F., Sanders, E. A., & Tudor, S. (2007). Effectiveness of paraeducator-supplemented individual instruction: Beyond basic decoding skills. *Journal of Learning Disabilities*, 40(6), 508–525.
25. Ehri, L., Dreyer, L., Flugman, B., & Gross, Al. (2007). Reading Rescue: An effective tutoring intervention model for language-minority students who are struggling readers in first grade. *American Educational Research Journal*, 44(2), 414–448.
26. Brown, K. , Morris, D., & Fields, M. (2005). Intervention after grade 1: Serving increased numbers of struggling readers effectively. *Journal of Literacy Research*, 37(1), 61–94.
27. Brock, M. E., & Carter, E. W. (2015). Effects of a professional development package to prepare special education paraprofessionals to implement evidence-based practice. *The Journal of Special Education*, 49(1), 39–51.
28. Barnes, C. S., Dunning, J. L., & Rehfeldt, R. A. (2011). An evaluation of strategies for training staff to implement the picture exchange communication system. *Research in Autism Spectrum Disorders*, 5, 1574–1583. doi:10.1016/j.rasd.2011.03.003
29. Hall, L. J., Grundon, G. S., Pope, C., & Romero, A. B. (2010). Training paraprofessionals to use behavioral strategies when educating learners with autism spectrum disorders across environments. *Behavioral Interventions*, 25, 37–51. doi:10.1002/bin.294
30. Alperin, A., Reddy, L. A., Glover, T. A., Breeden, N., Dudek, C., & Regan, P. (2020). Behavior Support Coaching for a Paraprofessional Working with First-Grade Students Exhibiting Disruptive Behavior Problems in an Urban High-Poverty Elementary School. *Clinical Case Studies*, 19(5), 303–320.
31. Reddy, L. A., Alperin, A., & Glover, T. A. (2020). A critical review of the professional development literature for paraprofessionals supporting students with externalizing behavior disorders. *Psychology in the Schools*. <https://doi.org/10.1002/pits.22381>
32. Bronstein, B., Breeden, N., Glover, T. A., & Reddy, L. A. (2020). Paraprofessionals’ Perceptions of Behavior Problems in Elementary School Classrooms. *The Journal of Special Education*, (online only) <https://doi.org/10.1177/0022466920961085>
33. Walker, V. L., & Snell, M. E. (2017). Teaching paraprofessionals to implement function-based interventions. *Focus on Autism and Other Developmental Disabilities*, 32(2), 114–123.
34. Slavin, R. E., & Lake, C. (2008). Effective programs in elementary mathematics: A best-evidence synthesis. *Review of Educational Research*, 78(3), 427–515.
35. Fortner, C. K., Kershaw, D. C., Bastian, K. C., & Lynn, H. H. (2015). Learning by doing: The characteristics, effectiveness, and persistence of teachers who were teaching assistants first. *Teachers College Record*, 117(11), 1–30.
36. Abramovitz, M., & D’Amico, D. (2011). *Triple payoff: The Leap to Teacher program*. New York: The City University of New York Murphy Institute.
37. Clewell, B. C., & Villegas, A. M. (2001). *Absence unexcused: Ending teacher shortages in high-need areas*. Washington, DC: The Urban Institute.



## ACT Preparation – Peer Power

Prepared by the Department of Research & Performance Management

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### College Readiness/ACT Preparation

April 2022

Author: Ashton Toone

#### Key Findings

- Students benefit both academically and socially from the experience of having a peer mentor.
- Peer mentoring has been proven to be positively associated with positive academic gains.
- Overall, research suggests that pretest intervention is associated with an increase in standardized testing scores.

#### Peer Power Program Overview

Peer Power is a non-profit organization that employs high-performing college students to serve as tutors and mentors to high school students in public schools. These college students are known as success coaches that work in classroom settings. Peer Power is currently situated in the following schools in Memphis-Shelby County Schools: Central High School, Cordova High School, Douglass High School, East High School, Hamilton High School, Kingsbury High School, Melrose High School, Ridgeway High School, and Whitehaven High School. Peer Power has two focuses with MSCS students. One focus is offering ACT prep courses for high school students at participating schools, and the other is providing general mentoring and assistance to students.

#### Peer Learning

Peer Power relies on the process of peer learning through the lens of a near-peer intervention model. Peer learning has been proven to be successful in increasing students' academic gains. It provides an opportunity for students to learn from each other and take an active role in their learning experience.<sup>4</sup> There are three main types of peer tutoring: (1) Reciprocal Peer Tutoring (RPT), (2) Class-Wide Peer Tutoring (CWPT), and (3) Cross-Age Peer Tutoring. (Ali et al., 2015).

- Reciprocal Peer Tutoring: peers learn from each other by alternating between tutor and learner roles
- Class-wide peer tutoring: whole class is broken down into small groups and groups learn from each other
- Cross-Age peer tutoring: elder students with more academic experience tutor younger students

Peer Power primarily employs the Cross-Age Peer Tutoring approach using the Near-Peer mentor model. Near-peer mentoring occurs when a mentor is close to the social, professional or age level of the mentee.<sup>7</sup>

Ali and colleagues noted that there are several benefits of peer tutoring such as students are empowered to be active participants in their learning, additional individualized time





## ACT Preparation – Peer Power

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spent on classroom content, and the development of interpersonal skills among both tutors and learners.<sup>2</sup> Those same benefits appear in the near-peer mentoring model.

### Test Preparation

A primary component of the Peer Power program is ACT Prep University where students receive preparation and coaching for the ACT test. Previously, the effects of test preparation on students' test scores showed mixed results and moderate positive effects.<sup>5</sup> A 2015 study examined the relationship between SAT score gains and factors of test preparation sessions.<sup>3</sup> They found that time spent on individual tutoring was positively associated with an increase in the total SAT score - each hour spent on tutoring increased the final SAT score by 2.34 points. They also found that the time spent preparing was positively associated with score gains.

There was a similar trend found in research done on the ACT test. Schiel and Valiga found that students who prepared for and took the ACT for a second time gained an average of 1.4 points on their composite score.<sup>6</sup> Additionally, ACT found that longer-term interventions such as consistent coursework were associated with increases of 2.5 to 5.8 points in ACT Composite score.<sup>1</sup> Moore, Sanchez, and San Pedro also found that test preparation was equally effective for students of multiple marginalized identities (i.e., sex, race, household income).<sup>5</sup>

There is additional evidence that suggests that intervention in the form of a test preparation course could result in positive general academic achievement gains. What Works Clearinghouse found a statistically significant positive effects on students' general academic achievement after participating in test preparation courses, citing three studies that compared students who received treatment versus students who did not prior to taking or re-taking a standardized test.<sup>8</sup>

### Conclusion

Overall, students can benefit from any type of standardized testing intervention. Not only could the intervention improve composite scores, but it can also contribute to greater classroom academic gains. Additionally, the individualized peer tutoring and mentoring that Peer Power provides can be invaluable to students as they are preparing for the ACT and post-secondary opportunities as it combines both academic and social reinforcements.



