



Arkansas School Finance Study Appendices

Contents

Appendix 1: Introduction	203
Current Resource Use and Practices LEA Survey	203
Case Study Protocol	213
Educator Panel Questions	215
Stakeholder Surveys	216
Appendix 2: Background	232
Matrix Funding (FY04-FY21)	232
Appendix 3: Analyses of the Uniform Rate of Tax and School Finance Equity	234
References	234
Appendix 4: Indicators Impacting Student Performance	235
Data Definitions and Key Terms	235
Concentrations of Poverty	236
Performance and Funding	236
Class Size	239
Identification of Gaps and Programs to Address	241
References	249
Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches	
Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States	250
Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas	250
Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas	250
Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References	250
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies 	
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School 	
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Des Arc Elementary School 	
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Helen Tyson Middle School 	
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Des Arc Elementary School Case Study School Summary: Helen Tyson Middle School Case Study School Summary: Jasper High School 	
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Des Arc Elementary School Case Study School Summary: Helen Tyson Middle School Case Study School Summary: Lafayette County High School 	
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Helen Tyson Middle School Case Study School Summary: Jasper High School Case Study School Summary: Lafayette County High School Case Study School Summary: Lakeside High School 	
 Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Des Arc Elementary School Case Study School Summary: Helen Tyson Middle School Case Study School Summary: Lafayette County High School Case Study School Summary: Lafayette County High School Case Study School Summary: Lafayette County High School Case Study School Summary: Lamar Elementary School 	
Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Des Arc Elementary School Case Study School Summary: Helen Tyson Middle School Case Study School Summary: Lafayette County High School Case Study School Summary: Lafayette County High School Case Study School Summary: Lakeside High School	
Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches Impact of CEP on FRL counts in Comparison States Impact of CEP on FRL counts in Arkansas Impact of Alternative Indicators in Arkansas References Appendix 6. Addressing Poverty and Achievement Gaps: Strategies Case Study School Summary: Crossett Middle School Case Study School Summary: Des Arc Elementary School Case Study School Summary: Helen Tyson Middle School Case Study School Summary: Lafayette County High School Case Study School Summary: Lafayette County High School Case Study School Summary: Lakeside High School Case Study School Summary: Helen Tyson North Middle-High School Case Study School Summary: Lakeside High School Case Study School Summary: Helen Tyschool Case Study Schoo	

Case Study School Summary: Paragould Junior High School	287
Case Study School Summary: Riverview High School	289
Case Study School Summary: Theodore Jones Elementary School	291
Case Study School Summary: Weiner Elementary School	293
References	295
Appendix 7: College and Career Readiness	299
Examples of Actionable CCR Definitions from Other States	299
College and Career Readiness Indicators, Early Childhood Education through 12 th Grade	300
References	
Appendix 8: District, School and Class Size	302
Class Size Policies, Impacts on School Sizes, and Facilities Master Planning	
Comparison of Space Sizes and Student Occupancy: Arkansas and North Carolina	
School Size Policy Best Practices from Other States: Kentucky Example	311
Impacts of Consolidation	314
Educational Service Cooperatives (ESCs)	316
Further Efficiency Opportunities	321
References	323
Appendix 9: Attraction and Retention of Staff	
References	327
Appendix 10. Other Requested Studies	329
Professional Development	329
Student Mental Health	329
Waivers	329
Vouchers	331
References	333
Appendix 11. Review of Resources in Matrix and Methods for Routinely Reviewing Adequacy.	
References	334
Appendix 12: Recommendations	

Appendix 1: Introduction

Current Resource Use and Practices LEA Survey

This survey is intended to supplement and provide context for available data currently collected by the state in the following areas:

- 1. School Enrollment Size, Class Size and Staffing Policies
- 2. Capital Needs
- 3. Use of Enhanced Student Achievement (ESA) Funds
- 4. Student Mental Health
- 5. Professional Development and Extra Duty Time
- 6. Educational Opportunities: Extended Learning Time, Career and Technical Education, Additional Opportunities
- 7. Services from Education Cooperatives

Please select your district or charter system from the drop-down list below:

[drop-down list with district names]

School Enrollment Size, Class Size and Staffing Policies

Has your district or charter system developed specific policies regarding the enrollment size of schools?

- o Yes
- o No

Has your district or charter system developed specific policies or guidelines regarding class sizes (teacher-to-student ratios) that differ from state requirements?

- o Yes
- o No

Does your district or charter system have staffing guidelines or caseloads for other staff positions (such as special education staff, instructional support or student support staff, administration or classified staff)?

- o Yes
- o No

Note the next set questions on the following page regarding school enrollment size policies, class size policies and guidelines, and staffing guidelines/caseloads will only be displayed if a respondent answered "yes" to the prior related questions.

What is your school district's or charter system's policy on school enrollment size for the following types of schools? *This list is not intended to be exhaustive of all possible grade configuration types in Arkansas.*

	Policy (Yes, No, N/A)	Minimum	Maximum	Optimal/ Ideal
Elementary School				
Middle/Junior High School				
High School				
7-12 School				
K-12 School				
K-8 School				

How does the public provide input on school enrollment size?

- The public does not provide input on school enrollment size decisions or policies
- □ Through testimony at public hearing, written or oral testimony
- □ Through survey(s)
- By participating on planning committee
- Other _____

When can the public provide input on school enrollment size?

- □ The public does not provide input on school enrollment size decisions or policies
- During the district's Master Planning process
- During school construction planning and decision making
- During construction contract approval
- Other _____

What are your school district's or charter system's policies or guidelines on class sizes (students per teacher) in different grades?

	Policy (Yes, No, N/A)	Minimum	Maximum	Optimal/ Ideal
Lower elementary grades (K-3)				
Upper elementary grades (4-5)				
Middle/junior high school grades				
High school grades				

How are these policies or guidelines set?

- State regulation
- School board policy
- Annual budget guidelines
- Facility Master Planning guidelines
- Collective bargaining agreements
- During secondary school scheduling process
- When making annual staffing and class assignment decisions
- Other _____

What are your school district's or charter system's staffing ratio (caseload) guidelines for the following positions?

	Set Guidelines? (Yes, No, N/A)	Maximum
Reading/ Math Specialists		
Special Education Teachers (Full day/ self-contained programs)		
Special Education Teachers (Partial day/ resource programs)		
Speech Therapists		
Occupational Therapists/ Physical Therapists		
Counselors		
Nurses		
Assistant Principals		
Classified/support staff		
Other instructional staff		

Is there anything (else) you would like to share about school size, class size and staffing policies in your district and how they are set?

[OPEN RESPONSE BOX]

Use of Enhanced Student Achievement (ESA) Funds

What do you think are the most effective uses of Enhanced Student Achievement (ESA) funding?

	Most Effective	Effective	Somewhat Effective	Not Effective	No opinion
Classroom teachers	0	0	0	0	0
Tutors	0	0	\bigcirc	0	0
Teachers' aides	\bigcirc	0	\bigcirc	0	0
Counselors, social workers, or nurses	0	0	\bigcirc	0	0
College and career coaches	0	0	\bigcirc	0	0
Curriculum specialists, coaches and	0	\circ	0	0	0
instructional facilitators					
Before/after school academic programs	0	0	0	0	0
Pre-kindergarten programs	0	0	\bigcirc	0	0
Summer programs	0	0	\bigcirc	0	0
Early intervention programs	0	\bigcirc	\bigcirc	0	0
Parent education	0	\bigcirc	\bigcirc	0	0
Remediation programs	0	\bigcirc	\bigcirc	0	0
Professional development	\bigcirc	0	\bigcirc	0	0
Materials, supplies, and equipment	\bigcirc	0	\bigcirc	0	0
Teacher salary supplements	\bigcirc	0	\bigcirc	0	0
School improvement plan/ scholastic audit	\bigcirc	0	\bigcirc	0	0
Transfer to other categorical funds	0	0	0	0	0
Other allowable uses	0	0	0	0	0

Are there any specific resources, programs, or strategies that you think are the most effective use of these funds?

[OPEN RESPONSE BOX]

Capital Needs

Does your district or charter system have the capacity to meet your current capital needs?

	Yes, through existing funds	Yes, through the state's Partnership Program	Yes, through local bond measure (passed or planned)	Yes, through other sources	No	N/A
Annual required maintenance						
Deferred maintenance						
System replacement						
Major renovations						
New construction						
Other						

Is there anything else you would like to share about the capital needs of your district? [OPEN RESPONSE BOX]

Student Mental Health

How does your district or charter system address student mental health needs?

	Low Need/	Moderate	High Need/
	Tier 1 (All	Need/ Tier	Tier 3
	Students)	2	
One-on-one meetings with counselors			
Small group meetings with counselors (pull out)			
Counselor-led classroom sessions			
Addressed during advisement/mentoring periods			
Specific framework/ model			
Specific curriculum			
School group/team that review student needs and			
develop plans to address			
District- or system- employed therapist provides services			
on site			
Outside agency provides therapy on site			
Addressed during instructional classes			
Specialists through Education Cooperatives			
Assessment of individual student mental health needs			
Other			

On average, how often does a low need (Tier 1) student meet with a counselor:

	More than	Once a	Twice a	Once a	Once a	Once a	Once a
	once a	week	month	month	quarter	semester	year
	week						
One-on-one							
In small groups (pull							
out)							
In the classroom							
Other							

On average, how often does a moderate need (Tier 2) student meet with a counselor:

	More than	Once a	Twice a	Once a	Once a	Once a	Once a
	once a	week	month	month	quarter	semester	year
	week						
One-on-one							
In small groups (pull							
out)							
In the classroom							
Other							

On average, how often does a higher need (Tier 3) student meet with a counselor:

	More than	Once a	Twice a	Once a	Once a	Once a	Once a
	once a	week	month	month	quarter	semester	year
	week						
One-on-one							
In small groups (pull							
out)							
In the classroom							
Other							

Anything else you would like to share about student mental health needs and supports in your district or charter system?

[OPEN RESPONSE BOX]

Professional Development and Extra Duty Time

On average, how many days in total do teachers in your district or charter system participate in professional development each year?

[drop-down list with options between 1 and 10+ days]

On average, what percentage of PD days are delivered in your	district of charter system.
	Percentage of PD days
During the summer	
During planning/collaboration periods during the school day	
Though early release/late start days	
Through trainings or conferences during the school year	
Other	

On average, what percentage of PD days are delivered in your district or charter system:

On average, what percentage of PD days are used to address:

	Percentage of PD days
State/federal determined topics	
District or system determined topics	
School leader determined topics	
Teacher determined topics	
Other	

On average, what percentage of PD days are led by:

	Percentage of PD days
School administrators	
District or charter system staff	
Education Cooperative staff	
Department of Education staff	
Outside consultants	
Other teachers	
Other	

Does your district or charter system have a policy regarding the minimum time for planning and collaboration a teacher should have in a day?

- O Yes
- O No

On average, how many minutes do teachers in your district or charter system have for planning each day?

- O Less than 30 minutes
- 0 30-44 minutes
- 0 45-59 mins
- 0 60-74 mins
- 0 75-89 mins
- 0 90 minutes or more

On average, how often do teachers in your district or charter system have a designated period of time for collaboration in a typical week?

- O Daily
- O 3-4 times a week
- 0 1-2 times a week
- O Less than weekly

Does your district or charter system have a policy (or set of policies) regarding extra duty time (lunch, pick up/drop off, recess supervision, etc.)?

- O Yes
- O No

On average, in your district or charter system how often do teachers:

	Daily	3-4 times a	1-2 times a	Less than	Never
		week	week	weekly	
Supervise pick up/drop off or bus	0	0	0	0	0
lines					
Supervise recess	0	0	0	0	0
Supervise lunch	0	0	0	0	0
Have a duty-free lunch	0	0	0	0	0
Have before or after school time or	0	0	0	0	0
office hours where they are					
available to students					
Supervise student activities outside	0	0	0	0	0
of the school day (extracurriculars,					
events, etc.)					
Receive additional compensation for	0	0	0	0	0
extra duty during the day					
Receive additional compensation for	0	0	0	0	0
extra duty outside of the school day					

Are there specific professional development topics or methods that have been most helpful or impactful in your district or charter system?

[OPEN RESPONSE BOX]

Educational Opportunities: Extended Learning Time

Prior to in-school learning ceasing due to the pandemic, how many schools in your district or charter system offered:

	All schools	Up to 75% of	Up to 50%	Up to 25% of	No
		schools	of schools	schools	Schools
Before/after school-					
academic- focused					
Before/after school-					
enrichment- focused					
Summer school-					
academic- focused					
Summer school-					
enrichment					

Prior to in-school learning ceasing due to the pandemic, how many schools in your district or charter system provided transportation for:

	All schools	Up to 75% of	Up to 50%	Up to 25%	No Schools
		schools	of schools	of schools	
Before/after school					
programs					
Summer school programs					

Educational Opportunities: Career and Technical Education

Are there any changes your district or charter system would like to make in the area of Career and Technical Education (CTE)?

- CTE is not offered in my district or charter system
- No changes needed in this area
- Offering additional courses in current industry areas
- Offering courses in other industry areas
- □ Increasing participation
- □ Increasing certifications
- Offering additional CTE courses at your district's school campuses
- Having additional CTE courses at secondary career centers
- Having additional CTE courses at postsecondary campuses
- Accessing additional CTE courses through remote instruction
- Providing CTE opportunities in earlier grades
- □ Other____

What challenges, if any, does your district or charter system face in making these changes?

- No challenges in this area
- □ Finding staff certified to teach
- □ Having building capacity/ needed facilities
- □ Having specific equipment or materials
- Needing secondary center or postsecondary campus to offer additional courses and/or courses in other industry areas
- Needing additional funding
- □ Being able to provide transportation
- □ Having schedule limitations
- Other _____

Educational Opportunities: Additional Opportunities

Are there areas you would like to offer additional educational opportunities to your students (either expanding current opportunities or offering new opportunities)?

- Before/after school
- □ Summer school
- □ Advanced courses (such as AP/IB)
- Concurrent enrollment courses
- □ Foreign language courses
- □ Computer science courses
- □ Arts courses
- □ STEM courses
- Other electives
- Additional courses through remote instruction
- Other _____

What challenges, if any, does your district or charter system face to provide these additional opportunities?

	Having staff certified to teach	Having building capacity/ needed facilities	Needing additional funding	Needing specific technology, equipment or materials	Being able to provide transportation	Having schedule limitations	No challenges	Other
Before/after school								
Summer school								
Advanced courses (such as AP/IB)								
Concurrent enrollment courses								
Foreign language courses								
Computer science courses		0				0	0	0
Arts courses					Ο	0		
STEM courses	0		0		0		0	
Other electives								
Additional courses through remote instruction								

If your district faces other challenges in offering additional education opportunities, please explain below:

[OPEN RESPONSE BOX]

Services from Education Cooperatives

Please indicate whether your district or charter system uses any of the following services offered by Education Cooperatives:

	Services Used to	Services Used to	Services
	Meet Entire Need	Partially Meet	Not Used
		Need	
Academic Attainment			
Career and Technology Education			
Community Health Nurse			
Computer Science			
Digital Education			
Dyslexia Specialist			
Early Childhood			
Electronic Fingerprinting			
ESOL Specialist			
Gifted and Talented Specialist			
K-12 Behavior Support Service			
K-12 Special Education Services			
Literacy Specialist			
Math Specialist			
Mentoring Program			
Novice Teacher Program			
Preschool Special Services			
Print Shop			
Professional Development			
Science Specialist			
Science/STEM Specialist			
SLP Support Personnel Program			
Special Education			
Staff Development			
Technology			
The HUB/ALE			
Vision Specialist			
Other			
Other			

Case Study Protocol Background and School Culture

- 1. Introductions: How long have you worked at this school? In your current role?
- 2. Can you tell me a little about the community in which your school is located? Who are your students? Their parents? Major industries or employers?
- 3. Since we cannot visit you yet in person, please tell us more about your school. Is it on a shared campus, in town, near other schools or post-secondary institutions, etc.?
 - a. Has your school changed in recent years? Declining enrollment? Increased enrollment? Changes in demographic (SES, race/ethnicity, ELL)?
 - b. What is student mobility and attendance like?
 - c. What are average class sizes? Do these vary by grade?
- 4. How would you describe the culture at your school? What's it like to work here? What do you think it's like to be a student here?
- 5. How would you describe the leadership structure of the school?
- 6. What do you believe has been most important to your school's success with students? Any specific strategies, programs or resources?

Instruction and Interventions

- How is the school day structured? How are students assigned to classes?
 Probe for flexible groups (groups that change based on student need) vs. static groups (groups that stay the same over long time periods).
- 2. What specific instructional strategies are in place for struggling students?
 - a. What kinds of extra help do you have in your school? When is extra help provided, for how long, and by whom?
 - b. Probes: Does the school provide an after school/extended day? Summer School?
 - c. How are students who are struggling identified and monitored?
- 3. What specific instructional strategies are in place for ELL students? Probes: pull out/push in strategies, sheltered instruction, co-teaching
- 4. Are there specific student or school improvement goals that contributed to these achievement gains in the school? *OR:* Which school or improvement goals were most helpful in advancing student learning?
 - a. How are these goals set (e.g., district, school administrators, or school personnel)?

Staffing and Professional Development

- 1. What is teacher turnover like in this school?
- 2. Do you share any staff positions with other schools?
- 3. How are <u>teachers organized for instruction</u>? How are teachers assigned to classrooms? In high school, to courses? *Probes: Are teachers assigned to their own classrooms or in collaborative teams? What kinds of collaborative teams are there? How are new teachers assigned and mentored?*
- 4. How is professional development delivered in your school? How are topics for PD determined? *Probes: is delivery school based? ongoing versus one shot; what kinds of follow-up is provided?*

Туре	Time Allocated	Notes
Individual planning		
Collaborative Work with other		
teachers		
Pupil-free days for PD		

- a. What kinds of professional development topics have been particularly helpful for improving student learning? *Probes: professional development that focuses on instructional strategies; on extra help for ELL/struggling poverty kids; curriculum reforms; on using data; etc. Anything linked to their overall curriculum and instructional strategies and focused on ELL and poverty kids*
- 5. How is extra duty time handled (lunch, pick up/drop off, bus)? What staff members are responsible?

Student Support Services

- 1. What additional student support services do you offer students? (*Probes: counseling, social worker/therapist support, advising/mentoring, health services*)
 - a. Are these resources paid for by the school, district, or community partnership?
 - b. Any specific student mental health strategies or initiatives that you believe have been beneficial to students?

Assessments and Data Use

Elementary schools:

- 1. What assessment(s) do you use with students in grades K-2? (*Possibilities: ISIP, NWEA/MAP, Star, i-Ready*) How often do you assess these students?
- 2. In addition to using the ACT Aspire for grades 3 and up as your summative assessment, do you also use it as an interim assessment? How often is it administered?
 - a. Do you use any additional interim or formative assessments in grades 3 and up?
- 3. How do staff use the data from these assessments? Do you have a data specialist or similar position?

Secondary schools:

- 1. In addition to using the ACT Aspire up to grade 10, do you also use it as an interim assessment? How often is it administered?
 - a. Do you use any additional interim or formative assessments?
- 2. How do staff use the data from these assessments? Do you have a data specialist or similar position?

Additional Monetary and Non-Monetary Support

- 1. Does your school have access to additional grants, corporate contributions, or PTA support?
- 2. Do you have any community partnerships?
- 3. Does the school receive non-monetary support from the community, such as volunteer hours?
 - a. Are volunteers mostly parents or others from the community?
- 4. Are their specific characteristics of the community that you believe impact the success of the school?

Wrap Up

- 1. What do you see as current or potential challenges to continued improvements in student achievement? *Beyond COVID, what challenges have you faced to continue performance*
- 2. Is there anything else you think is important for us to know in terms of understanding how your school achieves learning gains?

Educator Panel Questions

- 1. College and Career Readiness
 - a. What does it mean to be college and career ready in Arkansas?
 - b. What should be included in the state's definition of college and career readiness?
 - i. For example: academic core knowledge, coursework, performance outcomes, behavioral skills and/or capabilities?
 - c. Do you believe the state's curriculum and graduation requirements are well aligned with this definition? If not, what changes are needed to make them better aligned?
- 2. Staff Attraction and Retention
 - a. Does your district or school face any challenges recruiting and retaining staff?
 - i. Are there any staffing positions/areas that are particularly difficult to attract and retain qualified staff? (Teachers, administrative staff, nurses, etc.)
 - b. What factors (positive or negative) impact your school or district's ability to attract and retain staff?
 - c. What could the state do to support staff attraction and retention?
- 3. Addressing the Needs of Economically Disadvantaged Students
 - a. On average, does a student being economically disadvantaged have an impact on the student's ability to be academically prepared and/or succeed? If so, in what ways does this manifest?
 - b. What supports and services are the most effective in serving economically disadvantaged students? Does this vary based upon the concentration of poverty in the school?
- 4. Resources in the Funding Matrix
 - a. Are there any resource areas that are not currently addressed in the resource matrix that should be?
 - b. Are there any resource areas in the matrix that should be modified in some way (such as to decrease or increase the level of resource)?

Stakeholder Surveys Parents, Students, Community Members and Business Leaders

I am a(n)....

- □ Educator (including all school and district/charter system staff and school board members)
- Parent
- Student
- Community Member
- Business Leader
- Other ____

Following this question the survey branched into two versions, one for educators and one for parents, students, community members, and business leaders (general public). The questions that follow are for the general public.

For parents:

What school district or charter system does your child(ren) attend?

▼ Academics Plus Public Charter Schools ... Other

For students:

What school district or charter system do you attend school in?

▼ Academics Plus Public Charter Schools ... Other

For community members and business leaders: What county do you live in?

▼ Arkansas ... Yell

After the initial identifying questions, there was a page with the following language:

The study team understands the major impact that COVID is having on students, teachers, schools, and districts this year. However, this survey is part of a study to address ongoing education funding in Arkansas and will be used for legislative considerations in future years. As best you can, please share your responses to questions outside of any concerns that you have specifically related to COVID and the unique circumstances of education in the state this year.

The survey specifically will:

- Gather your opinion on the equity, responsiveness, transparency and flexibility of education funding system in the state.
- Provide an opportunity for you to share feedback on available education resources and funding.
- Ask for your input on what it means for Arkansas students to be college and career ready when they graduate and what elements should be included in a definition.

Thank you in advance for sharing your feedback.

Education Resources and Funding in Arkansas

Please indicate whether you believe the education funding system in Arkansas:

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Unsure
Equitably distributes funding to school districts	0	0	0	0	0
Ensures similar education opportunities for all students	0	0	0	0	0
Responds to the different needs of students (such as low income, special education and English Learners)	0	0	0	0	0
Responds to the different needs of school districts (size, location, enrollment changes)	0	0	0	0	0
Responds to the different needs of charter systems	0	0	0	0	0
Allocates funding in a manner that is clear and understandable	0	0	0	0	\circ

Please indicate the degree to which you agree or disagree with the following statements:

	Strongly disagree	Disagree	Agree	Strongly agree	Unsure
Similar districts are funded fairly in relationship to one another.	0	0	0	0	0
Taxpayers are treated equally across the state.	0	0	0	0	0
Where a student lives does NOT determine the quality of their education.	0	0	0	0	0
It is easy to understand how funding is determined and allocated.	0	0	0	0	0
The current funding system is flexible enough to allow schools and districts to decide how resources should be used to serve students.	0	0	0	0	0
Schools spend resources efficiently.	0	0	\bigcirc	\bigcirc	0
Districts spend resources efficiently.	0	0	\bigcirc	0	0

Outside of COVID-related issues for the current school year, what education resources and funding topics would you like to provide feedback on? On the next page you will be able to share feedback on each topic area that you select below.

- No feedback
- □ Capital needs (construction, maintenance, etc.)
- Class sizes
- Educational opportunities (advanced courses, career and technical education, extracurriculars)
- Educator salaries or experience
- □ Efficiency of funding/resource use
- Equity
- □ Funding (overall or for certain student groups, schools, or districts/charter systems)
- □ Instructional resources (teachers, instructional coaches, tutors/interventionists, etc.)
- School safety
- □ Student support resources (student mental health, counseling, nursing, etc.)
- □ Supports and services for specific student groups (special education, low-income students, English learners, gifted students, career and technical education students)
- Tax burden
- Other areas

Please share your feedback on each education resource and funding topic area you selected below: *Note, only responses selected in prior question were displayed.*

	Please describe below:
Capital needs (construction, maintenance, etc.)	
Class sizes	
Educational opportunities (advanced courses, career	
and technical education, extracurriculars)	
Educator salaries or experience	
Efficiency of funding/resource use	
Equity	
Funding (overall or for certain student groups, schools,	
or districts/charter systems)	
Instructional resources (teachers, instructional	
coaches, tutors/interventionists, etc.)	
School safety	
Student support resources (student mental health,	
counseling, nursing, etc.)	
Supports and services for specific student groups	
(special education, low-income students, English	
learners, gifted students, career and technical	
education students)	
Tax burden	
Other	

College and Career Readiness

In your opinion, what does it mean for a student in Arkansas to be college and career ready when they graduate? [open response text box]

Please indicate whether you believe the following components should be included in how the state defines college and career readiness:

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Unsure
Learning academic content knowledge	0	0	0	0	0
Participating in career exploration and planning	0	0	0	0	0
Developing behavioral skills such as dependability, perseverance, working effectively with others, adapting, and managing stress	0	0	0	0	0
Receiving college and career advisement	0	0	0	0	0
Meeting assessment benchmarks, such as those measured by the ACT	0	0	0	0	0
Participating in career and technical education (CTE)/ career-focused courses	0	0	0	0	0
Being prepared to enter a postsecondary institution without needing remediation	0	0	0	0	0
Learning capabilities such as critical thinking, collaborative problem solving, as well as information and technology skills	0	0	0	0	0
Developing financial literacy	0	0	0	0	0
Other [text box]	0	0	0	0	0

Any other comments or suggestions regarding college and career readiness in Arkansas? [open response text box]

Any other feedback you would like to share? [open response text box]

You have reached the end of the survey, please proceed to submit your responses. Note after doing so, you will not be able to re-enter the survey. Thank you!

Educators

I am a(n)....

- □ Educator (including all school and district/charter system staff and school board members)
- Parent
- Student
- □ Community Member
- Business Leader
- Other _____

Following this question the survey branched to two versions, one for educators and one for parents, students, community members, and business leaders (general public). The questions that follow are for educators.

What school district or charter system does you work for or serve on the board of?

▼ Academics Plus Public Charter Schools ... Other

What is your role?

- Teacher or Instructional Staff Member
- Student Support (Counselor, Psychologist, Social Worker, Nurse, Therapist, etc.)
- School-level Administrator
- Other School-level Staff Member
- O District-level or Charter System Administrator
- O Other _____

Following these introductory questions, there is a page with the following language:

The study team understands the major impact that COVID is having on students, teachers, schools, and districts this year. However, this survey is part of a study to address ongoing education funding in Arkansas and will be used for legislative considerations in future years. As best you can, please share your responses to questions outside of any concerns that you have specifically related to COVID and the unique circumstances of education in the state this year.

The survey specifically will address:

- College and career readiness
- Educator attraction and retention
- Your opinion on the equity, responsiveness, transparency and flexibility of the education funding system
- Any feedback that you would like to share about available education resources and funding
- Additional feedback on individual resource "matrix" areas (optional)

Thank you in advance for sharing your feedback.

College and Career Readiness

In your opinion, what does it mean for a student in Arkansas to be college and career ready when they graduate? [open response text box]

Please indicate whether you believe the following components should be included in how the state defines college and career readiness:

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Unsure
Learning academic content knowledge	0	0	0	0	0
Participating in career exploration and planning	0	0	0	0	0
Developing behavioral skills such as dependability, perseverance, working effectively with others, adapting, and managing stress	0	0	0	0	0
Receiving college and career advisement	0	0	0	\bigcirc	0
Meeting assessment benchmarks, such as those measured by the ACT	0	0	0	0	0
Participating in career and technical education (CTE)/ career-focused courses	0	0	0	0	0
Being prepared to enter a postsecondary institution without needing remediation	0	0	0	0	0
Learning capabilities such as critical thinking, collaborative problem solving, as well as information and technology skills	0	0	0	0	0
Developing financial literacy	0	0	0	0	0
Other [text box]	0	0	0	0	0

Any other comments or suggestions regarding college and career readiness in Arkansas? [open response text box]

Education Staff Attraction and Retention

In your opinion, to what degree do the following factors positively or negatively impact your district or charter system's ability to <u>attract</u> staff?

	Positively impact	Somewhat positively impact	Neither	Somewhat negatively impact	Negatively impact	Unsure/ no opinion
Starting salaries	0	0	0	0	0	0
Salaries in relationship to neighboring states	0	0	0	0	0	0
Potential for salary growth	0	0	0	0	0	0
Access to amenities	0	0	0	0	0	0
Working conditions (workload/ caseload/ class sizes)	0	0	0	0	0	0
Relationship/ proximity to teacher preparation programs	0	0	0	0	0	0
Available coaching/mentoring	0	0	0	0	0	0

In your opinion, to what degree do the following factors positively or negatively impact your district or charter system's ability to <u>retain</u> staff?

	Positively impact	Somewhat positively impact	Neither	Somewhat negatively impact	Negatively impact	Unsure/ no opinion
Salaries in relationship to neighboring states	0	0	0	0	0	0
Salaries in relationship to other professions/ industries	0	0	0	0	0	0
Potential for salary growth	0	0	0	0	0	0
Housing availability	0	\bigcirc	0	0	0	0
Access to amenities	\bigcirc	\circ	\bigcirc	0	0	\bigcirc
Working conditions (workload/ caseload/ class sizes)	0	0	0	0	0	0
Available coaching/mentoring	0	0	0	0	0	0
Available professional development	0	0	0	0	0	0
Support from administration/leadership	0	0	0	0	0	0

What other factors (positive and negative) do you believe impact your district or charter system's ability to attract and retain staff?

[open text response]

Are there any specific position areas that are difficult for your district or charter system to attract and retain staff?

- Science teachers
- Math teachers
- CTE teachers
- Special education teachers/staff
- Instructional support staff
- Nurses
- Counselors
- Other pupil support staff
- Administrators
- Other ______

Education Resources and Funding in Arkansas

Please indicate whether you believe the education funding system in Arkansas:

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Unsure
Equitably distributes funding to school districts	0	0	0	0	\bigcirc
Ensures similar education opportunities for all students	0	0	0	0	0
Responds to the different needs of students (such as low income, special education and English	0	0	0	0	0
Learners) Responds to the different needs of school districts (size, location, enrollment changes)	0	0	0	0	0
Responds to the different needs of charter systems	0	0	0	\bigcirc	0
Allocates funding in a manner that is clear and understandable	0	0	0	0	\bigcirc

	Strongly disagree	Disagree	Agree	Strongly agree	Unsure
Similar districts are funded fairly in relationship to one another.	0	0	0	0	0
Taxpayers are treated equally across the state.	0	0	0	0	0
Where a student lives does NOT determine the quality of their education.	0	0	0	0	0
It is easy to understand how funding is determined and allocated.	0	0	0	0	0
The current funding system is flexible enough to allow schools and districts to decide how resources should be used to serve students.	0	0	0	0	0
Schools spend resources efficiently.	0	0	0	0	0
Districts spend resources efficiently.	0	0	0	0	0

Please indicate the degree to which you agree or disagree with the following statements:

Outside of COVID-related issues for the current school year, what education resources and funding topics would you like to provide feedback on? On the next page you will be able to share feedback on each topic area that you select below.

- No feedback
- □ Capital needs (construction, maintenance, etc.)
- Class sizes
- □ Educational opportunities (advanced courses, career and technical education, extracurriculars)
- □ Educator salaries or experience
- □ Efficiency of funding/resource use
- Equity
- □ Funding (overall or for certain student groups, schools, or districts/charter systems)
- □ Instructional resources (teachers, instructional coaches, tutors/interventionists, etc.)
- School safety
- □ Student support resources (student mental health, counseling, nursing, etc.)
- Supports and services for specific student groups (special education, low-income students, English learners, gifted students, career and technical education students)
- Tax burden
- Other area

Please share your feedback on each education resource and funding topic area you selected below: *Note, only responses selected in prior question were displayed.*

	Please describe below:
Capital needs (construction, maintenance, etc.)	
Class sizes	
Educational opportunities (advanced courses,	
career and technical education, extracurriculars)	
Educator salaries or experience	
Efficiency of funding/resource use	
Equity	
Funding (overall or for certain student groups,	
schools, or districts/charter systems)	
Instructional resources (teachers, instructional	
coaches, tutors/interventionists, etc.)	
School safety	
Student support resources (student mental	
health, counseling, nursing, etc.)	
Supports and services for specific student groups	
(special education, low-income students, English	
learners, gifted students, career and technical	
education students)	
Tax burden	
Other	

The following two questions allowed respondents to choose if they would like to also provide specific feedback on each element of the matrix. If none of the choices are selected, no additional questions were asked.

Would you like to share any specific feedback on the following components of the state's funding matrix?

- □ Staffing: Classroom teachers (including class sizes by grade)
- Staffing: Pupil Support Staff (special education, instructional coaches, counselors, library media specialists, nurses, etc.)
- □ Staffing: Principal and Secretary
- □ School Level Salaries
- School Level Resources (technology, extra duty funds, instructional materials, supervisory aides, substitutes)
- District Level Resources (maintenance and operations, central office and transportation)

Would you like to share any specific feedback on additional funding provided outside of the matrix for:

- □ Low-income students
- English Learners
- □ Students in Alternative Learning Environments (ALE)
- □ High-cost special education students
- Professional development

If any options were selected, each relevant block of questions were displayed. Those optional question blocks are included on the following pages. All respondents saw the following three items at the end of the survey.

Are there any resource areas that are not currently addressed in the matrix that you believe should be? [open response text box]

Any other feedback to share? [open response text box]

You have reached the end of the survey, please proceed to submit your responses. Note after doing so, you will not be able to re-enter the survey. Thank you!

Optional Question Blocks

Classroom Staff

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

Classroom staff are resourced in the matrix at the following levels. Do you believe the resource level is sufficient? If not, how do you believe it should be charged?

	Resource level in matrix is sufficient?				If you disagree, how do you believe it should be changed?		Specific change you would recommend?
	Strongly	Disagree	Agree	Strongly	Increase	Decrease	
	uisagiee			Agree	level	level	
Kindergarten teachers resourced at 20:1	0	0	0	0	0	0	
Teachers in grades 1-3 resourced at 23:1	0	0	0	0	0	0	
Teachers in grades 4-12: resourced at 25:1	0	0	0	0	0	0	
Non-core teachers resourced at 20% of classroom teachers	0	0	0	0	0	0	

Any other comments or suggestions regarding how classroom staff resources are provided in the matrix? [open response text box]

Pupil Support Staff

	Resource	e level in m	atrix is su	ufficient?	If you disagree, how do you believe it should be changed?		Specific change you would recommend?
	Strongly disagree	Disagree	Agree	Strongly Agree	Increase resource level	Decrease resource level	
Special education staff resourced at 2.9 FTE (full-time equivalent positions) per prototype school of 500 students	0	0	0	0	0	0	
Library media specialist resourced at 0.85 FTE per prototype school of 500 students	0	0	0	0	0	0	
Instructional facilitators resourced at 1.0 FTE per 200 students	0	0	0	0	0	0	
Counselors and nurses (combined category) resourced at 1.0 FTE per 200 students	0	0	0	0	0	0	

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

Any other comments or suggestions regarding how pupil support staff resources are provided in the matrix? [open response text box]

Administration Staff

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

	Resour	ce level in m	iatrix is su	fficient?	lf you disa you belie be ch	gree, how do ve it should anged?	Specific change you would recommend?
	Strongly disagree	Disagree	Agree	Strongly Agree	Increase resource level	Decrease resource level	
Principal resourced at 1.0 FTE per prototype school of 500 students	0	0	0	0	0	0	
Secretary resourced at 1.0 FTE per prototype school of 500 students	0	0	0	0	0	0	

Any other comments or suggestions, regarding how administration staff resources are provided in the matrix? [open response text box]

School-level Salaries and Benefits (FY21)

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

	Resour	ce level in m	atrix is su	fficient?	If you disagree, how do you believe it should be changed?		Specific change you would recommend?
	Strongly disagree	Disagree	Agree	Strongly Agree	Increase resource level	Decrease resource level	
Classroom teacher salaries and benefits resourced at \$68,470 per FTE	0	0	0	0	0	0	
Pupil support staff salaries and benefits resourced at \$68,470 per FTE	0	0	0	0	0	0	
Principal salaries and benefits resourced at \$99,012 per FTE	0	0	0	0	0	0	
Secretary salaries and benefits resourced at \$40,031 per FTE	0	0	0	0	0	0	

Any other comments or suggestions regarding how school-level staff salaries and benefits are resourced in the matrix? [open response text box]

School-level Resources (FY21)

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

	Resour	ce level in m	natrix is su	fficient?	If you disagree, how do you believe it should be changed?		Specific change you would recommend?
	Strongly disagree	Disagree	Agree	Strongly Agree	Increase resource level	Decrease resource level	
Technology resourced at \$250 per student	0	0	0	0	0	0	
Instructional materials resourced at \$187.90 per student	0	0	0	0	0	0	
Extra duty funds resourced at \$66.20 per student	0	0	0	0	0	0	
Supervisory aides resourced at \$50 per student	0	0	0	0	0	0	
Substitutes resourced at \$71.80 per student	0	0	0	0	0	0	

Any other comments or suggestions regarding how school-level resources are provided in the matrix? [open response text box]

District-level Resources (FY21)

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

	Resour	ce level in m	atrix is su	fficient?	If you disagree, how do you believe it should be changed?		Specific change you would recommend?
	Strongly disagree	Disagree	Agree	Strongly Agree	Increase resource level	Decrease resource level	
Operations and maintenance resourced at \$705.70 per student	0	0	0	0	0	0	
Central office resourced at \$438.80 per student	0	0	0	0	0	0	
Transportation resourced at \$321.20 per student	0	0	0	0	0	0	

Any other comments or suggestions regarding how district-level resources are provided in the matrix? [open response text box]

Additional Funding for Student Groups

	Resour	ce level in m	atrix is su	fficient?	If you disa you belie be ch	gree, how do ve it should anged?	Specific change you would recommend?
	Strongly disagree	Disagree	Agree	Strongly Agree	Increase resource level	Decrease resource level	
For students in a school with less than 70% of students qualifying as low income, funded at \$526 per low-income student	0	0	0	0	0	0	
For students in a school with 70%-90% of students qualifying as low income, funded at \$1,051 per low- income student	0	0	0	0	0	0	
For students in a school with over 90% of students qualifying as low income, funded at \$1,576 per low- income student	0	0	0	0	0	0	
English Learners (EL) funded at \$352 per EL student	0	0	0	0	0	0	
Alternative Learning Environments (ALE) funded at \$4,700 per ALE student	0	0	0	0	0	0	
Funding for high-cost special education students through a catastrophic grant program	0	0	0	0	0	0	

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

Any other comments or suggestions regarding how additional categorical funding is provided for specific student groups outside of the matrix? [open response text box]

Additional Funding for Professional Development

	Resour	ce level in m	iatrix is su	fficient?	lf you disa you belie be ch	gree, how do ve it should anged?	Specific change you would recommend?		
	Strongly disagree	Disagree	Agree	Strongly Agree	Increase Decrease resource resource level level				
Professional development funded at \$40.80 student	0	0	0	0	0	0			

Please answer any questions that you would like to provide feedback on. Otherwise, leave blank.