## ACT Preparation – Peer Power

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### References

1. ACT. (2005). *Issues in college readiness: What kind of test preparation is best?* Iowa City, IA: ACT.
2. Ali, N., Anwer, M., & Jaffar, A. (2015). Impact of Peer Tutoring on Learning of Students. *Journal for Studies in Management and Planning*, 1(2), 61–66.
3. Appelrouth, J. I., Zabucky, K. M., & Moore, D. (2015). Preparing students for college admissions tests. *Assessment in Education: Principles, Policy & Practice*, 24(1), 78–95.
4. Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1994). *The new circles of learning: Cooperation in the classroom and school.* ASCD.
5. Moore, R., Sanchez, E., & San Pedro, M. O. (2018). *Investigating Test Prep Impact on Score Gains Using Quasi-Experimental Propensity Score Matching.* ACT Working Paper 2018-6.
6. Schiel, J., & Valiga, M. (2014). *How the amount of time spent on test preparation relates to ACT scores.* Iowa City, IA: ACT.
7. Singh S. (2010). Near peer role modeling: the fledgling scholars' education paradigm. *Anatomical Sciences Education*, 3, 50–51.
8. U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2016, October). *Transition to College intervention report: ACT/SAT Test Preparation and Coaching Programs.*



## Advanced Placement (AP) Course Expansion Prepared by the Department of Research & Performance Management

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### AP Course Expansion

May 2021

Author: Anne Walton Garrison

#### Strategy

Launch AP Academy, a centralized virtual delivery method for Advanced Placement (AP) courses so that students at schools with few or no onsite AP offerings can have access to AP courses.

#### Key Findings

- Despite AP's dramatic expansion since its inception and despite ongoing efforts to increase AP participation among disadvantaged groups, racial/ethnic and economic participation gaps persist. Intentional expansion of AP offerings in schools that serve disadvantaged populations has not brought about equitable AP participation, as privileged groups have used their resources and status to increase their own AP access and participation, thus maintaining their competitive advantage in college preparation and admissions.
- Most research on AP effectiveness is fatally flawed, in that it cannot establish whether differences in outcomes between AP and non-AP participants are program effects or selection effects. However, one well-designed study indicated a causal link between learning enough in an AP course to pass the AP exam and subsequently scoring higher on the ACT. Merely taking an AP course, however, showed no benefit for ACT performance.
- Two large-scale studies comparing the effectiveness of online versus in-person AP participation yielded opposite results, with one showing that online participants outperformed in-person participants, and the other showing the reverse. The former study contained no control variables, however, while the latter controlled for demographics and prior achievement. (Neither study was designed to establish causation.)

#### Introduction

The College Board's AP program has an established reputation for academic rigor, and AP participation in high school can work to students' advantage in college admissions and scholarship decisions and can even count for college credit. Given these factors, educators, education scholars, policymakers, and the College Board itself have turned their attention to democratizing AP access and expanding AP participation to underrepresented groups as a means to bridge persistent racial/ethnic and economic achievement gaps and to increase college readiness, college enrollment, and college persistence among historically marginalized populations.

A school's ability to offer AP coursework depends on a variety of factors. Small schools in particular struggle to offer AP courses, because the student population may not be big enough to support multiple levels of coursework in the same subject within a given grade level (e.g., regular, honors, and AP English). Beyond school size, other factors include having



## Advanced Placement (AP) Course Expansion Prepared by the Department of Research & Performance Management

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enough teachers trained to teach AP courses and having enough students interested in taking them.

Technology has introduced a way around these dilemmas, enabling students to take AP courses online regardless of whether their school has both the staff and student body to make offering a given AP course onsite feasible. The development of online instruction has opened up the landscape of AP coursework to populations that have not traditionally had access to it. From rural schools to understaffed/underfunded urban schools to small schools of any stripe, expanded access to AP can now be achieved without juggling limited resources and making difficult tradeoffs. As policymakers seek to increase AP equity through online course offerings, it would be helpful to consider studies examining the effectiveness of this strategy.

### Overview of the Literature

Unfortunately, the scholarly literature does not contain many high-quality, independent studies focused specifically on the effectiveness of and/or best practices for broad-access online AP courses. For the most part, the literature pertinent to this topic requires surveying scholarship from three areas of inquiry: effectiveness of the AP program, effectiveness of online instruction, and access to AP courses. Some studies may bridge two of the three subject areas, but studies considering all three in tandem are scant. Thus, this literature review considers studies from all three areas, with priority given to studies that treat at least two of the three topics together.

### Tension Between AP Access and Effectiveness

In a recent review<sup>1</sup> of the AP literature entitled “Advanced Placement: The Dual Challenge of Equal Access and Effectiveness” Kolluri (2018) explored the tension between the somewhat competing goals of expanding AP access and maintaining AP’s academic rigor. The author noted that while AP was once the province of elite students at elite schools, participation in AP has grown steadily since its inception. However, the rise in AP participation has been accompanied by a decline in AP exam scores and a weakening of the association between AP participation and success outcomes, leading many scholars to conclude that many students now taking AP are underprepared, and as such, they are not set up to benefit from the instruction.

Kolluri pointed out, however, that of the many quantitative studies included in his literature review, only one<sup>2</sup> employed a quasi-experimental design; the rest were correlational and thus could not establish causation. The extant studies on AP effectiveness thus may not have successfully ruled out the influence of student-level and school-level characteristics that affect both AP participation and outcomes such as AP exam performance and college success.

Indeed, the methodological shortcomings of research on AP effectiveness was a focal point in another review of the literature<sup>3</sup> published around the same time. Warne (2017) noted that earlier studies simply compared AP students to non-AP students while controlling for few or no confounding variables. Later studies have tended to control for many more student-



## Advanced Placement (AP) Course Expansion Prepared by the Department of Research & Performance Management

and school-level variables that would affect both AP participation and outcomes, resulting in much weaker associations than had been found in the studies that lacked such controls.

Warne also pointed out that merely controlling for confounding variables does not indicate a causal impact of AP on college success or other desired outcomes, noting that only a randomized control trial could do so conclusively, and that none had ever been implemented for the AP program. Thus, the question remains as to whether the somewhat better college outcomes observed among AP participants is attributable to their AP experience or to other factors such as economic, social, and cultural capital; school quality; or academic preparedness unrelated to AP coursework (to name a few).

That said, one strong quasi-experimental study<sup>4</sup> examined AP's impact on ACT scores using propensity score analysis with marginal mean weighting to match four groups of students (non-AP students, AP exam nonparticipants, AP exam non-passers, and AP exam passers) on a wide variety of demographic and academic variables. The study found little benefit to merely enrolling in an AP course. However, students who took and passed the AP exam did obtain higher ACT scores than their rigorously matched counterparts, suggesting a causal link between learning enough in an AP course to pass the AP exam and subsequently scoring higher on the ACT.

Moving back to the issue of expanding access to AP, Kolluri's (2018) literature review emphasized that racial, ethnic, and class inequities in AP access and participation still persist, despite the massive growth in AP that has taken place over the decades. Underscoring this point, a large-scale study<sup>5</sup> of AP participation in California found that as the state attempted to expand AP access,

*California's intervention resulted in increased AP subject offerings and enrollments in high schools serving disadvantaged and less advantaged students, but these reductions in deprivation had trivial effects on inequalities, since schools serving advantaged students increased their own AP offerings and enrollments. In addition, high schools serving White and Asian students had larger increases in AP offerings and enrollments than high schools serving Black and Hispanic students (p. 1).*

In a similar vein, Schneider (2009) compiled a history of AP access and participation<sup>6</sup> that highlighted the "difficulty of combating inequality with school reform, particularly in light of continuing moves by privileged groups to gain a measure of distinction" (p. 813). A subsequent study<sup>7</sup> demonstrated this phenomenon, finding that high schools' programmatic and non-programmatic resources influenced college outcomes and mediated the effect of socioeconomic status on college choices. The author concluded that:

*... the fragmented secondary school system in the United States is an avenue for affluent parents to seek relative advantages for their children in terms of reportable marks of distinction (namely AP course-taking and high SAT scores) and also in terms of social influences that lead to successful applications to selective colleges.*



## Advanced Placement (AP) Course Expansion Prepared by the Department of Research & Performance Management

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*Inequalities between schools substantially explain inequalities in college destinations based on family socioeconomic status (p. 803).*

A study examining unfulfilled AP potential<sup>8</sup> found that most students demonstrating AP potential did not fulfill it, and this was especially the case for students of color and economically disadvantaged students. Moreover, the study “did not find support for many of the student-centered reasons for forgoing AP, such as lack of motivation and constraints on time due to work or extra-curricular activities” (p. 1).

Another study<sup>9</sup> examined Black-White gaps in AP participation within racially diverse schools and “found that an additional AP course increased the Black-White AP gap in schools by 1.1 percentage points, net of other variables” (p. 642), indicating that expanding AP course offerings alone does not bring about equitable AP participation.

While access to AP has expanded dramatically over the years, the above overview underscores how persistent AP participation gaps can be, even in response to policies specifically designed to close them. Will the expansion of online AP programs help move the needle in ways that other policies have not?

### Online AP Programs

New York state’s Virtual Advanced Placement (VAP) program aimed “to increase access to AP courses for students who would have otherwise been underrepresented in AP programs” (p. 40)<sup>10</sup>. An evaluation<sup>10</sup> of the program found that the percentage of Black students in VAP was very similar to the percentage of Black students in the state, but the proportion of Latinx students in VAP lagged their proportion within the state population. Economically disadvantaged students, English language learners, and students with disabilities all had much lower VAP participation than their respective proportions within the state would indicate. Thus, while the VAP program helped Black students reach parity, it did not do the same for other marginalized groups.

A case-study evaluation<sup>11</sup> of an online pilot program designed to expand AP opportunities at a large urban high school in Ohio revealed an attrition rate of nearly 62%. The evaluator cited the following as being detrimental to the program: insufficient time to plan the pilot rollout; lack of support for students; and poor communication among the virtual vendor representatives, the virtual teacher, the program administrator, the program mentor, and the participating students.

As to the effectiveness of large-scale efforts to expand AP access via online course offerings, a survey of the literature yielded two studies that compared outcomes for students in the online program to those receiving in-person AP instruction. One of these studies<sup>12</sup> looked at Florida Virtual School (FVS), comparing FVS students’ AP exam performance to that of non-FVS students (i.e., to students in site-based AP courses). The FVS students outperformed the non-FVS students, but given that no control variables were employed, one cannot conclude that the differences were program effects rather than selection effects.





## Advanced Placement (AP) Course Expansion Prepared by the Department of Research & Performance Management

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The other study<sup>13</sup> considered AP courses offered through Virginia Virtual (VVA). Here is a summary of the findings:

*After controlling for demographic and prior achievement differences, students in face-to-face courses were more likely to score higher and demonstrate proficiency on SOL [state-administered achievement tests] and AP exams than students taking the same courses through VVA across most subject areas. Because the study design was correlational, additional research is needed to determine whether the difference in performance is due to the characteristics of the students in online courses, aspects of the VVA program itself, or some other factor such as students' reasons for enrolling in the course or the supports available in their local schools (p. 1).*

As for research focusing on the implementation of online AP, one study<sup>14</sup> examined the role of the facilitator in the teacher-facilitator model of online instruction. In this model, an online teacher delivers instruction virtually while a facilitator is onsite to help troubleshoot technical problems, proctor exams, monitor student progress, and provide a supportive learning environment for students. One emergent theme from this qualitative study was the perception among facilitators that teacher-student interactions could be improved. Another theme was the inadvertent overlap that can develop between the roles of the online AP teacher and the onsite facilitator, such that facilitators sometimes find themselves delivering direct AP instruction, which is beyond their purview and their training.

Another qualitative study<sup>15</sup> probed teachers' and students' perceptions about online interactions within a statewide Virtual Advanced Placement program. The study found that while teachers had a generally positive appraisal of the online interactions within their courses, students' perceptions were more mixed.