Any other comments or suggestions regarding how additional categorical funding is provided for professional development outside of the matrix? [open response text box]

Appendix 2: Background

Matrix Funding (FY04-FY21)

(see next page)

Updated August 30, 2019	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Matrix Calculations				Recalibrated													
School Size	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
K = 8% of students	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Grades 1-3 = 23% of students	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
Grades 4-12 = 69% of students	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
Staffing Ratios																1	
K P:T ratio = 20:1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Grades 1-3 P:T ratio = 23:1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Grades 4-12 P:T ratio = 25:1	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
PAM = 20% of classroom	4.2	4.2	4.2	4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.14	4.14
Total Classroom Teachers	25.0	25.0	25.0	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94
Special Ed Teachers	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Instructional Facilitators	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Librarian / Media Specialist	0.7	0.7	0.7	0.825	0.825	0.825	0.825	0.825	0.825	0.825	0.825	0.85	0.85	0.85	0.85	0.85	0.85
Guidance Counselor & Nurse	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Total Pupil Support Personnel	8.6	8.6	8.6	8.725	8.725	8.725	8.725	8.725	8.725	8.725	8.725	8.75	8.75	8.75	8.75	8.75	8.75
Subtotal	33.6	33.6	33.6	33.665	33.665	33.665	33.665	33.665	33.665	33.665	33.665	33.69	33.69	33.69	33.69	33.69	33.69
Principal	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Secretary	0	0	0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TOTAL School-Level Personnel	34.6	34.6	34.6	35.665	35.665	35.665	35.665	35.665	35.665	35.665	35.665	35.69	35.69	35.69	35.69	35.69	35.69
School-Level Salaries																	
Teacher Salary + Benefits	48,750	50,581	52,321	54,888	55,954	57,073	58,214	59,378	60,566	61,839	63,130	63,663	64,196	64,998	65,811	67,127	68,470
Per Student Matrix Expenditure	3,271.0	3,399.0	3,516	3,695.6	3,767.4	3,842.7	3,919.6	3,998.0	4,077.9	4,163.6	4,250.7	4,289.6	4,325.6	4,379.6	4,434.4	4,523.0	4,613.5
Principal Salary + Benefits	72,000	73,500	76,335	86,168	87,860	89,617	91,409	93,237	95,102	96,986	99,012	99,012	99,012	99,012	99,012	99,012	99,012
Per Student Matrix Expenditure	144.0	147.0	153.0	172.3	175.7	179.2	182.8	186.5	190.2	194.0	198.1	198.1	198.1	198.1	198.1	198.1	198.1
School-level secretary	0	0	0	34,751	35,415	36,123	36,845	37,582	38,334	39,213	40,031	40,031	40,031	40,451	40,855	40,855	40,855
Per Student Matrix Expenditure	0	0	0	69.5	70.8	72.3	73.7	75.2	76.7	78.5	80.1	80.1	80.1	80.9	81.7	81.7	81.7
School-Level Salaries Per Student	3,415	3,551	3,669	3,937	4,014	4,094.2	4,176.1	4,259.7	4,344.8	4,436.1	4,528.9	4,567.8	4,603.8	4,658.6	4,714.2	4,802.8	4,893.3
School-Level Resources																	
Technology	250	216	185	220	201	205	209.1	213.3	217.6	221.5	225.6	237.8	250.0	250.0	250.0	250.0	250.0
Instructional Materials	250	259	268	160	163.2	166.5	169.8	173.2	176.7	179.9	183.1	183.1	183.1	183.1	183.1	184.2	187.9
Extra Duty Funds	90	94	97	50.0	51.0	52.0	53.0	54.1	55.2	56.2	57.2	61.05	64.9	65.5	66.2	66.2	66.2
Supervisory Aides	35	36	37	49.35	50.35	51.4	52.5	53.6	54.7	55.7	56.7	50.0	50.0	50.0	50.0	50.0	50.0
Substitutes	63	57	59	59.0	59.0	60.2	61.4	62.7	64.0	65.2	66.3	67.7	69.0	70.4	71.8	71.8	71.8
Teacher Continuing Ed Pay (5 days)	101	93	96														
School-Level Resources Per Student	789	755	742.0	538.4	524.6	535.1	545.8	556.9	568.2	578.5	588.9	599.65	617.0	619.0	621.1	622.2	625.9
District-Level Resources																	
Operations & Maintenance			n/a	581	581	592.6	604.5	616.6	629.0	640.3	651.8	664.9	664.9	674.9	685.0	697.5	705.7
Central Office			n/a	376	383.5	391.2	399.0	407.0	415.1	422.6	430.2	430.2	438.8	438.8	438.8	438.8	438.8
Transportation			n/a	286	286	291.7	297.5	303.8	309.9	315.5	321.2	321.2	321.2	321.2	321.2	321.2	321.2
District-Level Resources Per Student	1,152	1,180	1,206	1,243.0	1,250.5	1,275.5	1,301.0	1,327.4	1,354.0	1,378.4	1,403.2	1,416.3	1,424.9	1,434.9	1,445.0	1,457.5	1,465.7
Foundation Per Pupil Expenditures	5,356	5,486	5,620	5,719	5,789	5,905	6,023	6,144	6,267	6,393	6,521	6,584	6,646	6,713	6,781	6,883	6,985
Adjustments (Cushion/Retirement)	44	42	42	0	0	0	0	0	0	0	0	0	0	0	0	16	33
Matrix Foundation Per Student	5,400	5,528	5,662	5,719	5,789	5,905	6,023	6,144	6,267	6,393	6,521	6,584	6,646	6,713	6,781	6,899	7,018
Inorogoo por ADM	\$	128	134	57	70	116	118	121	123	126	128	63	62	67	68	118	119
Increase per ADM	%	2.37%	2.42%	1.0%	1.2%	2.0%	2.0%	2.01%	2.0%	2.0%	2.0%	0.97%	0.94%	1.01%	1.01%	1.74%	1.72%
Enhanced Funding Per Student				51.0	87.0	35.0	0	0	0	0	0	0	0	0	0	0	0
Total Foundation Funding	5,400	5,528	5,662	5,770	5,876	5,940	6,023	6,144	6,267	6,393	6,521	6,584	6,646	6,713	6,781	6,899	7,018
Categorical Rates	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
ELL	\$195	\$195	\$195	\$293	\$293	\$293	\$293	\$299	\$305	\$311	\$317	\$324	\$331	\$338	\$338	\$345	\$352
ALE	\$3,250	\$3,250	\$3,250	\$4,063	\$4,063	\$4,063	\$4,063	\$4,145	\$4,228	\$4,305	\$4,383	\$4,471	\$4,560	\$4,640	\$4,640	\$4,700	\$4,700
NSL <70%	\$480	\$480	\$480	\$496	\$496	\$496	\$496	\$506	\$517	\$517	\$517	\$522	\$526	\$526	\$526	\$526	\$526
NSL 70-<90%	\$960	\$960	\$960	\$992	\$992	\$992	\$992	\$1,012	\$1,033	\$1,033	\$1,033	\$1,042	\$1,051	\$1,051	\$1,051	\$1,051	\$1,051
NSL 90+%	\$1,440	\$1,440	\$1,440	\$1,488	\$1,488	\$1,488	\$1,488	\$1,518	\$1,549	\$1,549	\$1,549	\$1,562	\$1,576	\$1,576	\$1,576	\$1,576	\$1,576
PD	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$51	\$52	\$53	\$32.4	\$32.4	\$32.4	\$32.4	\$32.4	\$32.4	\$40.8

Appendix 3: Analyses of the Uniform Rate of Tax and School Finance Equity

References

Berne, R. & Stiefel, L. (1984). *The Measurement of Equity in School Finance: Conceptual, Methodological, and Empirical Dimensions*. Baltimore, MD: Johns Hopkins University Press.

Bureau of Legislative Research (2017). *Equity of Revenues and Expenditures in Arkansas School Districts*. Little Rock, AR: Author.

Odden, A. R. & Picus, L. O. (2014). *School Finance: A Policy Perspective* (5th ed.). New York, NY: McGraw-Hill.

Appendix 4: Indicators Impacting Student Performance

Data Definitions and Key Terms

Table 4.A.1.1. Data Inventory

Disadvantaged Student Categories								
EL Students: Students who are deemed to have Limited English Proficiency.								
• Low-Income Students: Students who receive free or reduced-price lunch; students that are directly								
certified.								
• FRL: A count or percentage of students who receive free or reduced-price lunch, either								
through an income application or through direct certification.								
• Direct certification : A count or percentage of students who are directly certified to receive								
free meals based on documentation of benefit receipt or categorical eligibility (e.g.,								
Supplemental Nutrition Assistance Program (SNAP), Head Start, and Even Start).								
SPED Students: Students who receive special education services.								
• Students of Color: American Indian, Black/African American, Hawaiian/Pacific Islander, Hispanic/Latinx,								
and multi-racial students								
Assessment Data								
ACT Aspire								
 <u>Scaled Scores</u>: ACT Aspire reports test scores through a single scale that summarizes the 								
achievement of students from multiple grades. These scores are vertically scaled to allow for								
apples-to-apples comparisons across districts, schools, and grade levels.								
 <u>Proficiency Level</u>: Corresponds to one of four levels of proficiency on an ACT Aspire exam. 								
Proficiency levels of one and two are not considered proficient, while proficiency levels of								
three and four are considered proficient.								
 <u>Growth</u>: A Value-Added Measure (VAM) expressing whether a student exceeded, met, or did 								
not meet expected expectations of academic growth, taking into account how the student had								
performed in prior years.								
Expenditures and Revenues								
Per-Pupil Expenditures: School level instructional, support, operations, facilities, and "other" costs								
divided by school enrollment. District costs are also apportioned to be included in the numerator.								
Instructional Expenditures: Expenditures that are associated with assisting the instructional staff in								
planning, developing, and evaluating the process of providing learning experiences for children.								
• Total Mills: The number of dollars taxed per \$1,000 of property value. For example, if a district's total								
mills equal 50, a homeowner in that area is taxed 5000 dollars if their property is worth \$100,000.								
Class Size Measures								
• Student to teacher ratio: The number of students per teacher at a school or district.								
Class size: The average number of students per class at a school or district.								
District-level Factors								
• Total Full-Time Equivalent staff (FTE): Total number of staff working full-time at a given district.								
Locale: Locale as determined by the Education Demographic and Geographic Estimates (EDGE)								
program at the National Center for Education Statistics (NCES). The program classifies a locale's size								
and proximity to urbanized areas, ranging from distant rural areas (sparsely populated and								
geographically isolated), to large cities (densely populated and within an urban area).								
Year Span of the Data								
Student-level demographic and assessment data: 2015–16 to 2018–19								
School-level demographic and assessment data: 2015–16 to 2018–19								
District-level financial data: 2015–16 to 2017–18								
Concentrations of Poverty Figure 4.A.2.1: Correlations Between ACT Aspire Performance & Concentrations of Poverty



ACT Aspire Performance vs. % Low-Income Students

Performance and Funding

The box plots (below) represent the distribution of ACT Aspire test scores, by funding decile (or funding level). The deciles span from 1- 10 and represent successively higher levels of per-pupil funding. The middle bars within the blue boxes represent the median test score for students funded at that level. The shaded blue boxes represent the range at which 50% of all test scores lie. The whiskers, or lines above and below the shaded boxes, represent the bottom and top quartiles of tests scores. Lastly, the dots represent outliers, or student test scores outside of the range in which most test scores lie.



Figure 4.A.3.1: 2018 ACT Aspire, 3rd Grade Scaled Score Distribution by Spending Decile

Figure 4.A.3.2: 2018 ACT Aspire, 3rd Grade ELA Scaled Scores





Figure 4.A.3.3: 2018 ACT Aspire, 8th Grade Math Performance by Spending Level

Figure 4.A.3.4: 2018 ACT Aspire, 8th Grade ELA Performance by Spending Level





Figure 4.A.3.5: 2018 ACT Aspire, 10th Grade Math Scaled Scores

Figure 4.A.3.6: 2018 ACT Aspire, 10th Grade ELA Scaled Scores



Class Size

The two visualizations below display histograms (Distribution of Average Class Sizes) and scatterplots (4A 3.2). The histograms illustrate the mean and variance of class sizes by school type. The scatterplots are illustrations of the correlation between student demographics within schools, and average class sizes. The lines in the scatter plot show whether or not the correlation was negative or positive.



Figure 4.A.4.1: Arkansas Average Class Sizes

Source: Arkansas Department of Education, 2018 School-Level Variables



Figure 4.A.4.2: Arkansas Average Class Size by Student Population

240



Identification of Gaps and Programs to Address







Figure 4.A.5.3 2019 ACT Aspire, Math Proficiency Level by Income

Figure 4.A.5.4: 2019 ACT Aspire, ELA Proficiency Level by Income





Figure 4.A.5.5: 2019 ACT Aspire, Math Proficiency Level by LEP¹

Figure 4.A.5.6: 2019 ACT Aspire, ELA Proficiency Level by LEP



¹ ADE provided data for limited English proficient (LEP) students. These students are English learners (EL) identified at the school or district level to receive additional language support services. See http://dese.ade.arkansas.gov/divisions/learning-services/english-learners.



Figure 4.A.5.7: 2019 ACT Aspire, Math Growth by % Students of Color

Figure 4.A.5.8: 2019 ACT Aspire, ELA Growth by % Students of Color





Figure 4.A.5.9: 2019 ACT Aspire, Math Growth by % Low-Income

The correlation between % FRL and % proficient in math was-.3868. The correlation between % FRL and math mean VAM growth was -.2802. This demonstrates that proficiency has a higher correlation with income level than it does with math growth.



Figure 4.A.5.10: 2019 ACT Aspire, ELA Growth by % Low-Income

The correlation between % FRL and % proficient in ELA was -.6492. The correlation between % FRL and ELA mean VAM growth was -.197. This demonstrates that proficiency has a higher correlation with income level than it does with ELA growth.



Figure 4.A.5.11: 2019 ACT Aspire, Math Growth by % LEP

The correlation between % LEP and % proficient in math was -.0314. The correlation between % LEP and math mean VAM growth was .1994. This demonstrates that proficiency has a lower correlation with LEP than it does with math growth; and that math growth and % LEP have a positive correlation.



The correlation between % LEP and % proficient in ELA was -.0893. The correlation between % LEP and ELA mean VAM growth was -.2226. This demonstrates that proficiency has a lower correlation with LEP than it does with ELA growth.



Figure 4.A.5.13: 2019 ACT Aspire, Math Growth by % Students with Disabilities

Figure 4.A.5.14: 2019 ACT Aspire ELA Growth by % Students with Disabilities



The correlation between % SPED and % proficient in ELA was -.1847. The correlation between % SPED and ELA mean VAM growth was -.0833. This demonstrates that proficiency has a higher correlation with % SPED than it does with ELA growth.









References

Ballou, D. (2009). Test scaling and value-added measurement. Education finance and Policy, 4(4), 351-383.

Ho, A. D. (2008). The problem with "proficiency": Limitations of statistics and policy under No Child Left Behind. Educational researcher, 37(6), 351-360.

Appendix 5. Addressing Poverty and Achievement Gaps: Funding Approaches

Impact of CEP on FRL counts in Comparison States

Under CEP, schools may qualify all students for free meals if 40% or more of the students are directly certified as FRL eligible in prior years. Once a school is designated CEP, the eligibility is for four years during which time all students receive free meals. Additionally, during this time schools districts may not use a federal application to determine FRL eligibility. A school can re-qualify for CEP at the end of the fourth year through direct certification.

Arkansas Calculation

Arkansas funds free and reduced-price lunch students in three tiers:

- 1. School districts with 90% or more FRL students.
- 2. School districts between 70% and 89% FRL students.
- 3. School districts with less than 70% FRL students

If the school district is a CEP district it takes the percentage of national school lunch students submitted the year prior to being CEP multiplied by the number of students enrolled in the immediately preceding school year. If a district grows by 1% in enrollment for the three previous years they receive growth funding.

Other States Use of CEP

The study team examined the percentage of schools in each SREB state plus Massachusetts that use CEP in Table 5.A.1.

State (SREB & MA)	Percentage of Schools Utilizing CEP	FRL Percentage
West Virginia	75%	49.00%
Kentucky	64%	61.46%
Louisiana	59%	68.91%
Delaware	52%	16.72%
South Carolina	39%	62.11%
Tennessee	37%	36.10%
Mississippi	37%	69.00%
Georgia	35%	60.58%
North Carolina	33%	52.00%
Alabama	30%	53.23%
Texas	30%	58.70%
Massachusetts	26%	32.00%
Oklahoma	24%	61.28%
Florida	22%	61.40%
Arkansas	19%	60.15%
Maryland	17%	41.00%
Virginia	16%	33.77%

Table 5.A.1: CEP Use in Other States

Virginia has the lowest parentage of schools that use CEP (16%). Arkansas has 19% of schools that use CEP and West Virginia has the highest percentage of schools that use CEP (75%).

The study team analyzed the impact of CEP on FRL counts and funding for five SREB states:

- 1. Alabama
- 2. Maryland
- 3. Kentucky
- 4. Louisiana
- 5. South Carolina

Additionally, the study team researched the policies around FRL counts for states with higher percentage of CEP schools than Arkansas.

Alabama provides funding for at-risk students base on the number of free and reduced-price lunch students. Students generate additional allotments in the state's formula. Forty-five of the 135 districts were identified as having CEP schools. During the years 2013-14 to 2017-18, CEP districts actually saw a larger average decline in FRL percentage. CEP districts saw a decline in FRL percentage of 7.8% while non-CEP districts saw a decline of 1.7%.

Maryland uses free and reduced-price lunch to provide an additional 0.97 funding for each at-risk student. When CEP was implemented, Maryland began to use the last full years of data collection as the percentage to apply to a school's population to calculate funding for at-risk. Half of Maryland's 24 districts were identified as having CEP schools. The change in FRL percentage from 2013-14 to 2017-18 was similar between the CEP and non-CEP districts. CEP districts saw an increase in FRL percentage of 1.2% while non-CEP districts saw a decline of 1.6%.

Kentucky uses free and reduced-price lunch to provide an additional 0.15 funding for each at-risk student. Ninety percent of Kentucky's 170 districts were identified as having CEP schools. The change in FRL percentage between 2013-14 to 2017-18 was higher in CEP districts compared to non-CEP districts. CEP districts saw an increase in FRL percentage of 25% while non-CEP districts saw a decline of 7%.

Louisiana uses free and reduced-price lunch to provide an additional 0.22 funding for each at-risk students. Ninety-five percent of Louisiana's 62 districts were identified as having CEP schools. The change in FRL percentage between 2013-14 to 2017-18 was slightly lower in CEP districts compared to non-CEP districts. CEP districts did not see an increase while non-CEP districts saw increase in FRL percentage of 4%.

South Carolina uses free and reduced-price lunch to provide and additional 0.20 funding for each at-risk student. Sixty-five percent of South Carolina's 82 districts were identified as having CEP schools. The change in FRL percentage between 2013-14 to 2017-18 was lower in CEP districts compared to non-CEP districts. CEP districts saw an increase of 6.9% while non-CEP districts saw an increase of 10%.

Other State Policies on FRL Counts in Districts with CEP Schools

Some states do no provide extra funding based on FRL counts. West Virginia and Florida do not provide additional funding for at-risk or FRL students. Delaware uses a grant application that is applied to districts based on project plan, school supports, and evaluation methods. Additionally, Texas assigns one of five weights on economically disadvantaged metrics based on census block groups.

Other states in the country have other policies on FRL counts in districts with CEP schools. California requires CEP schools to count all students every four years, this is then the baseline data for state funding formula. Tennessee increased the per pupil funding by about \$300 per pupil to address the decrease of FRL count due to CEP and Massachusetts changed identification method to look at 133% poverty and a higher assigned rate for at risk students.

Impact of CEP on FRL counts in Arkansas

The study team was asked to evaluate the impact of the CEP program on FRL counts over time as well as the resulting impact on the Enhanced Student Achievement program (ESA, formerly known as the National School Lunch program). In this section we analyze how FRL counts have changed over time in schools participating in CEP and the estimated impact on ESA funding.