## Advanced Placement (AP) Course Expansion

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### References

1. Kolluri, S. (2018). Advanced Placement: The dual challenge of equal access and effectiveness. *Review of Educational Research, 88*(5), 671–711.
2. Parker, W., Mosborg, S., Bransford, J., Vye, N., Wilkerson, J., & Abbott, R. (2011). Rethinking advanced high school coursework: Tackling the depth/breadth tension in the AP U.S. government and politics course. *Journal of Curriculum Studies, 43*, 533–559.
3. Warne, R. T. (2017). Research on the academic benefits of the Advanced Placement program: Taking stock and looking forward. *SAGE Open, 7*(1), 2158244016682996.
4. Warne, R. T., Larsen, R., Anderson, B., & Odasso, A. J. (2015). The impact of participation in the Advanced Placement program on students' college admissions test scores. *The Journal of Educational Research, 108*(5), 400–416.
5. Klugman, J. (2013). The Advanced Placement arms race and the reproduction of educational inequality. *Teachers College Record, 115*(5), 1–34.
6. Schneider, J. (2009). Privilege, equity, and the Advanced Placement program: Tug of war. *Journal of Curriculum Studies, 41*(6), 813–831.
7. Klugman, J. (2012). How resource inequalities among high schools reproduce class advantages in college destinations. *Research in Higher Education, 53*(8), 803–830.
8. Rodriguez, A., & Hernandez-Hamed, E. (2020). Understanding unfulfilled AP potential across the participation pipeline by race and income. *Teachers College Record, 122*(9).
9. Rodriguez, A., & McGuire, K. M. (2019). More classes, more access? Understanding the effects of course offerings on Black-White gaps in Advanced Placement course-taking. *The Review of Higher Education, 42*(2), 641–679.
10. Fenty, N. S., & Allio, A. (2017). Using distance learning to impact access of diverse learners to Advanced Placement programs. *Quarterly Review of Distance Education, 18*(2).
11. Beese, J. (2014). Expanding learning opportunities for high school students with distance learning. *American Journal of Distance Education, 28*(4), 292–306.
12. Johnston, S., & Barbour, M. K. (2013). Measuring success: Examining achievement and perceptions of online advanced placement students. *American Journal of Distance Education, 27*(1), 16–28.
13. Mislevy, J., Schmidt, R., Puma, M., Ezekoye, A., & Saucedo, D. (2020). *Comparing the achievement of students in Virtual Virginia and face-to-face courses*. SRI International.
14. Hendrix, N., & Degner, K. (2016). Supporting online AP students: The rural facilitator and considerations for training. *American Journal of Distance Education, 30*(3), 133–144.
15. Blaine, A. M. (2019). Interaction and presence in the virtual classroom: An analysis of the perceptions of students and teachers in online and blended Advanced Placement courses. *Computers & Education, 132*, 31–43.



## AgriSTEM Program Expansion

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### AgriSTEM Program Expansion

April 2022

Author: Ashton Toone

#### Strategy

Memphis-Shelby County Schools will expand its Agriculture Program in an effort to enhance student preparedness for and access to post-secondary opportunities and improve the culture and climate of schools.

#### Key Findings

- Students who participate in Career and Technical Education (CTE) courses graduate high school and enter postsecondary programs or careers at higher rates than their peers.
- CTE programs within a school rather than a CTE-only school are more cost efficient for school districts.
- Research suggests that participation in CTE programs is associated with higher wages for students and an increased motivation to attend school.

#### Career and Technical Education Overview

In the state of Tennessee, career and technical education (CTE) is defined as the rigorous academic, technical, and employability skills or content that is taught through career-focused standards and courses designed to prepare learners for advanced education, training and employment in aligned occupations (TDOE, 2020). CTE is organized into the following major industry sectors: advanced manufacturing; agriculture, food, and natural resources; architecture and construction; arts, audio/visual technology, and communications; business management and administration; education and training; finance; government and public administration; health science; hospitality and tourism; human services; information technology; law, public safety, corrections, and security; marketing, distribution and logistics; STEM (science, technology, engineering, and mathematics); and transportation (TDOE, 2020). The skills acquired in CTE programs are intended to prepare students to enter postsecondary or career environments.

According to a study done by the Tennessee Higher Education Commission (2020), 42% of PK-12 students in Tennessee concentrate in a career and technical education program of study, and 72% of Tennessee students in CTE programs enrolled in advanced training or entered the workforce after graduation. In 2018, the Tennessee Department of Education reported that Agriculture, Food, & Natural Resources was the third most popular industry that students sought a concentration in.

#### Benefits of Career and Technical Education

There are many challenges that may arise in CTE expansion, but operating costs is one of the primary barriers to the success of CTE programs. CTE education often requires specialized equipment, facilities, and materials in order to operate at its optimal level. Additional barriers may include hiring adequately trained staff to lead agricultural programs



## **AgriSTEM Program Expansion**

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of study. However, research suggests that having a CTE-focused school, rather than a CTE only school proves to be more cost efficient to the district and beneficial for students. Not only could CTE programs solve potential enrollment issues (i.e., under enrollment and overcrowding), but CTE can provide labor for the local workforce which would in turn strengthen the local economy (EAB, 2017).

CTE courses are also often structured as small learning communities which can prepare students for postsecondary programs and early career opportunities (EAB, 2019). While there is not much experimental and long-term data on students who participate in CTE programs, CTE program participation has been associated with higher wages for students in postsecondary and career and higher motivations to attend school more frequently (Kreisman & Stange, 2017). The U.S. Department of Education found that high school students who participated in CTE programs graduated high school at slightly higher rates than their peers and entered postsecondary programs at slightly higher rates than their peers (USDOE, 2017).

### **Agriculture CTE Programs**

Agriculture-focused CTE programs, also known as school-based agricultural education (SBAEs), largely focus on topics of agriscience and agribusiness, but program pathways can vary from power and structural systems to veterinary science. Instruction in the agriculture pathway is comprised of three main components: (1) classroom/laboratory instruction, (2) supervised agricultural experience programs, and (3) student leadership through Future Farmers of America (FFA). In Tennessee, the following programs of study within agriculture are available:

- Agribusiness
- Agriculture, Engineering, Industrial, and Mechanical Systems
- Environmental and Natural Resource Management
- Food Science
- Horticulture Science
- Veterinary and Animal Science

Students are also able to receive credentials in both animal science and horticulture science.

### **Conclusion**

Though the longitudinal effects of CTE are still being explored, data does suggest that participating in any CTE pathway can be beneficial to the student. And because the agricultural program is only being expanded in one school, challenges associated with staffing and budget are less likely to impact the success of the pathway's implementation.