To analyze changes in FRL counts over time the study team used school level data for the FRL counts used in ESA aid calculations. These counts use both direct certification and FRL applications for free lunch counts and FRL applications for reduced lunch. According to Arkansas State Code (6-20-2303), the FRL percentage for schools participating in CEP is the FRL percentage from the school year prior to enrollment in CEP. This base year percentage is used for the duration of the four-year CEP participation window. Changes in the FRL counts were calculated separately for CEP schools, schools not participating in CEP, and schools that were CEP eligible but not participating and schools nearing eligibility. First, the percentage point difference in the FRL concentration percentage was calculated between the 2018-19 school year FRL percentage and the earliest year data were available for each school (for example, for a school operating during the entire period the difference would be between the school's FRL concentration percentages in 2018-19 and 2017-18). The difference in concentration percentages was used to control for changes in FRL counts due to enrollment changes in schools. We then compared the change in FRL percentages between CEP and non-CEP schools and districts.

This analysis was subject to certain limitations. First, the study team analysis of trends in FRL counts for schools and districts was limited to the years 2013-14 through 2018-19. School year 2013-14 was the earliest data readily available on the My School data portal. This year also corresponds with the last pre-CEP year of FRL count data. We also did not have data on when individual schools and districts enrolled in the CEP program, limiting our ability to compare pre- and post- CEP participation FRL counts and rates. As a result, our analysis examined the change in RFPM percentages in all schools over all years in the 2013-14 to 2018-19 range during which schools were operational. We also had no way of collecting actual FRL eligibility data in CEP schools because these counts do not exist. Finally, our analysis was limited to traditional schools operated by school districts due to limited and inconsistent data on charter schools over this time period. Only schools operating in 2018-19 with at least two years of FRL data were

included in the analysis. Because eligibility is determined at the school level, the FRL count change calculations were made at the school level and then aggregated to the district level. As a result, our analyses and finding are limited to the inferences we can make from the FRL estimates made by the state for establishing district FRL percentages for calculating ESA aid amounts.

On average for all districts in the state, the FRL percentage decreased over this time period from an average FRL of 60.31 percent to 59.44 percent, a decrease of 0.87 percentage points. The average FRL percentage in districts with no CEP schools decreased significantly more – by a total of 1.64 percentage points, falling from 58.15 percent to 56.53 percent. Conversely, districts with schools participating in CEP saw their FRL percentage increase by an average of 1.58 percentage points, increasing from 75.16 percent to 76.74 percent. The FRL percentage in districts with non-CEP schools with higher FRL concentrations - those designated as eligible for CEP but not participating or near eligible by the state, increased from 69.12 percent to 69.91 percent, an average increase of 0.79 percentage points, about half the increase of districts with schools participating in CEP.

While it is difficult to interpret what these numbers mean with certainty given the available data, these data suggest that the level of poverty in higher poverty schools in the state continued to increase even while rates in much of the rest of the state declined or increased at a slower rate. To confirm this, we examined the change in direct certification percentages for individual schools between 2013-14 and 2018-19. Table X below presents these data. Among all schools the average FRL percentage increased from 63.5 percent in 2013-14 to 68.0 percent in 2018-19. However, among schools not participating in CEP the percentage changed slightly from 60.5 percent in 2013-14 to 61.6 percent in 2018-19. Among schools eligible but not participating or nearing eligibility the percentage increased from 72.7 percent to 80.5 percent and among participating schools it increased from 80.0 percent to 98.9 percent. These data show that overall, the percentage of students in poverty increased by about 4.5 percentage points, but the increase was greater in the poorest schools (those participating in or eligible but not participating or near eligibility for CEP). Table X also shows that the percentage of students qualifying for free lunch using direct certification fell by 1.48 percentage points over this time period across all schools, but increased by 1.32 percentage points in CEP schools.

Schools	Total FRL % 2013-14	Total FRL % 2018-19	Change in Direct Cert. %
All	63.5	68.0	-1.48
Not Participating in CEP	60.5	61.6	-2.04
Eligible or Near Eligible	72.7	80.5	-0.45
Participating in CEP	80.0	98.9	1.32

Table 5.A.2: FRL Percentage and Percentage Poir	nt Change by School CEP Participation:
---	--

2013-14 to 2018-19

These data seem to confirm that the state's students have become poorer over time, but that rate of increase of low-income students was greater in schools with higher concentrations of poverty. The districts with schools participating in CEP had the largest increase in the percentage of students eligible

for FRL, about double that of districts with schools eligible but not participating in CEP or nearing eligibility for CEP.

Change in FRL Counts Over Time in CEP Districts and Impact on ESA Costs

To estimate the potential impact of CEP participation on ESA student counts over time the study team assumed that the average FRL change of +0.79 percentage points for districts with schools eligible but not participating or near eligible was the most valid indicator of the expected average FRL change in districts with CEP participating schools had they not been in CEP. Both sets of schools had the highest average FRL concentrations, although in 2018-19 CEP schools had a higher average FRL percentage than the eligible but not participating and near eligible schools. However, there is also some overlap in the districts in which these schools and CEP participating schools to reflect the lower average change found in districts with eligible but not participating or near eligible schools. This change resulted in a statewide decrease of 1,091 FRL students in 2018-19. If we apply the adjusted FRL counts to the ESA funding formula the amount of ESA state aid decreases by an estimated \$2.85 million.

We made the opposite adjustment to FRL counts to estimate the impact of future growth in CEP participation on ESA aid costs. To make this estimate the study team adjusted the change in FRL percentages for districts with eligible-not participating and near eligible schools (169 districts) to reflect the higher average change for districts with CEP participating schools (from an average increase of +0.79 to + 1.58 percentage points). This adjustment resulted in a statewide increase of 7,495 FRL students if all of the eligible-not participating or near eligible schools in these 169 districts participated in CEP. The additional ESA aid cost would total \$10.7 million. Table X shows the annual impact of increasing CEP participation assuming 10 percent of these schools enrolled in CEP each year for the next 10 years (holding FRL counts constant and assuming no changes to the ESA aid formula).

Increase in CEP Participation	Additional ESA Aid Cost
10%	\$1.1 million
20%	\$2.1 million
30%	\$3.2 million
40%	\$4.3 million
50%	\$5.4 million
60%	\$6.4 million
70%	\$7.5 million
80%	\$8.6 million
90%	\$9.6 million
100%	\$10.7 million

Table 5.A.3: Estimated Impact of Increasing CEP Participation on ESA Aid Costs

The study team cautions that due to the limitations of the data these are best available estimates with potentially large margins of error. Because data showing when schools enrolled in CEP were unavailable, we were unable to determine trends for how CEP enrollment has changed annually since 2014-15 and

no approach was available for making reliable estimates of actual FRL counts in CEP schools. However, there is a strong correlation between FRL and direct certification counts (0.954) which adds confidence to our estimates of the direction of changes in FRL counts and percentages over time and differences between groups of schools and districts (e.g. CEP participants, non-participants, and eligible but not participating/near eligible).

Impact of Alternative Indicators in Arkansas

The study team was also asked to analyze the impact of alternative proxies for identifying economically disadvantaged students. In response the study team examined five alternative proxies. All of these make use current data collection, alleviating the need for the state to implement a potentially costly new data collection process. The five alternatives are:

- 1. Direct certification;
- 2. Direct certification increased by the federal multiplier of 1.6;
- 3. Direct certification increased by a 2.1 multiplier;
- 4. U.S. Census count of children ages 5-17 living in poverty; and
- 5. Title I counts.

As noted above, the current direct certification count is of students eligible for the Supplemental Nutrition Assistance Program (SNAP), which identifies students from families at 130 percent of the poverty level or below. Direct certification used with a 1.6 multiplier is the count used by the federal government for determining FRL reimbursements in CEP schools. This count is currently used by the State of Texas for estimating the number of low-income students in schools and districts. The direct certification used with a 2.1 multiplier option was included because it results in statewide count that is most similar to the current FRL count. The Census count identifies children ages 5 to 17 from families at or below the federal poverty level, while Title I counts use the Census count plus counts of students who are neglected, delinquent, in foster homes, or eligible for the TANF program.

While all of these options are part of current data collections, each presents certain disadvantages as a proxy for economically disadvantaged children. Direct certification, as currently configured, only counts the equivalent of free-lunch students, excluding those students eligible for reduced-price lunches between 130 percent and 180 percent of poverty. These counts may be increased by a multiplier but then the connection to individual students is lost. Use of a different count may be necessary for categorizing students by income status for state assessment and accountability purposes. Census numbers are only available at the district level, not by school and would also exclude any students currently counted as FRL eligible who are above the federal poverty level.

The study team's approach to examining the impact of alternative counts is to look at how each district's share of the current FRL statewide count changes using an alternative count. The change in share data presented below indicate whether the district's share of eligible students will increase or decrease, which ultimately impacts districts' ESA funding levels. The following set of charts show the results of our analysis of how districts' shares of the statewide count of economically disadvantaged students differ between the current FRL count and each of the alternative counts. Figure X shows the number of districts whose share of statewide economically disadvantaged students changes by differing percentage

ranges when comparing the direct certification options to current FRL. These options were analyzed together because they are all multiples of the direct certification count, thus their share changes across districts are the same. Eighty-nine districts would see their counts change within a range of plus/minus 10 percent. Thirty-two districts would experience changes in their share of economically disadvantaged students of nearly a third or more. Fifteen districts would experience changes of 40 percent or more.





Figure X shows the same information disaggregated by region. Same change in poverty share data only aggregated by region. The table shows that the largest average change in the statewide share of economically disadvantaged students would occur in the Southeast (Lower Delta) region, which would experience a nearly 20 percent increase in state share. Conversely, the Northwest region would experience the largest decrease in state share of nearly 14 percent. The remaining regions would all experience more modest decreases in their state shares, ranging from -1.5 percent in the Northeast to -6.5 percent in the Central region.



Figure 5.A.5: Direct Certification, Direct Cert. 1.6, Direct Cert. 2.1

-20.0% -15.0% -10.0% -5.0% 0.0% 5.0% 10.0% 15.0% 20.0% 25.0% Figures X and X present the same summary data for the comparison between Census counts of children between the ages and 5 and 17 in poverty and FRL. Because the poverty threshold is lower than that of direct certification, more districts will experience decreasing state shares of economically disadvantaged children. Fifty-four districts would experience a change in share of plus or minus 10 percent or less. Most districts, a total of 137, would see their shares decrease, with 40 having a reduction of 30 percent



Figure 5.A.6: U.S. Census Counts Children Ages 5-17 Change in Share of Economically Disadvantaged Students

or more. Twenty-one districts would experience an increase in their share of 40 percent or more.

Examining the impact by regions, the Southeast region would again experience the largest average increase in share of economically disadvantaged students. The share in districts in this region would increase by an average of nearly 15 percent. Districts in the Central region would experience an average decrease in share of 14.5 percent. The Northeast and Southwest and North East regions would both see small positive share increases on average, while the Northwest region's share would decrease by nearly 10 percent.





Figures X and X present the final comparison for Title I counts. Title I counts use the Census data from above plus counts of students eligible for certain programs or in special circumstances. As Figure X shows, the distribution of districts by change in share is very similar to the Census data presented above. Sixty-one districts would experience a change in share of plus or minus 10 percent or less. Most districts, a total of 139, would experience a decrease in their share, with 41 having a reduction of 30 percent or more. Twenty-one districts would experience an increase in their share of 40 percent or more.



Figure 5.A.8: Title I Counts, Change in Share of Economically Disadvantaged Students

Comparing across regions shows that again the Southeast region would experience the largest average increase in share of economically disadvantaged students. Districts in this region would experience an average share increase 14.3 percent. Districts in the Central region would experience an average decrease in share of nearly 15 percent. The Northeast and Southwest and North East regions would both see small positive share increases on average, while the Northwest region's share would decrease by nearly 10 percent.



Figure 5.A.9: Title I Counts, Change in Share of Economically Disadvantaged Students by Region

References

Barker, P. & Nicholson, V. (2018). *Interim Study Proposal 2017-033: Evaluating the Impact of School Breakfast After the Bell on Student Health and Achievement* (Report to the Joint Committee, Arkansas General Assembly). Little Rock, AR: Arkansas General Assembly.

Chingos, M. M. (2016). No More Free Lunch for Education Policymakers and Researches (Evidence Speaks Reports, Vol. 1, #20). Washington, D.C.: Brookings Institution.

Croninger, R. G., King Rice, J. & Checovish, L. (2015). *Evaluation of the Use of Free- and Reduced-Price Meal Eligibility as a Proxy for Identifying Economically Disadvantaged Students: Alternative Measures and Recommendations*. Denver, CO: Augenblick, Palaich & Associates.

Greenberg, E. (2018). *New Measures of Student Poverty: Replacing Free and Reduced-Price Lunch Status Based on Household Forms with Direct Certification*. Retrieved from https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty.pdf

National Forum on Education Statistics. (2015). *Forum Guide to Alternative Measures of Socioeconomic Status in Education Data Systems*. (NFES 2015-158). U.S. Department of Education. Washington, DC: National Center for Education Statistics, U. S. Department of Education.

Appendix 6. Addressing Poverty and Achievement Gaps: Strategies

Case Study School Summary: Crossett Middle School Background

Crossett Middle School is a school of 520 students (grades 5-8) in the Crossett School District. The school is located ten miles from the Mississippi boarder in the town of Crossett (Southeast region). The largest employer is a paper plant, and the town is looking to bring in another plant for storage containers.

Crossett Middle School Demographics (19/20)	
Enrollment	520
FRL %	68%
English Learner %	2%
Special Education %	11%

Sixty-eight percent of students are eligible for free and reduced priced lunch (FRL), two percent are English Learner (EL) students and 11 percent are special education students. Sixty-one percent of students are White, 34 percent are Black, and three percent are Latino.

Average class sizes in the school are about 25 students, ranging from 16 to 28 students. The school has a 95 percent attendance rate.

School Culture and Leadership

Crossett Middle School has a strong school student-focused culture; the staff puts the students' needs first. The school is led by a confident school leader willing to listen to the advice and suggestions from staff. The principal says the school lives by the belief that students come first. The principal starts every morning with a positive message through announcements. The faculty feels bought in and supportive through the principal's willingness to listen to them when they identify an issue, and the principal looks to staff to be solution oriented and the experts. Staff feel that the yearly goals are well mapped out and created with the whole team's input. The school has been able to replace retired teachers with staff that is bought in and focused on the needs of the students.

The students feel supported as well by the school. Each student is assigned a teacher as a mentor who track both social emotional needs and academic needs. These teachers act as an advocate for the kids in the school and use advisory time to meet with students.

Instruction, Interventions, and Assessment/Data Use

The school uses Eureka math for 5th and 6th grade and Lexia for literacy. In 7th and 8th grade the school uses Summit for literacy and math. Summit is an online curriculum-based structure supported with selfdirective learning. The school has training with Summit in the fall and spring and new teacher orientation in the summer. All students have their own devices to enable a blended learning classroom. Additionally, the principal said they had made some adjustments to the curriculum to fit the needs of the community. The school deems a lot of its success on its strong emphasis on English and math and faculty buy-in. For the school's EL students, a facilitator to meet with families as well as to help integrate the students into the community. For the school's Special education students, the school has a resource room and a co-teaching model. Regular assessment and progress monitoring are an integral part of Crossett Middle School. The NWEA MAP test is administered three times a year: the beginning of the school year, right before winter break, and spring. The ACT Aspire test is administered as required. The staff uses MAP data for quadrant reports. The students are placed in quadrants based on performance. The advisory teacher will talk to each student one-on-one to inform them where they scored, how they did, where their growth areas are. The leadership team then comes together to develop a plan for the students. Additionally, the Summit learning system also produces detailed data about where each student is, and all teachers can see where each student falls in any core subject area.

For the school's struggling students in ELA, the school uses Barton and paraprofessionals for small group work for phonics. The school has a math facilitator to assist the students in need of math remediation. For 7th and 8th graders there is after-school tutoring. Students must finish their Summit curriculum during school hours or after-school; otherwise, they come to summer to school finish. Additionally, there is Saturday school for struggling students in Summit who do not have internet at home. There is no transportation provided for these programs. After-school is held for an hour on Tuesdays and Thursdays. The first twenty minutes is spent working on skill development such as note taking or study skills, the remaining forty minutes is spent working on assignments.

EL students meet with the district coordinator who will meet with the teachers to inform them of the deficits that the students face. Each student gets a shoulder partner in class to assist them with some language barrier issues.

Staffing and Professional Development

The school is led by a principal, a dean of students, and a counselor. A large number of the teachers grew-up in Crossett and have come back to teach and they know the area and the community well. The principal believes a key to their success is the team meetings that occur amongst teachers. Teachers work in grade-level teams and each grade-level has a planning period. Each day the teams meet for 40 minutes to discuss which students are struggling and what action steps need to be taken to support those students. Each teacher has an additional 45 minutes of planning time each day. Additionally, teachers have one day per week of extra duty time for about 15-20 minutes in the morning and 15-20 minutes in the afternoon.

This year there was higher than average turnover for the school. In order to integrate new staff, the school provides a buddy teacher for the first few days to integrate new staff to the school and the community. The Arkansas universities send a list of graduates and the school starts reaching out to them. It is hard to appeal to married staff since there are no jobs in town to offer the spouse. Crossett Middle School has the highest waivers for teacher licensure in the district, most years the school only receives three to four applicants.

As with most of Arkansas professional development is provided by the state or their education services cooperative. Two to three days at the beginning of the school year are Arkansas state specific PD. The other days are spent going over ethics and procedure as well as a school specific PD. This year the school

will focus on Capturing Kids Hearts to provide social emotional learning (described further below). Each year the school looks at its needs and finds appropriate PD to address this need.

Student Support Services

The school developed a new curriculum called Capturing Kid's Hearts to support social emotional learning within the classrooms schoolwide. Capturing Kid's Hearts works with staff to model desired behaviors and ensure accountability. Teachers then integrate the curriculum into their classroom norms and day-to-day lessons. Additionally, the school has a school counselor to meet with small groups to address social emotional issues as well. There is no school psychologist in the school, so if a student has a behavioral health crisis, the school will contact outside help. They have a district-level social worker that works withs students on an as needed basis.

Case Study School Summary: Des Arc Elementary School

Background

Des Arc Elementary is a prek-6 school with 316 students in 2019/20. There are 550 students in total in the district which is located on the northeast edge of the Central region in Arkansas. The school is in a small, rural community with the primary industry being farming. The community is very involved and tight knit. Staff reported

Des Arc Elementary School Demographics (19/20)		
Enrollment	316	
FRL %	72%	
English Learner %	0%	
Special Education %	17%	

having close connections with their students and families as a result of seeing them out and about or at church. The school has been increasing in enrollment due to drawing students from outlying communities due to its reputation.

There is little student mobility and the demographics of the school have been fairly stable (87 percent of students are White, 11 percent are Black, and 2 percent are Latino). In 2019/20, 72 percent of students received free and reduced-price lunch and 17 percent received special education services; the school's English Learner percentage was 0 percent. The school also has few attendance issues, with an attendance average around 98 percent.

School Leadership and Culture

Des Arc Elementary staff believe that the school's culture is the key piece of their success. They described their staff as very close, connected, and "like a family." Being a family means that teachers are more likely to stay at the school, teachers can work through any issues and find help when they need it, and students feel fully supported and loved. Further, there is supportive leadership at all levels, including the superintendent, the school board and the school principal. Teachers reported that they felt that the principal always backed them up and that they had the opportunity to be leaders in the school. The school principal stressed that they have a "building full of leaders." The staff, as well as the community, are a part of decisions which leads to a high level of buy in and investment. Leadership reported that teachers are always willing to jump in, take on new initiatives and opportunities, and put in the time; teachers "have no quit in them" and this dedication has been essential to the school's

success. Students feel it and know how much staff care about them and their education. Teachers have high expectations for their students and challenge them to rise to meet their standards.

There is also constant communication with families, who are made to feel involved and aware of issues even when they cannot be at the school. The community as a whole is very invested in supporting the school. One teacher shared that if the expression is it "takes village to raise a child," their school is an example of what happens when the village comes together.