## AgriSTEM Program Expansion

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### References

1. *Agriculture, Food, & Natural Resources*. Tennessee State Government - TN.gov. (2021). Retrieved April 21, 2022, from <https://www.tn.gov/education/career-and-technical-education/career-clusters/cte-cluster-agriculture-food-natural-resources.html>
2. Education Advisory Board. (2017). *Career and Technical Education-Focused High Schools*. Retrieved from [https://eab.com/wp-content/uploads/2019/07/Career-and-Technical-Education-Focused-High-Schools\\_032018.pdf](https://eab.com/wp-content/uploads/2019/07/Career-and-Technical-Education-Focused-High-Schools_032018.pdf)
3. Education Advisory Board. (2019). *Establishing Career Academies*. Retrieved from [https://eab.com/wp-content/uploads/2019/12/Establishing-Career-Academies\\_EAB.pdf](https://eab.com/wp-content/uploads/2019/12/Establishing-Career-Academies_EAB.pdf)
4. Kreisman, D., & Stange, K. (2017). *Vocational and Career Tech Education in American High Schools: The Value of Depth Over Breadth*. Retrieved from <https://aysps.gsu.edu/files/2017/10/17-12-Kreisman-VocationalTech.pdf>
5. *Strengthening Career and Technical Education in Tennessee*. Tennessee State Government - TN.gov. (2020). Retrieved April 21, 2022, from [https://www.tn.gov/content/dam/tn/education/ccte/TN\\_2020\\_State\\_Plan.pdf](https://www.tn.gov/content/dam/tn/education/ccte/TN_2020_State_Plan.pdf)





## Naviance

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### Naviance

April 2022

Author: Anne Walton Garrison

#### Strategy

Continue use of the Naviance platform and services for middle and high school students to develop robust career pathway opportunities.

#### Introduction

MSCS adopted Naviance in 2020–21. Naviance is an online platform designed to assist students with college and career readiness. It serves as a one-stop-shop for multiple types of information, including student information (e.g., college entrance exam scores, grade point average [GPA], individualized graduation plans), college information (e.g., admissions requirements, applications, financial aid forms), and a variety of assessments and questionnaires pertinent to the college selection and application process. School counselors and students can use Naviance to explore college and career options that match students' academic performance, interests, and goals. Students can also organize their college choices and applications as well as request transcripts and recommendation letters inside the platform. The District's current subscription includes all Naviance offerings except for AP and SAT test preparation and a feature for coordinating volunteer opportunities.

A thorough search of the scholarly literature using the term *Naviance* revealed that only four peer-reviewed studies of the platform have been conducted thus far. An overview of each of these studies, along with their recommendations, is presented in chronological order.

#### Naviance Use and College Application Rate<sup>1</sup>

##### Study Synopsis

Noting high student-to-counselor ratios that prevent many school counselors from being able to give students as much one-on-one attention as they need, the authors of this study sought to learn whether the Naviance platform might fill in some of the gaps. The study aimed to find out whether college application rate was associated with the number of years students had access to Naviance and the number of times they accessed the platform each year.

The study focused on the first four cohorts of graduates who had access to Naviance: the first cohort were seniors during the first year of Naviance adoption, while the fourth cohort had access to Naviance for all four years of high school. The study found that college application rate was significantly associated with both the number of times students accessed Naviance (to a strong degree) and the length of time students had access to the platform (to a smaller degree), controlling for sex, socioeconomic status, and weighted GPA. It is worth noting that there was a strong correlation between students' length of access to Naviance and the average number of times they logged into Naviance each year, explained at least in part by the fact that counselors increasingly relied on more Naviance features over time. As with any program implementation, it took time for counselors to fully integrate



## Naviance

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Naviance into their work processes, and the increase over time in students' average annual logins reflected that.

While unable to establish a *causal* relationship between Naviance use and college application rate, the authors concluded that Naviance is an appropriate way for school counselors to promote college access.

### Recommendations

The authors gave the following recommendations for Naviance implementation (pp. 40–41):

- Naviance should be a supplement for college counseling services already provided, not a replacement.
- Counselors should make Naviance available no later than the ninth grade.
- It is important for school counselors to make Naviance necessary for all students.
- School counselors should use Naviance to help students select rigorous coursework.
- Counselors need to involve all stakeholders in the implementation of Naviance.

### School Counselors' Acceptance and Use of Naviance<sup>3</sup>

#### Study Synopsis

This study aimed to find out why school counselors ( $N = 38$ ) choose to use or not use Naviance and whether their “acceptance and use of Naviance enhances counseling practices, job productivity, and efficiency” (p. 369). The study incorporated the following data sources: a survey questionnaire, face-to-face semi-structured interviews, Naviance staff usage reports (showing the number of times counselors accessed the platform), and Naviance engagement reports (showing which features counselors used to support students' academic, college, and career development).

The school district in the study gave Naviance implementation “a low to medium priority, with the expectation that school counselors would at least minimally use the technology” (p. 372). Most (66%) of the school counselors reported that they used Naviance daily, 24% indicated weekly usage, 5% reported using it monthly, and 5% said they did not use Naviance at all.

Most of the counselors reported that they liked using Naviance and had a favorable attitude toward it, and that it “was desirable to use for academic and related counseling purposes” (p. 377). Additionally, most of the school counselors in the study agreed that Naviance:

- Has a friendly interface for students and counselors
- Requires minimal effort
- Is easy to use
- Is clear and understandable
- Increases job-related effectiveness and productivity
- Enhances counseling practices
- Is useful



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In sum, most of the counselors in this study used Naviance frequently and felt that it enhanced their job performance. In particular, counselors liked that Naviance better enabled them “to introduce college-related material to help students develop individual education plans, identify courses, provide social and emotional resources, and advise on graduation status and college eligibility” (p. 379) and that they could also use it to share information with teachers, administrators, and parents.

### Recommendations

Several counselors attributed their comfort level and positive attitude in part to having participated in multiple trainings on the platform. For the small minority of counselors who did not have a favorable impression of Naviance, some of their frustrations with the program stemmed from slow internet connections and limited access to computer labs. Therefore, Naviance training should be thorough and offered on an ongoing basis, and barriers to well-networked computers should be removed.

The authors offered two recommendations for future practice regarding Naviance: “leveraging the reports and analytic features to emphasize programmatic effectiveness and student outcomes, and infusing the college-related curriculum into subject matter classes” (p. 380).

### Accuracy of High School Seniors’ Self-Report in Naviance of Intended College Enrollment<sup>2</sup>

#### Study Synopsis

This study was less about evaluating the performance of Naviance as a platform and more about using survey data collected through Naviance to measure the accuracy of high school seniors’ self-report of intended college enrollment. The authors compared the college that students reported in Naviance that they planned to attend, with students’ actual college enrollment records obtained through the National Student Clearinghouse.

A high percentage (81%) of self-reported intended enrollments matched actual enrollments, which the authors asserted was consistent with summer melt studies that found that “approximately 80% of college-intending students enroll in college the fall following high school graduation” (p. 7). The following factors increased the probability of an accurate self-report: higher socioeconomic status, higher GPA, higher number of college acceptances, having a college entrance exam score, and enrolling in a public (versus private) college.

### Recommendations

For districts whose typical students diverge significantly from the above factors, the authors recommended using alternative sources of college enrollment information (such as National Student Clearinghouse) in addition to students’ self-reports.

### Naviance’s Influence on Students’ College Application Choices<sup>4</sup>

#### Study Synopsis

This was a high-quality, quasi-experimental study focusing on a particular feature of the Naviance platform that “shows students how, for individual colleges, their academic profiles compare with previously admitted schoolmates. This information is conveyed in



## Naviance

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scattergrams, which are scatterplots showing the grade point average (GPA) and SAT (or ACT) scores of prior applicants from a student's school to a specific college as well as the admissions decision each of these applicants received" (pp. 220–221).

The purpose of the study was to determine the causal impact of this Naviance feature on students' college application choices. The study yielded the following four main findings (p. 222):

- Access to a college's admissions information increases applications and attendance at that college, especially for students with a high admissions probability.
- Students prefer to apply to colleges where they are most similar to previous admits.
- Students use the average admissions lines and the color coding of their scores as heuristics to simplify their application choices.
- The information in Naviance leads application portfolios and attendance choices to reflect the set of colleges with visible and relevant information.

The impacts were not uniform across students, however, but depended in part on student and school characteristics:

Naviance increases 4-year college enrollment for low-income, Black, and Hispanic students when it provides them with information about local public colleges where they are likely to be admitted. It also increases the selectivity of colleges attended by students who are shown information on many relevant match and reach colleges. Students who attend high schools with weaker college-going cultures, however, are more likely to be nudged to less selective colleges based on the available scattergrams. (pp. 224–225)

### Recommendations

Essentially, the study established that the scattergram feature of Naviance, which displays information only for the colleges to which previous cohorts of schoolmates applied, influences students to constrain their college application choices to only those colleges. Thus, students "in schools with suboptimal college choices among older cohorts will be nudged to repeat the suboptimal choices of their peers" (p. 257). The author thus advised districts to pool data across high schools to give students admissions information for a much wider landscape of colleges. She also recommended that counselors and/or Naviance staff provide guidance to students on how to interpret the scattergram data so that they better understand their limitations.



## Naviance

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### References

1. Christian, D., Lawrence, A., & Dampman, N. (2017). Increasing college access through the implementation of Naviance: An exploratory study. *Journal of College Access*, 3(2), 28–44.
2. Christian, D. D., Stuckey, A. G., Boykin, A. A., & Adams, J. J. (2020). Predicting college enrollment of graduating high school seniors: How accurate is self-report? *Professional School Counseling*, 23(1, part 3), 2156759X20903512.
3. Deslonde, V., & Becerra, M. (2018). The Technology Acceptance Model (TAM): Exploring school counselors' acceptance and use of Naviance. *Professional Counselor*, 8(4), 369–382.
4. Mulhern, C. (2021). Changing college choices with personalized admissions information at scale: Evidence on Naviance. *Journal of Labor Economics*, 39(1), 219–262.





## Strategic Teacher Retention and Recruitment Prepared by the Department of Research & Performance Management

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### Educators

#### Strategic Teacher Retention and Recruitment

April 2022

Author: Hannah Pallotta

#### Key Findings

- One study found that mentoring dosage was positively and significantly related to new teacher retention after one year.
- Mentor programs for new teachers should last at least two years, and time with mentors should be protected and frequent.
- School climate that prioritizes teacher wellbeing—including reducing classroom size and giving teachers designated time for planning and rest—and promotes teacher engagement can increase teacher retention.
- Newly placed principals in districts that had a principal pipeline were more likely to stay at their school for two years than principals at other districts.

#### ESSER Strategic Teacher Retention & Teacher Recruitment Program Overview

Memphis-Shelby County Schools (MSCS) received Elementary and Secondary School Emergency Relief (ESSER) funds which aim to address the ongoing impacts that the Covid-19 pandemic has on K–12 education. A portion was allocated to strategic teacher retention and establishing sustainable teacher recruitment models. The Human Resources team will implement and expand a variety of strategies designed to recruit and retain the best District leaders and teachers in the nation, immerse them in professional development to embrace and teach. The District will expand the leadership development pipeline for School and District Leadership to Central Office Employees.

#### Teacher Turnover

- School-level turnover is higher in schools where 75% or more of the students are eligible for free and reduced lunch.<sup>1</sup>
- 44% of new teachers leave the profession within five years.<sup>2</sup>
- Schools with highly rated principals with high achievement growth have less turnover than schools with lower rated principals.<sup>6</sup>
- It can cost a district around \$75,000 to replace one school principal.<sup>6</sup>
- Teachers of color leave teaching at a higher rate than white teachers, citing dissatisfaction with organization conditions as their primary reason for leaving. Teachers of color disproportionately work in schools located in higher-poverty districts with fewer resources and little administrative support. Teachers of color often feel pressure to represent the needs of students of color, and this extra labor often goes unnoticed, without recognition or compensation.<sup>1</sup>
- Teachers who earn their credentials through alternative certification programs are 25% more likely to leave their schools than teachers who participate in traditional certification programs.<sup>1</sup>



## Strategic Teacher Retention and Recruitment

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### Mentoring Programs

#### Teacher Mentor Programs

- One study found that “mentoring dosage was positively and significantly related to new teacher retention after one year”.<sup>3</sup> About 97% of new teachers in the moderate-dosage group and 94% of new teachers in the high-dosage group were retained in the district between school years compared with only 78% of new teachers in the low-dosage group. New teacher retention was significantly higher in the two higher dosage groups than in the low-dosage group. The difference between the moderate and high groups was negligible.
- A successful mentor program should include:<sup>4</sup>
  - Rigorous mentor selection based on qualities of an effective mentor
    - Qualities could include evidence of outstanding teaching practice, strong intra- and inter-personal skills, experience with adult learners, respect of peers, current knowledge of PD, etc.
  - Ongoing beginning teacher PD
  - Ongoing PD and support for mentors
  - Protected time for mentor-teacher interactions
    - Mentors and beginning teachers should have 1.25–2.5 hours per week to allow for the most rigorous mentoring activities. This time should be protected by teachers and administrators.
  - Multi-year mentoring
    - At least two years; research suggests that most deep learning happens in the second and third years of teaching.
  - Professional teaching standards and data-driven conversations
    - Data collection and documentation of mentor conversations should happen whenever possible.
  - Clear roles and responsibilities for administration
    - Administrators play a key role in ensuring the success of the mentor program by setting boundaries around the time that beginning teachers have with their mentors, creating a positive culture of ongoing learning, and communicating with new teachers about their needs.
  - Collaboration with all stakeholders
- Induction programs or beginning teacher mentor programs have a positive impact on teacher commitment and retention, classroom instructional practices, and student achievement.<sup>5</sup>

#### Principal Pipeline/Mentor Programs

“The term principal pipeline is shorthand for the range of talent management activities that fall within a school district’s scope of responsibility when it comes to school leaders.”<sup>6</sup> These activities include selective hiring and placement, preparation opportunities for principals and assistant principals, having leader standards, and the process of induction, evaluation, and continued support.