Instruction, Intervention, and Assessment/Data Use

The school day is structured with core blocks and time for enrichment/intervention daily. Further, it allows for common planning periods by grade level for 45 minutes a day using a rotation of daily specials (library, PE, art, music, computer). Teachers time is protected, with leadership using non-classroom staff for duty (for example, the principal, SRO, PE teacher and librarian do bus duty, while the SRO, dyslexia specialist and art teacher do pick up). K-2 classrooms are self-contained with paras, and 3rd and 4th grade are split between math/science and literacy/language arts. 5th and 6th grade are compartmentalized with rotation through four teachers. Administration lets teachers select their own curriculum and pull from several different resources, so they can find the best fit for their students.

Overall, the school reports having very data-driven instruction. During the summer, teachers use PD to review/ disaggregate ACT Aspire data to plan curriculum and instruction for the year. The school also uses MAP and interim ACT Aspire assessments, plus DIBELs literacy screeners. During the year, teachers regularly review data during their professional learning community (PLC) time. Staff set strategic goals based upon data, and then mini lessons and bell ringers are incorporated into class time to target gaps. They also use awards and recognition to motivate students.

Targeted interventions for students are also offered in several ways. Paras in grades K-2 allow for small group and individual pull out, and in grades 3-6 there is daily time for enrichment and intervention within the schedule. The school's speech teacher goes into kindergarten classrooms to lead phonemics awareness for an hour per week, and the special education teacher provides push in support for special education students. After school tutoring is offered for one hour after school to students with highest need Identified based upon classroom performance and assessment data.

Des Arc Elementary also has a RTI committee to review student data to determine who needs Tier 1, 2, or 3 support. Committee monitors progress to add/remove students as needed. Classroom teachers first do Tier 1 interventions, if not working fill out packet with family and student history, performance, assessment, behavior to give to the RTI committee. The committee then reviews the materials to determine what issues could be and strategies for Tier 2 intervention (via classroom teachers and interventionists) to address. These strategies will be applied for 6 weeks; if the student is improving, they will continue with the strategies, if not, the student with move to Tier 3 intervention. The school also has a dyslexia program if that is idented as an issue.

Staff feel that their smaller class sizes allow them to provide personalized support to students. They also hold students accountable for their education, and overall, are implementing a student-centered

education model. They know their students and adjust strategies as needed to meet their needs. This includes both providing intervention and acceleration when needed.

Staffing and Professional Development

Des Arc Elementary is led by a principal and supported by one clerical staff member. There are 15 core teachers, 3 electives teachers, 2 tutors/interventionists, and 2 special education teachers. Additional support is provided by a librarian, a counselor, a nurse, a school resource officer (SRO) and a speech teacher. The counselor also is the gifted teacher, and the PE teacher and librarian also used for interventions. There is very little turnover at the school.

There are also six paraprofessionals, who support both K-2 classrooms and special education. There are about two classes per grade in most grades. Kindergarten has three classes around 14 students, 1st grade has average class sizes around 22-23, and the school was looking for a third teacher to reduce those class sizes. Second grade has an average of 19-20 students and 3rd grade has higher average class sizes of 25-26 students, but the school is also looking for a third teacher for the grade to reduce the class sizes. Fourth through sixth grade have an average class size of 20-22 students.

As noted previously, teachers have common planning time by grade and also meet in PLCs 1-2 times a month to review data and adjust curriculum. Teachers meet twice a week with grades during their planning periods and have cross grade meetings during shared lunch times.

PD is otherwise primarily offered during the summer. Of the 60 hours of PD, 24 hours are set by the state. There are 2-3 days of district led PD and the remained provided by their education services cooperative. Teachers and principal discuss their individual PD needs. Teachers really appreciated this time for self-reflection and freedom to determine what they needed in particular to improve their practice. Teachers reported that the RISE, Wilson Fundations Phonics, Cognitively Guided instruction for Math, AR Math Quest, and dyslexia trainings have been very helpful.

Student Support Services

The school has a counselor works with all students, then an outside company comes in to provide mental health services when needed. They bill insurance so there is no cost to the school and no out-of-pocket costs for their families.

Case Study School Summary: Helen Tyson Middle School Background

Helen Tyson Middle School is a school of 735 students (grades 6-7) in the Springdale School District. The school is located in Springdale in Northwest Arkansas. The largest employers are Tyson meats, Walmart, JB Hunt, and Cargill.

Helen Tyson Middle School Demographics (19/20)	
Enrollment	735
FRL %	79%
English Learner %	29%
Special Education %	11%

The school is high need, with 79 percent of students being eligible for free and reduced priced lunch and 29 percent EL. Northwest Arkansas tends to be wealthier and more predominately white than the rest of the state; however, Springdale has two schools that are 99 percent FRL. While the area is wealthy, there

are also many low-income families working as line workers at Tyson and other companies. The district is rapidly growing due to industry and jobs.

The school's enrollment has remained consistent over the past years. There are four elementary schools that feed into Helen Tyson Middle School, one of which is very high FRL. There is high mobility at that school. Low-income families must move often to find affordable housing; this is a common issue in the district, the instructional facilitators at each middle school meet to keep track of students.

Helen Tyson Middle School is working on ways to incentivize attendance through various rewards. The school will contact families if a student is frequently absent. This can be difficult because families will change phone numbers often for cheaper plans.

School Culture and Leadership

Helen Tyson Middle School has a strong focus on relationships. The staff wants the students to know that they care about them. The school has Primetime period where staff can check in with students and help them personally and academically. These advisory periods are used to help build relationships with students and to direct students to appropriate supports.

Helen Tyson Middle School is led by a confident school leader who was mentored by the prior principal. The principal has members of her leadership team and staff lead meetings, as well as invites students, parents, and community members to meetings. The faculty feels bought in and supportive through the principal's willingness to listen to them when they identify an issue, and the principal looks to staff to be solution oriented and the experts. The principal believes that flexibility is the key to the school's success. The school is always changing programs and schedules to best meet the school's changing demographics and needs. If something does not work, they will try something else. Additionally, the principal believes that everyone is responsible for <u>all</u> kids. They do not categorize kids as EL, SPED or atrisk.

Instruction, Interventions, and Assessment/Data Use

Regular assessment and progress monitoring are an integral part of Helen Tyson Middle School. The schools look at ASPIRE and other assessment results to identify and target weak areas. The student will then receive differentiated and individualized instruction.

Helen Tyson Middle School structures the week to provide supports for struggling students. On Monday and Tuesday mornings the students have advisory periods where their teacher meets with them on their status in each of their classes. On Wednesday and Thursday mornings the students can attend primetime or enrichment. Primetime is a time for students to work on areas where they may have deficiencies. Friday mornings the students have "home base" where they meet with core teachers. Additionally, the school rotates priority classes, for example one week would be focused on math and the next would be focused on reading. The school also provides after school four days a week where transportation, dinner, snack, tutoring, and enrichment are offered.

Special education students receive grade-level content as much as possible. The teachers provide supports to help students access and understand the content. In order to serve EL students, Springdale

School District partners with ESL Achieve. ESL Achieve pulls out levels 1 and 2 (based upon the WIDA ACCESS assessment) and focuses on language development rather than content. For students in the intermediate level, ESL Achieve works on content and then moves to more challenging critical thinking. During PLCs classroom and ESL teachers work together to make sure content and approaches are similar.

Staffing and Professional Development

The school is led by a principal and two assistant principals. There are two counselors, one for each grade, a nurse, a library/media specialist and additional instructional staff, including instructional facilitators and interventionists. There is little turnover amongst staff. In 2020 they had one teacher who was retiring, one who was moving and one who was going to another school in the district. The school shares a band teacher, some coaching staff, a social worker, and an SRO.

Teachers have time each day for individual planning and PLC or team planning. The art, PE, and music teachers have PLC time on Fridays. The principal feels it is very important from a funding perspective to provide staffing resources to allow for collaboration time. The school district provides a lot of professional development. The district has a strong vision for professional development and will train teachers or send them to their education services cooperative. The teacher will then come back to the school and train all the other teachers. All of the professional development in the building is led by the instructional facilitators or individual teachers depending on the topic.

Student Support Services

Helen Tyson provides multiple support services for students. There is a social worker in the school two times a week. There is also therapy offered through Ozark Guidance which is paid for through parent's insurance and can be facilitated at the school. There is a full-time school-based counselor who coordinates services for homeless families. Additionally, the admin team provides a lot of counseling and support for students. The school does have in-school suspension. The principal targets those students for extra support and to keep things from escalating.

The school has a school base health center with a full-time nurse. The health center has been a great way to keep students in school and in class. There is also a sensory area where students can go that includes a stationary bike and manipulatives. It provides an opportunity for students to calm and recenter.

Case Study School Summary: Jasper High School Background

Jasper High School is a small 7-12 innovation school in Northwest Arkansas. The town of Jasper has less than 500 residents, most are retirees on a fixed income. The major industry is tourism, and the largest employer is the school district. About 60 percent of the land is federally owned.

Jasper High School Demographics (19/20)	
Enrollment	226
FRL %	71%
English Learner %	0%
Special Education %	19%

As an innovation school, Jasper High has developed an innovative flex schedule model that allows students to (1) take ownership and have agency over their education, (2) receive personalized instruction, (3) develop the skills needed for life after high school, (4) pursue internship opportunities, (5) take CTE and concurrent enrollment courses, and have time for to participate in student activities during school day. This approach also allows teachers to engage with their students one-on-one more meaningfully and in small groups, as well participate in schoolwide professional learning communities (PLCs) to create a deeply collaborative school culture.

Jasper High is predominately white (96 percent) with a higher-than-average percentage of students qualifying for free and reduced-price lunch (71 percent) as well as for special education services (19 percent). With 226 students across six grades, classes are small with an average class size of 12-15 students. Student mobility can be an issue with student moving in and out of the school throughout the year to attend neighboring districts where they have family. It is fairly common within their education services cooperative to have similar course offerings by grade to make these transitions easier.

School Culture and Leadership

Staff stressed that the culture of their school, with its collaborative community and close relationships with students, was the biggest factor of their success. Staff are welcoming to students, engaged in their lives and aware of what is going on with them. Each teacher is an advisor who meets with kids twice a week, so that those students always have someone to go to and know that they are cared about. The counselor is also there to reach out to the kids that need a little extra care or push. Teachers shared that students are willing to work harder when they know that they are cared for and a part of the school community. Teachers also work well together and are engaged in decision-making. Finally, as an innovation school, teachers are encouraged to think creatively and have a high degree of buy in and voice in the school.

Students are also very welcoming to each other and there are many different activities for students to get involved in to find their place in the school community.

Instruction, Interventions, and Assessment/Data Use

Jasper High's flex schedule is unique and is reported as a key factor to their success. The schedule is structured with three protected days of traditional instruction time, then up to two "flex days" (two days in high school grades, less in the middle school grades). This allows every student's schedule to be customized, allowing for both acceleration and support. On a flex day, a student will go to their advisor first to review attendance, grades, missing work, and time on task for the week. If the student does not have any issues in these areas, they select how they would like to use the time (for example: spend time in band, work on projects). If a student has an issue in these areas, they will have to attend specific class periods to address to meet with teachers individually or in small groups. Flex days are also used for concurrent enrollment courses, internships, labs, assemblies, student activities and events; further, all holidays and snow days are counted as flex days so that instructional days are protected. Advisory is held the first hour of every flex day and teachers will have the same group of students from grades 7-12; this period is both used for monitoring and scheduling, as well as developing student success plans. Teachers reported that in addition to the benefits reported above (under Introduction) the peer

influence that this approach allows is incredibly impactful: students share their schedules, see other students that have more flexibility and fun in their schedule, so it encourages them to work harder to get the same flexibility and fun opportunities.

Jasper High has a strong RTI model in place to identify, monitor and support struggling students. The flex schedule allows small group intervention support to occur during flex days, so there is no need for after school programs that can be difficult to have due to transportation issues. Leadership reported how beneficial it is to have certified staff during flex days provide that intervention to students and the increased comfort that students have sharing that they are struggling or have questions when it is in a small group setting compared to the regular classroom. The flex schedule allows each student's education to be customized to their needs- it is not "one size fits all."

The use of data and monitoring is a critical element of determining the student's needs and how to use the flex schedule to meet those needs. Progress monitoring occurs weekly and the school has set criteria in the areas of attendance, grades, missing work, needing to retake a quiz or test, and time on task for deciding when a student needs to receive additional intervention and support on flex schedule days.

Staffing and Professional Development

As a small school, Jasper Hugh shares a number of positions with the nearby elementary school including shared music, art and gifted teachers and a shared nurse position. The school's counselor and administration staff are not shared. The school does not have the staffing to offer language or AP courses, which they offer through Virtual Arkansas. Jasper High leadership is also exploring sharing teachers in the future with another small high school to do virtual courses. Leadership also shared that have some extra staff positions paid out of Title I and ESA than what would be found in a school without access to those funds. This extra staffing has allowed certified staff to do interventions on flex days, which leadership has been invaluable. Compared to the matrix, the leadership said they had more positions, but that is due to salaries being low. The minimum salary going up makes this tradeoff difficult to manage.

The school has been implementing the Solution Tree PLC model. Further, Jasper High tries to embed as much PD as possible within the school schedule. Flex says allow for collaboration and any needed grouping of teachers (by grade, by subject). In this school year, there were two PD days during the school year that all teachers attended at their request, then 4 days for PD that teachers could use for self-directed PD. The principal surveys teachers regarding their needs, then sits down with them to discuss what their PD should be. Other PD days occur during the summer and leadership has tried to send each teacher to model school conference at least once (not all at once) as teachers get to learn, have some fun, and bring back information and ideas to share with others.

Student Support Services

The school currently has access to on licensed therapist and one assistant, which they have found to be a huge help to address student mental health. The therapist and assistant's time is paid for by billing Medicaid, but the district provides them space. Staff indicated that if there is any area that needs additional financial support, its student mental health. They have found that if you do not address student mental health needs, you cannot teach them. Also, if they had their own mental health staff, then the school would not need to rely on parental referral.

Case Study School Summary: Lafayette County High School Background

Lafayette County High School is a school of about 235 students, grades 7-12, in Lafayette County School District in southwest Arkansas, near the Texas and Louisiana borders. The district and school are experiencing declining

Lafayette County High School Demographics (19/20)		
Enrollment	235	
FRL %	87%	
English Learner %	0%	
Special Education %	11%	

enrollment, administrators estimate that since a district consolidation in 2004, student enrollment has declined 60-70 students per year. Lafayette County is one of the least populated counties in the state, with a total population between 7,000 and 8,000 residents, and is made up of mostly poor communities. The high school is located in Stamps, while the district's elementary school serving preschool through sixth grade is located about eight miles away in Lewisville.

There is a lack of industry in the area, and many residents travel out of the county for work. School administrators anticipate this declining enrollment trend will continue, as families continue to leave this area in search of jobs and opportunities elsewhere. The school is high need, with approximately 85 percent of students being eligible for free and reduced priced lunch. The school does not typically have many English Learner students and eleven percent of students are in special education. Approximately 60 percent of students are Black, 35 percent are White, and three percent of students are Latino.

Average class sizes typically range from 18-20 students, with a maximum class size around 25 students. The school's graduation rate is 90 percent.

School Culture and Leadership

Lafayette County High School has a strong school culture, led by a confident school leader with a clear vision. The principal has established a Guiding Coalition as the leadership team within the school. The Guiding Coalition typically attends a 3- to 4- day summit each summer, which helps to build relationships and camaraderie among the coalition. Staff described the school environment as a family-oriented atmosphere. The staff as a whole works well together and support each other throughout the school year. Equally important, and in the forefront of the staff's mind, is the importance of building relationships with students. The Guiding Coalition noted that students perform better in the classroom when students and teachers have a good relationship, and when students know the teachers and staff genuinely care for them and their well-being. Staff noted that being such a small district, where all of the staff lives within the district, helps relationship building immensely. So many staff members know students' families personally, giving them insight into any potential issues outside of school that may be impacting students in school.

Instruction, Intervention, and Assessment/Data Use

The school day includes eight instructional periods; teachers teach seven of the eight periods. Each teacher has a daily planning period, and administration tries to schedule common planning periods for

departments, but with such a small school (three math teachers and two English teachers), the schedule cannot always accommodate it. On early release Wednesdays, the teachers participate in PLCs.

The school offers a diverse high school curriculum. While each teacher utilizes appropriate coursespecific curriculum, schoolwide a number of curricular resources are available, including Edcite, Edgenuity, and Tools for Learning. In the core content areas, the school is very focused on college and career readiness. It has partnerships with the local community college where students can participate in concurrent enrollment to begin earning college credits while still in high school, and through the district's Career Center, students are able to take courses and earn certificates in certain industries. Thanks to a grant program through the University of Arkansas at Hope, students are able to take career and technical education courses at no cost to the students. Every eighth grader completes a Student Success Plan, which looks at each student's strengths, weaknesses, college plans and career interests. The school counselor reviews the plan, and each year reviews transcripts, grades, student interests and their course request form to ensure each student is on track to complete their required 24 units for graduations, and to enroll them in the appropriate courses. The first priority in scheduling is to ensure graduation requirements are met, then courses are selected based on student interest/availability.

The staff recognizes that low-income students in general have tremendous academic gaps. Given the high number of low-income students in Lafayette County, the school is committed to the fact that those gaps must be addressed during the school day. They have set the foundation to show students that the staff cares about them, and their success in the classroom. While the school believes absolute academic performance is important, that to be successful, it takes a focus on the whole child – mental, physical and academic. The school follows the RTI model, and through the master schedule there are opportunities, particularly in math and science, for teachers to pull some students out for additional help. The school utilizes the data from the War Room during PLC time and early release Wednesdays to identify students that could benefit from additional help and determine how to best serve them. The school did offer summer school last year, in the form of a 15-day program, providing students the opportunity to make up one credit. While the school has tried to offer afterschool tutoring in the past, it is difficult to coordinate, especially without being able to provide transportation for students.

Regular assessment and progress monitoring are an important part of Lafayette County's student success. Lafayette County uses the ACT Aspire for interim assessments, which gives a good assessment of where students are at a given time, and if there might be a need to back up and review some previously covered content to get students to mastery. The staff evaluates all the information from the assessments and identifies ways to help students improve. For example, in an effort to focus on increasing literacy skills, every student completed a reading scholastic inventory test to determine reading levels, and students each had to read at least one book within their lexile range. The school made a friendly grade level reading competition, and in the following round of assessments, found that reading comprehension had increased. The high school has what is affectionately known as the "war room," which is the school's data center. The data center contains every student's assessment results. School staff regularly reviews the student-level data to monitor the number of students performing below the average marker, and to identify students that could use extra support. The school has seen a high level of growth among its special education students, and the special education teacher points to
use of data through regular assessment, identification of gaps or weaknesses, and targeted support in those specific areas, and establishing high expectations

The school's enrollment does not often include many EL students; During the 2019-20 school year, the school had one EL student. Whenever EL students are present in the school, the teacher who serves as EL Coordinator coordinates whatever support the students need.

Staffing and Professional Development

The teaching staff at Lafayette County High School is relatively stable, without high rates of teacher turnover. The school sees this minimal turnover as a big factor in its success. When the school does hire new staff, it has difficulty retaining staff from outside the region. Particularly for teachers newer to the profession, they may come seeking teaching experience, but the county make be lacking in amenities and other experiences, so they often move on to Texarkana or other districts after gaining initial teaching experience in Lafayette County. Through a Cadet program with the local university, the district is focusing on a "grow your own" approach to recruiting teacher candidates. They have seen success with the program so far and believe they will have better results in terms of retention through this program – as those individuals who currently live in the area, or are returning to the area, have ties to the community and are more likely to stay longer term.

The staffing configuration of the school includes a principal, assistant principal, and counselor, ten core teachers, elective teachers for music, PE, technology, business, agriculture CTE and gifted, and aides. This year, the business and art teacher were shared with the other district school, each were included in the above table at a 0.5 rate. The principal expects that next year only the art position might still be shared. The school also has instructional facilitators and special education staff. As a small school spanning six grade levels, many staff members hold multiple roles. For example, the AP also serves as athletic director, the guidance counselor also serves as the ESL coordinator, the library media specialist also serves as test coordinator; the PE teacher also serves as Health Assistant and football coach. Nearly every teacher in the school also serves as sponsor of a club or afterschool activity, and/or coaches a high school sport in some capacity, including the principal, who is also the E-sports sponsor. The involvement of most adults in the building in extracurricular activities contributes to the family feeling described by the staff and contributes to relationship-building between students and staff in the building.