- One study of over 10,000 school districts nationwide found that “respondents from large districts were more likely than respondents from medium districts to report having school leadership standards, processes to encourage individuals to become



## **Strategic Teacher Retention and Recruitment**

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school leaders, standards-aligned evaluation, objective criteria—such as performance tasks to evaluate principal candidates, a dedicated office of school leadership.”<sup>6</sup>

- In this same study, virtually all districts indicated that they provided individual coaching to at least some of the principals in their district, with roughly 60% of these districts reporting that they provided individualized coaching or mentoring to all principals in their district.
- Another study that looked at the efficacy of a principal pipeline found that newly placed principals in districts that used a principal pipeline were nearly 6 percentage points more likely to remain in their school for two years than principals in districts that did not use this model.<sup>7</sup>

### **School Supports**

School administration can provide four supports to increase teacher retention:<sup>2</sup>

- Support teacher wellbeing
  - Create a culture that fosters staff wellness that includes fair leave policies, good benefits, a safe environment, sufficient supervision, the support and resources to do the work, and processes for shared decision making.
  - One district made Wednesdays an asynchronous learning day where teachers were able to leave at 1pm. This gives teachers time to plan and refresh.
  - Reducing classroom size enables teachers to focus more time on individual students and reduces all other work (paperwork, parent interaction, classroom management, etc.).
- Promote teacher engagement
  - Having open and early communication about initiatives
  - Keeping initiatives realistic
- Create a supportive school climate
- Monitor teacher retention and recruitment
  - Identify and track trends in teacher attrition

Principal supports for new teachers:<sup>4</sup>

- Frequent communication/having an open-door policy so new teachers are comfortable discussing issues
- Regular classroom observations and feedback
- Protected time for new teachers for mentorship, PD, and classroom observation.
- Limiting extracurricular expectations; ensuring that new teachers can focus on their classroom
- Support when new teachers communicate with parents
- Essential information on the evaluation process early in the year
- A complete school orientation



## Strategic Teacher Retention and Recruitment

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### References

1. Best Practices in Retention and Advancement of Diverse Staff. (2019). Hanover Research. Retrieved April 4, 2022.
2. 4 Strategies to Increase Teacher Retention. Hanover Research. (2021). Retrieved April 4, 2022.
3. Caven, M., Durodoye, R., Zhang, X., & Bock, G. (2021). Variation in mentoring practices and retention across new teacher demographic characteristics under a large urban district's New Teacher Mentoring Program (REL 2021-100). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast & Islands.
4. Implementing and Managing Teacher Induction Programs. Hanover Research. (2021). Retrieved April 4, 2022.
5. Impact of Teacher Mentoring on Student Achievement. (2014). Hanover Research. Retrieved April 4, 2022.
6. Gates, S. M., Kaufman, J. H., Doan, S., Tuma, A. P., & Kim, D. (2020). Taking stock of principal pipelines: What Public School Districts Report doing and what they want to do to improve school leadership. Rand Corporation.
7. Gates, S. M., Baird, M., Master, B. K., & Chavez-Herrerias, E. R. (2019). Principal pipelines: A feasible, affordable, and effective way for districts to improve schools. RAND.



## Proximity Learning

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### Proximity Learning

May 2022

Author: Shelby Roberts, Ph.D.

#### Key Findings

- Proximity learning can help school districts mitigate the current teacher shortages in the United States.
- Students felt supported and engaged when taught using synchronous online instruction compared to asynchronous.
- Lessons taught by proximity instructors can be recorded and stored as a resource for students.
- Quality of the instructor is still more important than the method of delivery in promoting student learning.
- Technology issues can frustrate students and cause missed instruction.

#### Strategy

Memphis-Shelby County Schools (MSCS) allocated a portion of the ESSER funds to utilize proximity teachers. In the 2021–22 school year, specific high school instructors teaching courses with end-of-course exams (EOC) were partnered with proximity teachers who supported those classrooms virtually. MSCS utilizes proximity teachers as support teachers instead of as the teacher of record.

#### Overview

Proximity teaching is a term “used to describe a teacher’s nearness to [their] students during a lesson.”<sup>1</sup> In a proximity learning model, students can be together in a classroom with the teacher online or the students and their teacher can connect online at the same time all from different locations. Proximity learning is often used by K–12 districts to shore up staff shortages, deliver virtual instructions, and to add specialty courses for districts.<sup>15</sup>

As a method of instruction, proximity learning is the same as synchronous online learning.<sup>15</sup> This brief will synthesize research on both topics and use the terms interchangeably. Additional best practices for proximity learning are listed in Appendix D.

#### Benefits

Synchronous online learning is not new in the field of education, although historically not as popular as asynchronous online learning environments.<sup>18</sup> However, due to the Covid-19 pandemic the popularity in synchronous online instruction has increased and more research is emerging on this method of instruction in K–12 settings.

- Classrooms that utilized proximity learning did not have as many challenges as traditional students whose schools had to shift to online learning due to the pandemic.<sup>8</sup>





## Proximity Learning

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- Compared to asynchronous online learning, students felt more supported, had more peer-centered activities, had more feedback, and reported higher satisfaction when their online teacher was delivering instruction synchronously.<sup>4</sup>
- Synchronous online “webinars” were more effective at promoting student content knowledge than asynchronous and face-to-face courses, but there was no difference in students’ satisfaction levels between the groups.<sup>4</sup>
- “Advantages of using a synchronous learning environment include real time sharing of knowledge and learning and immediate access to the instructor to ask questions and receive answers.”<sup>17</sup>
- Lessons taught by the proximity teacher can be recorded and added into a video library for students to access later or if they need additional support on the topic.<sup>13</sup>

### Disadvantages

- Blended online classrooms did not outperform “purely online classes” indicating that the quality of instruction is more important than the type of delivery of the instruction.<sup>3, 9</sup>
- Classroom management is still a concern with proximity learning. When the students are in a room together, but their instructor is virtual, local distractions can be difficult to manage.<sup>18</sup>
- Technology issues with proximity teaching can cause students to miss instruction and is often frustrating for students.<sup>7</sup>