The Lafayette County School District this year received a flexible schedule waiver, which is utilized for districtwide professional learning communities (PLC) on Wednesday afternoons. Lafayette County High School has been implementing Solution Tree's PLC model and sent a team to the PLC Summit. The PLC model is set up to ensure success of the PLC is not dependent on any specific individuals being present. Every core subject, including CTE and special education, is represented through PLCs. The school's Guiding Coalition content leads facilitate the content area PLCs. During the summer prior to this school year, the school conducted a training with a university partner focused on engagement, which staff described as a pivotal professional development opportunity. The training was for teachers only – the principal was not in attendance – and the school's teachers defined what engagement should look like from the teacher and student perspective. This opportunity resulted in buy-in across the teaching staff around shared expectations for teacher and student engagement. The principal noted that they value

the partnerships with universities, as they provide a number of professional development sessions for the school and include opportunities for reflection and growth among the staff.

Student Support Services

In addition to instructional resources, the school also provides social-emotional to Lafayette County High School students. Lafayette County High School's counselor provides the typical guidance and counseling services of any high school. In recent years, with the implementation of the Arkansas G.U.I.D.E. for Life program, a need for additional counseling opportunities for some students was identified. Utilizing supports provided by the program, the counselor is able to conduct small group sessions with students, with parental approval. The school also partners with Therapeutic Family Services, whose therapists come on campus to meet with students in need of therapy individually during the school day. Referrals to Therapeutic Family Services also require parental consent, and costs are not borne by the school – most are billed to Medicaid, otherwise costs are billed to private insurance. The school also partners with local rehabilitation facilities and provides referrals for a small number of students with higher need; again, any costs associated with those services would be billed to Medicaid or insurance as appropriate.

Case Study School Summary: Lakeside High School Background

Lakeside High School is a school 257 students, grades 9-12, in Lakeside School District (Chicot) in Southeast Arkansas, near the Mississippi and Louisiana borders. A small community of less than 3,000 residents, it is largely a farming community. The hospital, school

Lakeside High School Demographics (19/20)					
Enrollment 257					
FRL % 78%					
English Learner % 6%					
Special Education % 13%					

districts and one factory are the largest non-farming employers. Nearly fifteen years ago neighboring Eudora School District was annexed into the Lakeside School District. The school is experiencing declining enrollment, while the last several years enrollment has been around 260 students, as recently as 2013-14 the school's enrollment was 319 students, with a decline in enrollment nearly every year since. School administrators expect this trend will continue, as families leave this more rural area to find job opportunities elsewhere.

The school has 78 percent of students being FRL eligible, a higher-than-average rate that has remained steady even with the school's declining enrollment. Approximately six percent of students are EL and 13 percent are in special education. The school' does not struggle with high mobility during the school year. Seventy-three percent of students are Black, 13 percent are Latino, and the 13 percent of students are White.

Average class sizes vary across the grade levels, with 20-23 students per ninth grade class and 15-17 students per class in twelfth grade. The school's graduation rate is 94.2 percent.

School Culture and Leadership

Lakeside High School is led by a confident school leader with a clear vision. The principal strongly values teacher and student voice, and that inclusion is evident in formal school structures, namely the school's leadership team comprised of staff members across the school, and the Principal's Advisory Committee,

where the principal meets with students periodically at lunch to hear directly from students on issues that impact them. As a small school, it is clear that school staff deeply values the importance of relationships – both among adults in the building and between adults and students. Leadership and staff alike declared that the students in the school are "our" students, that they know and care about all students. Further, teachers in the school know and trust each other, and each has the best interest of the students at heart. Most of the school's staff lives in the community, the school staff generally knows the students' families and have a deeper understanding of issues outside the school that may impact performance in school. This insight into out of school factors helps the school's staff provide additional support as needed to students during the school day. Teachers reported feeling highly valued and feel their input is valued. Ultimately, they understand the final decision is the principal's decision, but believe their input is heard and considered.

Instruction, Intervention, and Assessment/Data Use

The day includes eight instructional periods and a lunch period. The school is physically located on a shared campus with the elementary and middle school; the middle and high school operate on a synched schedule. The schedule is developed so departmental teams have common planning time, whenever possible. Several positions are shared among the schools, since the school buildings are on a shared site, it's relatively easy to facilitate transitions for those teachers.

The school has a varied high school curriculum, offering programs of study for college- and career-bound students. The teaching staff at Lakeside High School have worked to create commonalities across courses, and jointly decide if there are specific areas of focus each teacher should bring to their classroom. For example, one year they saw that students were struggling with paraphrasing, so they focused on identifying main idea through the work of each class. The school believes strongly in bell-to-bell teaching and utilizes "bell ringers" at the start of periods for strengthening skills. Doing these exercises every day adds up and helps better prepare students.

All teachers follow the Arkansas standards in their content areas, but the school has a focus on crosscurricular instruction and keeping content relevant. Teachers accomplish this relevancy by incorporating "real world" implications in the classroom. Additionally, the high school believes for students to be prepared for college and careers, it's essential to teach soft skills – things like making eye contact, working collaboratively with others, etc. In addition to the courses offered through in person teachers, the school makes use of the Virtual Arkansas courses to enable their students to take courses the school is unable to offer.

Regular assessment and progress monitoring are an integral part Lakeside's educational approach. The school utilizes the ACT Aspire in 9 and 10th grades, three times a year for interim assessment and then fourth time for summative assessment. All 11th graders take the ACT. Additionally, the school utilizes STAR for reading program assessment and certification assessments are offered for students in CTE courses. Fetterman Associates, an outside agency the school contracts with, provides assistance to teachers in evaluating the data and determining appropriate follow-up areas of focus based on the data. This can range from providing embedded professional development to teachers to providing direct support to students through boot camps, or targeted workshops addressing areas of weakness

identified in the data. The school's data room serves as the meeting for teams of teachers to review data with data specialists, identify and address any concerns. Lakeside also believes it is important to include students in the review and understanding of their own data. Periodically, students review their own data, and during weekly mentoring in small groups will review their performance, discuss goals, and determine areas of focus. Every Wednesday, the school has a 22-minute period, the Power Hour. In this, a few minutes are reduced from each other class during the day. During the Power Hour, mentors go over the data – including current grades and assignments – with each individual student, give help or refer to help in areas they are struggling.

Struggling students are identified to participate in boot camps to focus intently on areas of weakness. For any ELs that are struggling, the school makes sure to have someone in class with them to provide additional assistance throughout the day. The school also focuses on student athletes and provides targeted help to athletes who are struggling academically. The school offers summer school for credit recovery purposes, to help students stay on track for graduation. Credit recovery is also offered afterschool, and occasionally during the school day. The pull-out boot camp instruction is provided with the assistance of the consulting group. Teachers identify the students who should receive support, and consultants work with students to address areas of weaknesses on the ACT Aspire. Outside of school hours, teachers will sometimes host study sessions in neighboring towns to provide assistance in a more relaxed atmosphere.

Staffing and Professional Development

When asked how the school produced its student performance results, the first thing the principal highlighted was the fantastic teachers employed in the school, and everyone's willingness to embrace the students as their own and work to provide supports so each student has the opportunity to succeed.

Lakeside High is led by a principal and dean of students. There are 12 core teachers and 8 elective teachers who teach business, art, band, music, agricultural, family and consumer science courses. The school's three aides (paraprofessionals) have specific duties - one assigned to In School Suspension, while the other two are primarily Virtual Arkansas Facilitators. The school runs an Alternative Learning Environment (ALE) program, which includes four teachers, although not all are fully dedicated to ALE, i.e., some also teacher traditional courses.

The school makes extensive use of the Virtual Arkansas platform, to provide students with educational opportunities and courses it otherwise would not be able to offer students, due to size. The school also participates in concurrent enrollment and career and technical education opportunities. Concurrent enrollment courses are provided through Arkansas Technical University and the school district pays all fees, so there is no out of pocket cost to students. The school's counselor and teachers work to identify students who are good candidates for concurrent enrollment and set up meetings with students and parents to explain the benefit of concurrent enrollment and assist with the process. CTE are offered at a nearby college campus; currently these opportunities (12 slots for medical program and 12 slots of automotive program) are provided to seniors, as they have the flexibility in their schedules to take the courses. Students are bussed from the high school to the technical school and back.

All teachers must complete their required 60 hours of professional development. Lakeside has four student release days that are spread throughout the school year and used for professional development. The school generally also uses its faculty meetings – in whole or part – for professional development. Topics to be covered are chosen based on the needs of the school, with teacher input through both the school's leadership team and through a survey of staff. Many opportunities are led by whomever in the school has the expertise in a given area, and the school looks to the state department of education for guidance on any required topics. The school does bring in outside people for professional development as need. This group has included the Fetterman and Associates consulting group, the AR State Education Association, or others. Topics of professional development this year have included 504 plans; Technology; Science of Reading (multiple sessions); active shooter; suicide awareness; Code of ethics (annually); Google Classroom (that really helped with the pandemic this year); classroom management; and confidentiality. Finally, the school's departmental groups are very strong. The principal schedules common planning time in core content areas to allow the teams additional time to work collaboratively and consult with each other.

Student Support Services

In addition to instructional resources, the school also provides social-emotional support through its guidance counselor and through the culture of the school, where students know the teachers in the building all care about them and their success. Students feel comfortable with teachers and will reach out to them with issues, as they know teachers will look to support them.

A health clinic is also housed on the school campus; it is funded outside of the school budget. School staff believe having the clinic onsite has helped with attendance. Students who are feeling ill can come in and be seen by the clinic staff. Likewise, if students have a health issue arise during the school day, rather than being immediately sent home, they are sent to the clinic to be evaluated. Often the clinic medical staff can address the issue and then students are able to return to class. In addition, a certified therapist is on campus and students are able to get the help they need from the therapist during the school day.

Case Study School Summary: Lamar Elementary School

Background

At the time of the interview, Lamar Elementary School was a K-3 school of 395 students in Northwest Arkansas.² The school is a part of Lamar School District which has roughly 1,300 students in three schools. The school community is close knit, with a collaborative

Lamar Elementary School Demographics (19/20)					
Enrollment 395					
FRL %	72%				
English Learner %	3%				
Special Education % 16%					

staff and a data-driven approach to instruction and addressing student skill gaps. The community is also very involved in the school with parents always willing to come in and help.

² As of 2020/21, the district has reconfigured its school grade bands and buildings, so the elementary school shifted to serving K-5 and increased its enrollment to over 600 students (20/21).

Seventy-two percent of students are FRL eligible, with 3 percent of students being English Learners and 16 percent qualifying for special education. Class sizes average between 20-22 students.

School Leadership and Culture

School leadership and teachers describe their school as a place where people want to be and that they are like a family. Everyone is working hard toward a common goal, and while they take their jobs seriously, they still like to have fun and "don't sweat the small stuff." The administration is very involved and visible, from the school administrators doing drop off time every morning and the superintendent being highly seen by students and staff. Teachers also reported having autonomy over their classrooms as leadership trusts that they know what is best for their students. Additionally, teachers are involved in decision making by voicing their opinion, then decisions are made by school leadership carefully considering everyone's feedback. There is minimal teacher turnover and teachers are very supportive of new teachers, both having an assigned mentor teacher and other teachers regularly checking in with new teachers about how they can help. It is a very supportive and collaborative culture.

Staff stressed that students love coming to school, love being together, and love learning together. Students feel like part of the family too. The school emphasizes character building, referred to as the "Warrior Way." Each week staff focus on particular area (each letter represents a character trait) and align class guidance to it, with staff nominating star students and celebrating positive behavior and successes. Staff also said there is good communication with parents to incorporate them into the school community.

Instruction, Intervention, and Assessment/Data Use

Lamar Elementary School emphasizes data-driven instruction and relies on routinely reviewing data and intervening from there. This includes identifying not just student knowledge gaps but skills gaps, then concentrating their efforts and targeting professional development in these areas. Adding interim assessments really helped them identify deficits and teach to them. Leadership described this shift as when the schools' scores really took off. For example, when they looked at their scores and found that only half their students were on track in kindergarten, they focused in this area and now have 100 percent of kindergarteners on track and closing the achievement gaps that they came to school with. Instructional strategies include incorporating drills to address gaps, pairing students with similar gaps, and targeting specific skills for intervention. Paraprofessionals that work with students on interventions particularly noted how helpful it has been to have targeted data so they know exactly what they need to do to help students and can see the impact. Further, giving staff better tools to teach with helps them feel they are making a difference, and be more decisive and intentional in their practice. Their education cooperative has also been a valuable resource in understanding assessment data.

Lamar Elementary has a strong RTI system to support students identified through data as in need of intervention. First, the school's schedule is structured so content areas are staggered so instructional interventionists can work with all classes. All teachers also have blocks of time for Tier 2 interventions within classroom for 30 minutes a day. Tier 2 students are also pulled out for 30 minutes of intervention twice a week. For Tier 3, this increased to 5 times a week. Progress monitoring occurs every three weeks. The school also provides afterschool tutoring for Tier 2 and 3 students twice a week. Summer

school, including transportation, is provided and required for Tier 3 students. Overall, the school described an "all hands on deck" approach to leveraging all staff in their schools, including certified teachers and paraprofessionals, to help provide intervention to students.

The school does not have a high percentage of EL students but does have a district EL teacher who comes to the school twice a week to work with EL students. Leadership reports that teachers are exceptionally good at supporting these students within the regular classroom.

Staffing and Professional Development

In addition to its teaching and paraprofessional staff, Lamar Elementary has a principal, a library/ media specialist, and a counselor. As the district is relatively small, they employee a number of shared positions with the other two schools in the district, including for art, music, PE and gifted. The school's education services cooperative (ESC) also provides important support including a novice teacher program, professional development, and content specialists.

As previously described, there is minimal teacher turnover in the school and the staff is both experienced and highly collaborative. This collaboration is not just between teachers, but between all school staff, leadership, and education cooperative staff. Once a month there are grade level meetings with an ESC specialist and teachers reported feeling very comfortable reaching out to ESC staff whenever they had a question or needed support. Professional development is mostly during the summer through the ESC. Each teacher receives at least 60 hours of PD (10 days) and PD is related to individual teacher growth plans. Teachers set three goals within plan from personal reflection and then meet with administration to review. Teachers reported that the RISE training has been particularly helpful. Facilitators also help support teachers and are in every classroom at least once every 9 weeks.

Student Support Services

Lamar Elementary has a counselor on staff who regularly visits classrooms, convenes 2-3 small groups of students a week, and provides individual meetings twice a week for students that need targeted support, such as to address interpersonal relations, anger management, controlling/labeling emotions, emotional regulation and dealing with trauma. There are also counseling groups that come into school and the school refers students to outside counseling groups near them who will then come to the school to provide services. This can be challenging as parents have to be on board, a doctor's referral can be required, and it must either be billed to insurance, Medicaid or Arkansas Kids. The school does provide a list of mental health resources to parents as well. There is also a behavior specialist in their education services cooperative that provides support to the school. The school has set intentional targets related to student support, including decreasing behavior referrals and focusing on bullying awareness.

Case Study School Summary: LISA Academy North Middle-High School

Background

LISA Academy Middle-High School serves grades 6-12 and is a part of the LISA Academy charter school network in Little Rock (Central region of the state). In 2019-20 the school served 529 students. Assessment, demographic and other data is reported by the state for each school separately.

The student population includes a little under 30 percent White students, nearly 40 percent Black students, and a little over 20 percent Latino students. About 60 percent of students were eligible for FRL,

LISA Academy North Middle Demographics (19/20)				
Enrollment	294			
FRL %	62%			
English Learner %	9%			
Special Education %	12%			

LISA Academy North High Demographics (19/20)				
Enrollment	235			
FRL %	59%			
English Learner %	7%			
Special Education %	13%			

about 8 percent of students were EL, and 12 percent were in special education.

The school recently transitioned from a K-12 school to the 6-12 setting but still shares a campus with the lower grade school. The school expects to continue growing with the ability to hold around 700 students. All students chose to come to the school and no busing is provided, so families transport students to the school.

School Leadership and Culture

LISA Academy North is very diverse with students coming from many backgrounds. The mission of LISA Academy is to provide "an academically rigorous college preparatory program, in partnership with students, families, and the community, and guide all students in gaining knowledge, skills, and the attitude necessary to direct their lives, improve a diverse society, and excel in a changing world." The school ensures student and staff feel welcome regardless of background and the community is very supportive. Staff enjoy the small school setting and the collaborative approach needed to run the school. Almost everyone in the school is expected to be responsible for something outside of their primary role. This allows the staff to feel more connected and develop new skill sets.

The leadership team includes the principal, assistant principal for academics, dean of students, math and ELA leads, and the controller. The administration is very supportive and collaborative. Many of the administrators were teachers in the school before moving into their current roles, so they understand the job of the teachers. The school also has the support of the larger charter district with district level content experts and other support staff.

Instruction, Interventions and Assessment/Data Use

Academics are the school's first priority. The longer students stay with the school the better the do academically. In grades 6-10, the school provides 10 hours of instructional time in for both ELA and math each week. Seven of these hours are core teaching and with three of the hours for lab. Lab time provides both enrichment and opportunities for pullout for students to address specific skills gaps.

Tier 2 and Tier 3 interventions are provided within the classroom with Tier 3 delivered through intensive pullout interventions. Tier 2 is provided through small group instruction. All students are on the ALEKS program for math, which is leveled for each student. The program helps identify groups of students that are struggling in the same area. ALEKS is aligned to the school's curriculum.

ELA is broken up into reading, writing, and English with the labs also broken up into the three areas. The school uses Newsela which allows for differentiation and the development of background knowledge. Teachers are expected to be working in small groups and interventionists support the teacher.

LISA Academy North uses both the ACT Aspire and NWEA to track student progress. Teachers have individual conversation with students to about their progress. The data allows staff to identify specific interventions for students.

LISA Academy provides extended day with the first semester focused on what kids want to dig into. The second semester is more tailored for students that are struggling with specific areas. The school also has robust extension opportunities including STEM courses, advanced robotics, the science Olympiad, the STEM festival, and the schoolwide science fairs. These extensions are an important piece of the academic culture at the school.

Staffing and Professional Development

LISA Academy North has low staff turnover with the expectation that about 90 percent of staff will return in the coming year. The network has focused on providing a more competitive compensation system and now pays more than many schools in the region. LISA Academy North also feels they have a strong evaluation system that supports staff.

The school has collaboration time set every Friday for either departments or grade levels. These are supported by the subject coordinators in the building and additional support can come through district-wide coordinators. The school is working towards implementing a professional learning community model.

Broader professional development is in collaboration with the district. This begins with a back-to-school week that includes all faculty. There is team building and then focused meetings on content and teacher needs. The district surveys teachers twice a year to gauge needs. Each school also gets two school level professional development days. Beyond the back-to-school professional development, each teacher is provided 18 hours of personalized content with many gaining for more hours each year.

Student Support Services

LISA Academy North has a mental health counselor that can provide one-on-one counseling for students. In addition, the school has services available to students in conjunction with the University of Arkansas Medical school. These are generally billed through Medicaid.

Case Study School Summary: Mena Middle School

Background

Mena Middle School is a school of about 400 students serving grades six through eight in the Mena School District, in Southwest Arkansas. Approximately 20,000 people reside in the county, and Mena's population is around 5,000. Mena is a rural area, approximately 80

Mena Middle School Demographics (19/20)					
Enrollment 403					
FRL %	69%				
English Learner % 1%					
Special Education % 11%					

miles to the interstate. Several machining companies operate in town, and the area's largest employers are Walmart, the school system and the hospital. Mena is known as a retiree community, which can present challenges raising local funds for education, as a smaller proportion of residents has students in the school system. In the early 2000s, Mena consolidated with a smaller district to the south, and while consolidation brought an initial increase in student population, the district's student enrollment has been in fairly steady decline for the last several years. Mena School District's four campuses are adjacent to one another.

Approximately 70 percent of students were eligible for FRL. A very small percentage (usually around 1%) are English Learners. The school is approximately 90 percent White, seven percent of students are Latino, and just over one percent of students Black and Native American each. Student mobility can be a struggle at times, as families often come to Mena because they know people who live here, then find there is little opportunity for employment once they arrive and often end up moving out.

School Culture and Leadership

The school operates with a distributive leadership style- the principal tries to solicit input, get opinions from others before making decisions, especially in an area that he perceive as a strength. The core leadership team is the principal, the assistant principal, who handles student discipline, and the counselor, who serves as a liaison for teachers and students, to help give them a voice. As the middle school, Mena's leadership believes it's important to have strong connections to both the elementary and high school, which requires being aware of the leadership of the school's principals and ensuring there is vertical alignment so transitions for students are smooth as they move throughout the system.

A key component of the school's culture is the community. Teachers feel a great sense of pride and community within the school; the teachers love being together inside and out of school. As a small community, the students feel very connected to their teachers, as their teachers are also their neighbors. Teachers have the opportunity to build strong relationships with students outside of the school setting. Knowing families in town also provides insight into the lives of students — the teachers are aware of family struggles and are able to provide appropriate support to students within the school.

Instruction, Intervention, and Assessment/Data Use

The school day is comprised of seven instructional periods of 50 minutes each, a lunch period, and a 30minute Achieve period between first and second periods. The Achieve period is essentially a homeroom period, it gives students the opportunity to have more time to get their work done and to consult with teachers. The school has been trying to incorporate more social-emotional elements into the Achieve block, but it's a difficult balance, as the school tries to create as much time to get support from teachers during the school day as possible. The school follows a typical middle school curriculum, with core subjects in English, mathematics, science and social studies. The school utilizes Eureka Math as its primary math curriculum, and this year the literacy department used IXL more frequently this year. A number of electives are available for students to participate in, including band, art, business. Teachers at Mena collaborate and sometimes team teach across content areas, to provide more engaging content for students.

A unique feature of Mena Middle School's schedule is its use of Flex Fridays. Flex Fridays are flexible schedule days, where if students are missing assignments or otherwise behind in an area, they report to the teacher(s) to complete the missing work or to receive additional support (RTI or other direct instructional support) in specific areas. For students who have completed all assignments and are on track with coursework, they have choices of where to go and what to work on during Flex Fridays. Some might choose to go to their electives teacher's room to work on a project, others may choose to work on virtual courses or get ahead on classwork. The students enjoy Fridays and work hard during the week to ensure they get to choose what to do on Flex Fridays, rather than being directed to go to a certain teacher's class to catch up on work. Teachers are able to use Flex Friday to provide targeted support to students who need it.

Another key highlight of Mena's approach is the Zeros Aren't Permitted (ZAP) program. Mena adapted programs from other schools to one that works for their school – the program is intended to increase expectations for academic completion and performance. The program provides students an opportunity for a second chance to turn in missing work, and receive up to 80% credit, rather than a zero. When students do not turn in assignments on time, teachers enter that information into a google form. Students are then referred to a supervised ZAP period, during which they complete the work missed. ZAP periods can be during study halls or electives and encourage students to complete their work.

Regular assessment and progress monitoring are a key part of Mena Middle School's strategy. The school utilizes the ACT Aspire exams. Additionally, teachers utilize STAR assessments in reading and math and the Renaissance program to identify areas of focus. The school is equipped with chromebooks, which is especially helpful for diagnostic testing. The school changed the timing of their parent teacher conferences, so that rather than occurring toward the end of the grading period, they occur at the midpoint of the grading period. By doing so, teachers are able to share all relevant data with parents, evaluate student progress, and jointly establish goals for the remainder of the term. This shift enabled the school to better partner with parents on their children's education and happens early enough in the grading cycle that there is sufficient time for students to improve their grades.

Mena Middle School utilizes a strong RTI process. Teachers and the school counselor work together to identify students requiring extra support. The Achieve period is often utilized to group students for RTI intervention. In this, teachers will group students based on particular skills they were struggling to master. Mena teachers have seen real improvement in closing gaps and acquisition of skills by utilizing that 25-minute period to work in small groups. The school is focused on using every minute of the school day to address student needs, due to transportation limits, many students are unable to stay

afterschool for tutoring or additional help. The school does offer before- and after-school tutoring two days per week, which is open to all students. Further, due to the rural nature of the area, many areas have limited or no internet connectivity, so teachers are aware that student may not have the access needed to complete online assignments outside of school hours. The school provides an Alternative Education Program for students that need additional support.

The school has a very low English Learner population. One staff member in the building is responsible for supports for EL students. Most English Learner students in the district were identified in kindergarten or early elementary school, so have fairly high language skills by middle school and require only modest support.

Staffing and Professional Development

The principal noted that for most teachers, middle school is the "you love it or you hate it" grade span, and the principal is proud to have a staff that loves it. Much of the school's teaching staff is from the area, and number of staff attended Mena schools themselves. The focus of the staff is to help students understand that middle school is a time of transition, they aim to help students explore the nature of becoming young adults –through opportunities, choices, and responsibilities – to help prepare them to be ready for high school. Mena Middle School shares some staff members with other schools: eight staff members also spend some of their day at the high school, and four staff members are shared with the grade 3-5 school.

The staffing configuration of the school shows that that the school has about 14 core teachers and about 13 elective teachers to provide instruction in subjects including art, music, physical education, health, business and technology. The school also has two paraprofessionals throughout the school serving all students, and an additional three paraprofessionals dedicated to serving special education students. It's important to note that eleven staff members – teacher and paraprofessionals – are shared among campuses in the district. These staff members split time with the middles school, high school and/or elementary school. The school's administrative team is comprised of the principal, an assistant principal, and the school counselor.

The school is currently in a transition phase with its professional development approach. Traditionally, PD occurs for several days prior to the start of the school year, along with some district professional development days, and building-level professional development, most often led by administrators or counseling staff. The school would sometimes utilize trainings offered through the local education services cooperative, and offer opportunities for department/content based professional development. This summer, the school is transitioning to having all professional development embedded in the calendar. Professional development will occur on 4-5 different days throughout the year, on nonstudent contact days. The school is beginning with workshops on the art and science of teaching.

Teacher planning and collaboration time is valued at Mena Middle, with each teach having one 50minute planning period per day. Whenever possible, the tested content areas have a common planning period, allowing those departments to work collaboratively as needed.

Student Support Services

Mena Middle School believes social-emotional (SEL) support is an important facet of the school day. SEL support services are primarily provided through the school counselor and a behavior specialist. The behavior specialist spends most time with higher need students. Currently, services to sixth graders are generally pull-out, meeting in a space outside the classroom. The seventh-grade family and consumer science course, which all students have for one semester, focuses heavily on SEL. In 8th grade, more time is spent on career development and exploration.

As mentioned previously, some social-emotional support is provided during the Achieve period and the school is currently exploring whole child models to integrate into the school day, as Mena sees SEL as an area of potential growth to better address whole child needs. A SEL committee, made up of the counselor and a couple teachers, is working to make SEL more intentional this year and exploring potential models. As with the ZAP program, school leadership believes it's vital to take the time to explore the options and make sure whatever program is implemented is not implemented in an off-the-shelf fashion, rather that it is designed and customized to the unique needs of the school's population.

Case Study School Summary: Oscar Hamilton Elementary School

Background

Oscar Hamilton Elementary School is a school of 261 students, in kindergarten through sixth grade, in the Forman School District. Located in Southwest Arkansas, the town of Foreman is near the Oklahoma

Oscar Hamilton Elementary School Demographics (19/20)				
Enrollment	261			
FRL %	74%			
English Learner %	4%			
Special Education %	16%			

and Texas borders. Foreman is a small town of approximately 1,000 residents; the school serves Foreman and students from surrounding towns. The local cement plant is the only major industry in the community and many residents work in Texarkana or neighboring towns, primarily in paper mills, chicken farms or the logging industry.

Seventy-four percent of students are FRL. Approximately four percent of students are ELs, which is a significant increase from ten years ago, when the school had no or very few ELs. Many of the school's EL students come from families who come to work in the cement plant, which was built about 10 years ago. The school's special education population have increased rather consistently year to year, and currently is around 13.5 percent.

Approximately seventy percent of students are White, 15 percent are Black, and nine percent are Latino. The school's enrollment is somewhat steady, while some families move and in out, overall, the school does not struggle with high mobility during the school year. The school boasts a 95 percent attendance rate. Average class sizes vary across the grade levels but tend to fall in the range of 15 to 20 students per class. The school was designated a 2019 "Beating the Odds" school by the University of Arkansas, Office of Education Policy in Math, ELA and Overall.

School Leadership and Culture

Oscar Hamilton Elementary is a school where students feel safe and welcome. A benefit of being in a small community is that school staff know the parents and extended families of students at the school, and there is a belief that the community and school are working together toward a common goal. Oscar Hamilton staff believe the key to the school's success is its belief in high-expectations and excellence for learning – for both students and teachers – but believe it is critical to build relationships and rapport with students first, before holding them accountable to the expectations.

Oscar Hamilton's administrative team strongly believes that their teachers are the number one resource that impacts student success. The principal is well respected and highly regarded by staff in the building. Teachers have autonomy within their classrooms – they have the freedom to teach as they believe best suits student needs, while knowing that the principal is supportive and a great sounding board to work collaboratively with to problem solve as needed. The school utilizes a growth mindset and is constantly seeking to improve instruction and practice for student success. This growth mindset extends beyond the staff and includes regular celebrations of student growth such as extra recess, popsicle parties, recognition on the wall, and receiving charms from the principal for meeting learning goals.

Instruction, Intervention, and Assessment/Data Use

A key feature of Oscar Hamilton's schedule is a daily morning RTI period, where students receive instruction in small groups based upon analysis of student-level data. Students are organized for instruction differently, based upon grade level. Students in kindergarten through second grade are in self-contained classrooms with their designated teacher. The school is departmentalized in grades three through six, where students see different teachers in different content areas, with 90-minute blocks for literacy and math. In the upper elementary grades, student data is used to determine class placements to ensure an appropriate mix of students so teachers are able to focus on the needs of students and differentiate instruction appropriately.

Oscar Hamilton teachers know and teach to the state standards – those serve as the foundation – and teachers build on them with curricular and other resources. School administration and teachers believe that more important than the specific curriculum offered, the key to Oscar Hamilton's success is its belief in high-expectations and excellence for learning – for both students and teachers. Several computer-based programs are used at the school, including IXL, DIBELS, Moby Max and Study Island. Oscar Hamilton has adopted the Wonders reading curriculum, Eureka Math and Pearson Interactive Science program. Additionally, the school places a high value on phonics, and uses the Phonics First program to build phonemic awareness. It also utilizes the Haggerty and Science of Reading programs, and the Sunday program especially for its dyslexic and EL students.

Regular assessment and progress monitoring are an integral part of Oscar Hamilton's approach to student achievement. When asked how teachers use data to inform instruction, the response was, "How do we not use data?" Teachers follow an approach of progress monitor; reteach; progress monitor. They also create individual plans to better track student growth and need areas. Teachers noted that it is a difficult process, but worth it to achieve student growth and success. For assessments, Oscar Hamilton uses the NWEA Maps K-2 assessments three times per year and the ACT Aspire interim and

summative assessments. It also utilizes the DIBELS assessment, which was noted to be especially helpful for developing RTI student groups. A school-wide improvement plan goal to increase reading scores last year provided a clear focus on using available data to inform instruction and educational strategies. Teachers regularly review data and collaboratively decide which students need interventions, how to best group students, and when to move students in and out of various groups. A shared leadership system exists among all teachers for evaluating student data, and following each administration of the interim assessments, the school has a "data day" where all teachers discuss the data, which drives the school's RTI process. Teachers also look at their students' data during weekly collaboration time.

Oscar Hamilton has a strong RTI process in place, with daily dedicated RTI sessions, during the first period of the school day. Students who have been identified for RTI meet in small groups with certified teachers to work on whatever skills they may need additional work on. Students not requiring RTI are able to receive assistance with their work from the activity/elective teachers and aides. The RTI grouping are very fluid, students are monitored and can move in and out of RTI groups throughout the school year. English Learners typically stay with their classes most of the day; the school prefers to push-in additional supports to EL, rather than pulling them out of class. For those EL students that require additional supports, they will take them out of class 3 times per week for 30 minutes, and typically use the Sunday program for additional language acquisition opportunities.

Staffing and Professional Development

As previously noted, Oscar Hamilton highly values its staff. Teacher turnover at the school is low; occasionally teachers will leave for a Texas district just over the border, but they often seek to return. The majority of the staff is full time at Oscar Hamilton; three positions are shared with the high school: art, physical education, and one special education teacher. Every grade level has a common planning period, and in the departmentalized upper elementary grades, content-area teachers have a common planning time at least once per month. Professional learning communities meet weekly.

Professional development topics are based on the school's needs assessment, teacher growth plans and the district growth plan. Oscar Hamilton sees its own teachers as experts and will often use its own teachers for professional development sessions, to share their areas of strength and expertise with others in the school. The school will often utilize their education services cooperative to provide professional development on specific topics of interest to the staff. Three professional development topics the staff pointed to as particularly helpful for improving student learning were on formative assessment and the importance of using it daily to improve instruction; the RISE training; and a study on the growth mindset, which had a big impact on how teachers approached students and their learning.

Student Support Services

In addition to instructional resources, the school also provides social-emotional support through counselors and character education. Beyond the school's intentional efforts to create a positive culture and build relationships between school staff and students, additional student support services are available at Oscar Hamilton. The school's full-time counselor is available to anyone in the school community (students, parents, teachers and school staff). A mental health counselor also comes to the

school three days per week. Students can be referred for counseling services, however they are provided outside of the school budget, so services must be billed to Medicaid or to private insurance. School staff believes these additional support services are helping students be successful in the classroom.

Case Study School Summary: Paragould Junior High School Background

Paragould Junior High School is a school of about 485 students in 7th and 8th grade in Paragould School District in the older area of Paragould. The school is located eleven miles from the Missouri boarder and 70 miles from the Tennessee boarder (Northeast region of the state). Paragould

Paragould Junior High Demographics					
Enrollment 485					
FRL %	71%				
English Learner % 6%					
Special Education % 16%					

is a large manufacturing town where majority of the student's families work in the factories. Most of the families are not your traditional two-parent families. Students will live with grandparents, older siblings, or with one parent. Additionally, many families rent and move quite often leading to a higher rate of student mobility.

Seventy-one percent of students are FRL, 6 percent are EL, and 68 percent are special education students. Eighty-one percent of students are White, 6 percent are Black, and 6 percent are Latino. The demographics of the school has changed over the years. The school used to mainly be Latino students making up the EL population, now the school is seeing an increase in Middle Eastern students. Additionally, the school is seeing an increase in Black students. The school has a 93 percent attendance rate. Average class sizes in the school are about 17 students.

School Culture and Leadership

The administrators and teachers work as a team. The administrators trust the staff and hold them accountable. The principal believes the key to success is to hire qualified and caring teachers. Every teacher in the school goes above and beyond. The school has four leadership committees that will have multiple meetings throughout the year to address school climate, curriculum, safety, and parent engagement. There are six to eight teachers on each committee as well as certified and classified staff.

The school also believes in holding students accountable. Paragould Junior High has a schoolwide discipline plan that has led to more instructional time by decreasing the number of office referrals, suspensions, and providing a safe and orderly learning environment. There are four schoolwide rules:

- 1. Be on time and be prepared for class.
- 2. Keep hands, feet, and objects to yourself.
- 3. Follow directions the first time they are given.
- 4. Be respectful to yourself, your classmates, and your teacher at all times.

Additionally, the school has a rewards system where if a student only receives one detention and no office referrals in nine weeks the student gets an event such as dodgeball, karaoke, or pizza party.

Staff intentionally work to create a feeling of trust with their students and to develop meaningful relationships with them. This provides a safe place for students to share any issues they experience

outside of the school walls and to get needed support. The staff also works closely with parents to make sure students are receiving the resources they need.

Instruction, Interventions and Assessment/Data Use

Paragould has a number of different instructional approaches and interventions to meet the different needs of its students. Schoolwide, a Zeros Aren't Permitted (ZAP) program is employed. If a child does not turn in their homework for the first time, they can turn it in the next day. If a child does not turn in their homework for the second time, they go to lunch detention where they work on their homework and cannot use their cellphone. Staff believe that this program has really enhanced the students grades and understanding of fundamental skills.

The school started has also started a reading lab class for students that are at the 5th and 6th grade reading level. A classified staff member will read a novel with comprehensive questions and work through solving them with the students.

Imagine Math and USA test prep are used to help students who need remediation in certain areas. There are after school and lunch tutoring offered to students. Students can attend an hour after school two days a week or attend lunch tutoring during the school day. Additionally, parent involvement is very important. The school will reach out to parents if the students is struggling to schedule an in-person meeting.

For special education students, the school provides a resource room with three teachers and one selfcontained teachers. The resource teachers use Imagine Learning for levels K-6 and have found it helpful because it gives the students a feeling of success and a desire to keep learning.

Regular assessment and progress monitoring are also an integral part of Paragould Junior High. The teachers and leadership team look at ACT Aspire scores for focused remediation. Remediation is usually provided during first period. Additionally, the school uses Edulastics for common assessments in English and math four times a year to identify areas of weakness and improvement. Aspire data is used for science data. The data is also used to update the pacing guide and allows the school to see where students are struggling.

Staffing and Professional Development

Teachers work in subject-level teams and each subject-level has a planning period. Each day the teams have the option to meet for 50 minutes to discuss curriculum and student achievement. The content teams are not required to meet because the school relies heavily on PLC teams instead of content teams. The PLC teams meet a few times a week to look at data and see the percent of students that are meeting benchmarks. Districtwide the junior high school has the lowest turnover. The area with the highest turnover is special education and the school similar to its counterparts in Arkansas has a hard time recruiting special education teachers.

Paragould Junior High School provides a variety of avenues for its staff to receive professional development. The staff receives 24 hours over the summer and 12 throughout the school year. A portion of those hours are from the state. The state requires so many hours in cores content areas, for

those hours the school will use their education services cooperative or the state. The additional hours the teachers can chose amongst a group of topics. The school first asks the district if it will cover the cost of the selected PD opportunity, otherwise the school uses will use discretionary funds from its budget.

Case Study School Summary: Riverview High School

Background

Riverview High School is a 9-12 school of 375 students located in the town of Searcy, Arkansas in the Northeast region of the state. While the high school is in the town of Searcy, is not in Searcy School District. Instead, the high school is a part of Riverview School

Riverview High School Demographics (19/20)						
Enrollment 375						
FRL %	69%					
English Learner %	10%					
Special Education %	10%					

District, which is a consolidated district of about 1,200 students covering 1,900 square miles. About 10 percent of students do not live in the district. Compared to the town, many of the communities that the school supports have few businesses or industries.

Riverview High School is diverse school for the area with a growing Latino population. In 2019/20, 68 percent of students were white, 16 percent were Latino, 10 percent were Black, and 6 percent were two or more races. Nearly 70 percent of students were FRL and 10 percent were EL students. Ten percent of students received special education services.

Average class sizes are about 25 students.

School Leadership and Culture

School leadership described their work to shift the school culture to becoming a student-centric school and indicated that it is an ongoing process that they are still engaged in. Being student- centric means making every decision about what is best for students. Leadership said teachers are really good at reaching out to the kids, parents, and leaders of the district. Leadership strongly believes in equity for all students and that all students can learn and be successful. The school has experienced challenges with turnover at the district level, with four different superintendents in 8 years, and a fifth superintendent coming on during the summer of 2020. While there is low volunteer support, there is a lot of support for athletics and clubs in the community. The school also has community partnerships with the local food bank, churches and a university to provide meals and resources to students.