### Outcomes

Many of the studies on proximity learning or synchronous instruction used survey and interview data focused on student engagement, motivation, connectedness, or satisfaction.<sup>5, 6, 11, 12, 16</sup> Few studies used rigorous quantitative methods or large sample sizes to show the outcome of learning in a synchronous environment compared to face-to-face or asynchronous in a K–12 setting. The studies showed disparate findings and often cited the impact of the quality of the instructor as paramount to student performance.<sup>3, 9</sup>

- Synchronous courses have shown more frequent and better-quality student interactions than asynchronous courses which in turn led to higher course exams and course performance.<sup>3</sup>
- However, findings from an Algebra I course found that students in the synchronous section had lower end-of-course scores than those in the asynchronous section.<sup>2</sup>
- Proximity Learning® conducted an internal study over six terms and found that students taught by proximity learning instructors averaged an 80.3% (a B to B–average) which was sufficient for college admissions.<sup>8</sup>

### Conclusion

While proximity teaching and synchronous learning are not new in education, their use in K–12 educational settings has expanded due to the Covid-19 pandemic. School districts can utilize this instruction method to alleviate the staffing strain due to teacher shortages. When looking at student academic outcomes confounding results were found, though students’ attitudes and engagement in proximity courses were typically more positive.



## Proximity Learning

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### References

1. Alexandria City Public Schools. (2015). *Proximity*. Retrieved from <http://www.acpsk12.org/pl/coachs-cuts/proximity/>
2. Berry, S. (2017). *Educational outcomes of synchronous and asynchronous high school students: A quantitative causal-comparative study of online algebra 1* (Doctoral dissertation, Northeastern University).
3. Duncan, K., Kenworthy, A., & McNamara, R. (2012). The effect of synchronous and asynchronous participation on students' performance in online accounting courses. *Accounting Education*, 21(4), 431-449.
4. Ebner, C., & Gegenfurtner, A. (2019, September). Learning and satisfaction in webinar, online, and face-to-face instruction: a meta-analysis. *Frontiers in Education* (Vol. 4, p. 92). Frontiers Media SA. <https://doi.org/10.3389/feduc.2019.00092>
5. Fabriz, S., Mendzheritskaya, J., & Stehle, S. (2021). Impact of synchronous and asynchronous settings of online teaching and learning in higher education on students' learning experience during COVID-19. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.733554>
6. Lin, X., & Gao, L. (2020). Students' Sense of Community and Perspectives of Taking Synchronous and Asynchronous Online Courses. *Asian Journal of Distance Education*, 15(1), 169-179.
7. McBrien, J. L., Jones, P., & Cheng, R. (2009). Virtual spaces: Employing a synchronous online classroom to facilitate student engagement in online learning. *The International Review of Research in Open and Distributed Learning*, 10(3). <http://www.irrodl.org/index.php/irrodl/article/view/605/1264>
8. McClendon, G., Elhage, R., & Laosebikan, O. (2020). *Grade Efficacy, Grade Point Average Aggregation, and Covid-19 Readiness at Proximity Learning®-A Company Providing Certified Teachers and Accredited Courses through Online Streaming*. *International Journal of Education and Social Science*, 7.
9. Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. *USDOE*. [Link](https://files.eric.ed.gov/fulltext/ED571270.pdf)
10. Moser, S., & Smith, P. (2015). *Benefits of Synchronous Online Courses*. ASCUE Proceedings, (pp. 43-48). <https://files.eric.ed.gov/fulltext/ED571270.pdf>
11. O'Brien, A., & Fuller, R. (2018). Synchronous teaching techniques from the perspective and observation of virtual high school teachers: An investigative study. *International Journal of Information and Communication Technology Education (IJICTE)*, 14(3), 55-67. DOI: 10.4018/IJICTE.2018070105
12. Peterson, A. T., Beymer, P. N., & Putnam, R. T. (2018). Synchronous and asynchronous discussions: Effects on cooperation, belonging, and affect. *Online Learning*, 22(4), 7-25.
13. Perveen, A. (2016). Synchronous and Asynchronous E-Language Learning: A Case Study of Virtual University of Pakistan. *Open Praxis*, 8(1), 21-39. <https://files.eric.ed.gov/fulltext/EJ1093436.pdf>
14. Proximity Learning. (2022). *About Us*. Retrieved from <https://www.proxlearn.com/#:~:text=Live%20Online%20Instruction,ask%20questions%20in%20real%2Dtime>.
15. Proximity Learning. (2022). *How it Works*. Retrieved from <https://www.proxlearn.com/how-it-works>
16. Racheva, V. (2018, December). *Social aspects of synchronous virtual learning environments*. In AIP Conference Proceedings (Vol. 2048, No. 1, p. 020032). AIP Publishing LLC.
17. Skylar, A. A. (2009). A Comparison of Asynchronous Online Text-Based Lectures and Synchronous Interactive Web Conferencing Lectures. *Issues in Teacher Education*, 18(2), 69-84. <https://files.eric.ed.gov/fulltext/EJ858506.pdf>
18. Watts, L. (2016). Synchronous and asynchronous communication in distance learning: A review of the literature. *Quarterly Review of Distance Education*, 17(1), 23.



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### Appendix D

#### Best Practices in Proximity/Synchronous Learning Environments<sup>9</sup>

1. Provide a welcome message that is displayed approximately 15 minutes before class.
2. Notify Class of your presence and encourage equipment checks.
3. Provide easily accessed methods to connect/enter the virtual classroom
4. Record class meetings.
5. Discourage unnecessary use of video sharing.
6. Maintain virtual office hours.
7. Pre-load software that will be used during class presentation.
8. If possible have more than one monitor/display.
9. Equip your teaching/production facility with various video options.
10. Use electronic Textbooks and other reference materials.
11. Encourage (require?) students to participate in virtual study sessions/group meetings.
12. Integrate additional software systems to augment the virtual classroom experience.



# APPENDIX C



Author's Craft

- Describe the job of an author and an illustrator
- Discussion: Q/P
- Electronic Book - Fliple, Grows and Tells
- K-1st Trace / Copy / Draw
- 2nd-3rd Create sentences & illustrations
- 4th-5th 7 Notes: Comprehension Questions

Illustrator's Craft

- Book Check-out
- Completed Work
- Taped out the Book

Student Reading

Exit Tickets

Homework

- Bring Library Cards
- Read 20 minutes



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