Instruction, Intervention, and Assessment/Data Use

The high school used to be structured to offer a full eight- period day every day but has moved to a modified flex schedule with eight periods three days a week, then two days of the week having only five periods. This allows time for built in remediation. Further, the school tries to ensure that a student can take everything they want to take, which is very difficult in a small school. AP and concurrent enrollment can be particularly challenging to offer. However, the school allows all students to AP/honors courses so that students can challenge themselves.

The school has started using NWEA MAP three times a year in core subjects grades 9-11 and are working on how best to leverage this data. Staff utilize a data wall with MAP results for each student, then meet

every nine weeks on student performance, attendance, and goals. The staff then use this data to identify instructional gaps to address. For example, after reviewing their data staff found that students tended to have lower reading achievement, so they embedded literacy across all classes and every department now has a common literacy assessment.

Leadership emphasizes that poverty is not an excuse for poor student performance, but there are realities to poverty that must be addressed first for students to be successful. This includes addressing their physical and emotional needs, such as through their second chance breakfast program, providing mental health therapy on campus, and providing one-to-one technology that they can take home. The school also focuses on teaching life skills and self-sufficiency. Additional support is offered outside of the school day through a 21st century after school tutoring program which provides academic support, food, and transportation home. There is also credit recovery summer school for students that need it.

To serve English Learners, the school has an ESL teacher to support higher need (Levels 1 and 2 on the ACCESS assessment) ELs through pullout intervention. There is also an ESL paraprofessional who helps during remediation time and 21st century after school tutoring. Staff believe that strength in home language makes for better ESL learning, so they have books in home languages.

Staffing and Professional Development

The junior high school is connected to the high school, so there are a number of shared staff positions. Coaches, in particular, are often shared. Staff at the school are fully certified with an average of seven years of teaching experience. There are over 30 certified staff members at the high school, with an average of about 5 teachers leaving a year, mostly due to retirement.

The school started PLCs three years ago with PLC teams meeting once a week. Teachers are grouped by grade level cores with common planning time so they can talk about the same group of students. Fine arts staff are also grouped together, and CTE staff are grouped together for PLCs. Once a month, cross-grade core content areas also meet together. Teachers receive other PD during the summer (a total of 10 days), with about half of PD used to address state requirements. About 1-2 days are led by school staff and the rest are through the district and state. Often at least half a day of school-led PD is just building culture.

Student Support Services

Riverview School District has an RN for the district, who is housed at the high school. There are two counselors specifically for the high school, with the 11th-12th grade counselor focusing on college and career preparation, and the 9th-10th dealing more and more with student mental health. The school has identified and uses a specific social emotional curriculum developed by another state. Leadership said they might turn back to outside agencies to provide mental health support, but the issue has been that those outside agencies will not serve students who cannot pay so students who do not have Medicaid are left out of receiving services. In the 2019/20 school year, the school was able to provide service to 12-15 students, compared to the 20-40 students that received support in the prior year. The school is exploring telehealth options.

Case Study School Summary: Theodore Jones Elementary School

Background

Theodore Jones Elementary School is a kindergarten through fourth grade school in the Conway School District in the Central region of the state. The school is predominately minority with 35 percent Black, and 12 percent Latino, and 46

Theodore Jones Elementary Demographics (19/20)				
Enrollment	461			
FRL %	68%			
English Learner %	8%			
Special Education %	16%			

percent White students. Sixty-eight percent of students are eligible for FRL, while 8 percent are EL, and 16 percent are special education students.

The school serves students from the largest geographic area in the district. Theodore Jones students come from a large geographic footprint with families working in multiple industries including at the University of Central Arkansas (UCA). The school has a very transient population with shifts in enrollment by grade happening frequently. Recently, the school lost two full classrooms of students between kindergarten and first grade. The school is also seeing growth in its EL population over the last decade with most EL students coming from the Hispanic community.

School Culture and Leadership

The school leadership and staff ensure that all students are known. Families are often multi-generational with parents and even grandparents having gone to the school. Knowing students includes not only what they need to learn, but *how* they learn. Days start with community circles to allow for a check in with each student. Teachers are always collaborating on the best ways to help students. Teachers reach out to one another when faced with a challenge, including reaching across grade levels.

The leadership team includes the principal, assistant principal, and two instructional coaches. This team sets the tone to make things fun in the school including dance party Fridays, popcorn, and cotton candy. They celebrate staff in a number of ways including the Marigold Teacher of the Month, which is presented publicly every month. Leadership understands that relationships are the number one priority in the school, and they facilitate this in any way possible.

In addition to the leadership team, there is a building advisory committee which includes a representative from each grade level. This group helps with the yearly planning for the school.

Instruction, Interventions and Assessment/Data Use

The school prioritizes class creation as part of ensuring success with students. This process begins with class list day where teachers collaborate to set each classroom roster. Current teachers help to build these class lists which allows them to front load information on each student for the upcoming teacher. Classrooms are then created in a balanced manner considering gender, skill levels, and learning styles.

Every classroom has Tier 2 interventions within its regular schedule. All teaching staff are part of working with these small groups including specials teachers. There is even a group of dads, the Watch Dog Dads, who come in and work with students in the lower grades some years. The goal is to pull a small group of students with a similar skill gap. Groups are very flexible with students moving between

groups as the data shows progress on a skill. The school has embraced the state's RISE work and is ahead of the curve with the program. The RISE work was implemented a year early and has changed how the school does small groups.

The school uses NWEA, DIBELS, ACT Aspire, and Acadience for assessment data. Interim assessments are given twice a year for K-4. Progress monitoring is done every two weeks utilizing DIBELS and classroom assessments. Tier 2 intervention groups are guided by the data produced through the assessment system, allowing for the movement in and out of groups.

Theodore Jones provides additional interventions for struggling and EL students. The school has both before and after school programming for students identified as needing additional help. Students are matched with teachers to work on skill development. Since many students arrive early for breakfast this time is used for intervention, with other students served before buses arrive in the afternoon. About 30-35 percent of students participate in the additional programming.

Theodore Jones pushes support into classroom for new EL students to ensure they are comfortable in the classroom. The school uses methods that will be advantageous to all students, with a focus on oral language. This is part of the morning circle for each classroom. The school also tries to ensure EL students are grouped with a bilingual student so they have someone to help them in their native language in the classroom.

Staffing and Professional Development

Theodore Jones has low teacher turnover and shares a few staff positions with other schools including the EL teacher, speech pathologist, resource teacher, and interventionist. Grades K-3 are set up in a traditional elementary model with teachers teaching all core subjects, while fourth grade is subject area based. Teachers have a planning time and meet in grade level teams at least weekly.

One week a month includes more intensive work on students. Each grade meets three times, with a meeting to prepare for work with a member of the leadership team, a meeting with that leader, and then an additional planning meeting. The focus is on the students in the grade and how to best serve them.

Student Support Services

Theodore Jones has a fulltime counselor whose goal is to spend 90 percent of their time with students, and a fulltime nurse to serve students. The school is able to provide dental care through the local children's hospital. In addition, the district health clinic is available to students. The school has access to two mental health providers, though they mentioned that staff could use more training in good mental health strategies.

Case Study School Summary: Weiner Elementary School

Background

Weiner Elementary School is a very small K-6 school in the Harrisburg School District in the Northeast region of Arkansas. In 2019/20 the school served 108 students. The school has 87 percent White students, 3.7 percent Black, and 6.5 percent Latino. Nearly 70 percent of

Weiner Elementary Demographics (19/20)				
Enrollment	108			
FRL %	69%			
English Learner %	2%			
Special Education % 23%				

students are FRL, 2 percent are EL and 23 percent are special education – a much higher than average percentage. Weiner is the only school in the community with the high school closing a few years ago.

The school is part of a farming community that has seen shifting demographics as farming changes. School enrollment has declined over time as less families work the farms and the number of students from economically disadvantaged backgrounds has grown.

The school is an Innovation School and was one of just 12 schools to receive this designation in the year they applied. The school was a 2016 Blue Ribbon School and has won several awards in 2019 from the University of Arkansas for growth and "beating the odds."

Weiner Elementary School's average class size is around 16 students.

School Culture and Leadership

Staff repeatedly mentioned the family feel of the school. The small size of the school is important and allows for a focus on the whole child. Staff are able to build strong relationships with each other, students, and families. Members of the staff live in the community and are sure to be seen, helping grow the connection between the school and the community. Staff rely on one another for support and know they can go to anyone in the school for help. Teachers work with each other to ensure they can best support students.

The principal is the leader of the school but believes in shared leadership. This includes working with the GT coordinator and digital learning facilitator. Teachers are trusted and administration supports them. Staff are encouraged to highlight what isn't working and administration will get them what they need.

Instruction, Interventions and Assessment/Data Use

The school has very high standards for all students. When the staff were applying for innovation status, the developed a model in the image of their dream school. The school utilizes a number of waivers to implement the program in such a small setting. This includes providing Spanish without a licensed teacher, the Spanish offerings include some for high school credit. The school does not technically have a library and provides art and music instruction in the classrooms.

Teachers use co-teaching for math instruction, with up to three teachers in the classroom at one time. This allows students to work with teacher on specific skill needs. Weiner also utilizes peer tutoring, matching students with needs to students that have mastered the skill. The small setting allows for lots of small group instruction. The staff knows each child and holds them to the school's very high standards.

The school uses iReady and DIBELS to monitor students and identify skill gaps for kids. Weiner uses a data wall, and each teacher owns their students' data. The success of students is owned by all staff members.

Weiner provides after-school programming three days a week for 40 minutes. This time includes homework and tutoring help. In addition, teachers will find time, often during specials classes, to pull a student who needs extra help. Morning programming is more focused on extensions and peer mentoring.

Staffing and Professional Development

Weiner has very low teacher turnover, with the school having the same staff the past five years. They do not share any staff with other schools. The school uses platooning, with one teacher focused on math and one on literacy. There is just one teacher teaching each subject per grade level, teachers are expected to be masters of their craft.

Teachers have common planning time at least twice a week. Grades 3 through 6 teachers meet to ensure vertical alignment across grades and then grade level teachers also meet together. In house professional development has focused on student data, with all staff helping identify what is needed for students. The school focuses outside professional development on the needs of teachers, with the school paying for opportunities teachers identify. Weiner also relies on the education service cooperative to deliver some professional development.

Student Support Services

Weiner is able to provide group counseling one a day week for kids. Counseling focuses on the growth mindset in grades 4-6, utilizing both online and in-person programming. Character development is the focus for the lower grades. The school also has access to school based mental health services that are available to all students regardless of the ability to pay. The small setting allows the school to address the needs of students.

References

Achilles, C. (1999). Let's Put Kids First, Finally: Getting Class Size Right. Thousand Oaks, CA: Corwin Press.

Al Otaiba, S., Schatschneider, C., & Silverman, E. (2005). Tutor-Assisted Intensive Learning Strategies in Kindergarten: How Much is Enough? *Exeptionality*, *13*(*4*), 195-208.

Amatucci, D. (2014). *Stopping the Summer Slide. Homeroom: The Official Blog of the U.S. Department of Education*. Retrieved 5/19/15 from <u>http://www.ed.gov/blog/2014/03/stopping-the-summer-slide/</u>

Belfield, C., Bowden, B., Klapp, A., Levin, H., Shand, R. & Zander S. (2015). The Economic Value of Social and Emotional Learning. New York, NY: Center for Benefit-Cost Studies in Education, Teachers College, Columbia University.

Boone, S. (2007, July). Education, Politics, and the School Calendar. *Digest of Gifted Research*. Duke Talent Identification Program (TIP). Accessed 5/19/15 from <u>https://tip.duke.edu/node/857</u>

Borman, G. D. & Dowling, N. M. (2006). Longitudinal Achievement Effects of Multiyear Summer School: Evidence from the Teach Baltimore Randomized Field Trial. Educational Evaluation and Policy Analysis, 28(1), 25-48.

Carey, Bjorn. (2013, September). *Language gap between rich and poor children begins in infancy, Stanford psychologists find*. Stanford, CA: Stanford University. Accessed 5/14/15 from http://news.stanford.edu/news/2013/september/toddler-language-gap-091213.html

Collaborative for Academic, Social, and Emotional Learning (CASEL). (2020). Retrieved from https://casel.org/

Chenoweth, K. (2009). How it's Being Done. Cambridge, MA: Harvard Education Press.

Cohen, P., Kulik, J., & Kulik, C. (1982). Educational Outcomes of Tutoring: A Meta-Analysis of Findings. *American Educational Research Journal, 19(2),* 237-248.

Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfeld, F., & York, R. (1966). *Equality of Educational Opportunity: The Coleman Report*. Washington D.C.: Government Printing Office.

Cryan, J., Sheehan, R., Wiechel, J., & Bandy-Hedden, I. (1992). Success Outcomes of Full-Day Kindergarten: More Positive Behavior and Increased Achievement in the Years After. *Early Childhood Research Quarterly, 7(2),* 187-203.

DeLuca, S. & Rosenblatt, P. (2010). Does Moving to Better Neighborhoods Lead to Better Schooling Opportunities? Parental School Choice in an Experimental Housing Voucher Program. *Teachers College Record*, *112*(5), 1443-1491.

Durlak, J. A. & Weissberg, R. P. (2007). The Impact of After-School Programs that Promote Personal and Social Skills. Chicago, IL: CASEL.

Elicker, J., & Mathur, S. (1997). What Do They Do All Day? Comprehensive Evaluation of a Full-Day Kindergarten. *Early Childhood Research Quarterly, 12(4),* 459-480.

Fairfax County Public Schools: Office of Program Evaluation. (2004). *Full-Day Kindergarten Study*. Fairfax, VA: Author.

Fashola, O., & Cooper, R. (1999). Developing the Academic Talents of African-American Students During The Non-School Hours: Four Exemplary Programs. *Journal of Negro Education, 68(2)*, 130-137.

Fernald, A., Marchmann, V. A., & Weisleder, A. (2012). SES Differences in Language Processing Skill and Vocabulary are Evident at 18 Months. *Developmental Science*, 16(2), 234-248. Finn, J., Gerber, S., & Boyd-Zaharias, J. (2005). Small Classes in the Early Grades, Academic Achievement, and Graduating from High School. *Journal of Educational Psychology*, *97*(2), 214-223.

Fusaro, J. (1997). The Effect of Full-Day Kindergarten on Student Achievement: A Meta-Analysis. *Child Study Journal*, 27(4), 269-277.

Gamoran, A. & Long, D. A. (2006, December). *Equality of Educational Opportunity: A 40-Year Retrospective* (WCER Working Paper No. 2006-9). Madison: University of Wisconsin–Madison, Wisconsin Center for Education Research. Retrieved 6/9/2015 from <u>http://www.wcer.wisc.edu/publications/workingPapers/papers.php</u>

Gardner, M., Roth, J. L., & Brooks-Gunn, J. (2009). *Can After-School Programs Help Level the Playing Field for Disadvantaged Youth?* (Equity Matters: Research Review No. 4). New York, NY: Campaign for Educational Equity, Teachers College, Columbia University.

Gerber, S., Finn, J., Achilles, C., & Boyd-Zaharias, J. (2001). Teacher Aides and Students' Academic Achievement. *Educational Evaluation and Policy Analysis, 23(2)*, 123-143.

Gormley Jr., W. T., Gayer, T., Phillips, D., & Dawson, B. (2005). The Effects of Universal Pre-K on Cognitive Development. *Developmental Psychology*, 41(6), 872-884.

Granger, R. C. (2008). *After-School Programs and Academics: Implications for Policy, Practice, and Research*. Washington, D.C.: Society for Research in Child Development.

Grissmer, D. (1999). Class Size: Issues and New Findings. *Educational Evaluation and Policy Analysis*, 21(2).

Hawley Miles, K. & Frank, S. (2008). *The Strategic School: Make the Most of People, Time and Money*. Thousand Oaks, CA: Corwin Press.

Hernandez, D. (2011, April). *Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation*. Retrieved 3/25/15 from <u>http://files.eric.ed.gov/fulltext/ED518818.pdf</u>

Hough, D., & Bryde, S. (1996). The Effects of Full-Day Kindergarten on Student Achievement and Affect. *American Educational Research Association*. New York, NY.

Karoly, L. A. & Bigelow, J. H. (2005). *The Economics of Investing in Universal Preschool Education in California*. Santa Monica, CA: RAND Corporation.

Kennedy, M. M., Jung, R. K., & Orland, M. E. (1986, December). *Poverty, Achievement, and the Distribution of Compensatory Education Services* (Report from the National Assessment of Chapter 1). Washington, D.C.: U.S. Department of Education. Retrieved 4/30/15 from http://files.eric.ed.gov/fulltext/ED271546.pdf

Kim, J. S. & Quinn, D. M. (2013). The Effects of Summer Reading on Low-Income Children's Literacy Achievement from Kindergarten to Grade 8: A Meta-Analysis of Classroom and Home Interventions. *Review of Educational Research*, 83(3), 386-431. Lauer, P. A., Akiba, M., Wilkerson, S. B., Apthorp, 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(2), 275-313.

Levanthal, T. & Brooks-Gunn, J. (2000). The Neighborhoods They Live in: The Effects of Neighborhood Residence on Child and Adolescent Outcomes. *Psychological Bulletin, 126*(2), 309-337. Retrieved 10/5/15 from <u>http://www.gxe2010.org/Speakers/pubs/Brooks-Gunn_2000a.pdf</u>

Lippman, L., Burns, S., & McArthur, E. (1996, June). *Urban Schools: The Challenge of Location and Poverty*. National Center for Education Statistics. Retrieved 3/25/15 from <u>http://nces.ed.gov/pubs/96184all.pdf</u>

McCombs, J. S., Augustine, C. H., Schwartz, H. L., Bodilly, S. J., McInnis, B., Lichter, D. S., & Brown Cross A. (2011). *Making Summer Count: How Summer Progams can Boost Children's Learning*. Santa Monica, CA: RAND Corporation.

Moore, K. A. (2014). *Making the Grade: Assessing the Evidence for Integrated Student Supports*. Child Trends. Retrieved from http://www.childtrends.org/wp-content/uploads/2014/02/2014-07ISSPaper.pdf

Nye, B., Hedges, L., & Konstantopoulos, S. (2002). Do Low-Achieving Students Benefit More from Small Classes? Evidence from the Tennessee Class Size Experiment. *Education Evaluation and Policy Analysis, 24*, 201-217.

Odden, A. R. & Archibald, S. J. (2009). *Doubling Student Performance and Finding the Resources to do it*. Thousand Oaks, CA: Corwin Press.

Olson, L. (2014). *A First Look at Community Schools in Baltimore*. Baltimore, MD: Baltimore Education Research Consortium.

Perry, L. & McConney, A. (2010, November). Does the SES of the School Matter? An Examination of Socioeconomic Status and Student Achievement Using PISA 2003. *Teachers College Record*, *112*(4), 7-8.

Plucker, J., Spradlin, T., Magaro, M., Chien, R., & Zapf, J. (2007). *Assessing the Policy Environment for School Corporation Collaboration, Cooperation, and Consolidation in Indiana*. Bloomington, IN: Center for Evaluation & Education Policy.

Poverty & Race Research Action Council (2015). *Annotated Bibliography: The Impact of School-Based Poverty Concentration on Academic Achievement and Student Outcomes*. Retrieved 3/25/15 from http://school-diversity.org/coalition-research-briefs/

Reardon, S. (2011, July). The Widening Academic Achievement Gap Between the Rich and the Poor: New Evidence and Possible Explanations. *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances.* Russell Sage Foundation.

Reijneveld, S., Brugman, E., Verhulst, F., Verloove-Vanhorick, S. (2004, July). Area Deprivation and Child Psychosocial Programs: A National Cross-Sectional Study Among School-Aged Children. *Social Psychiatry and Psychiatric Epidemiology (40)*, 18-23.

Reisner, E., Petry, C., & Armitage, M. (1990). *A Review of Programs Involving College Students as Tutors and Mentors in Grades K-12*. Washington, DC: U.S. Department of Education.

Rumberger, R. & Palardy, G. (2005). Does Segregation Still Matter? The Impact of Student Composition on Academic Achievement in High School. *Teachers College Record 107*(9), 1999-2045.

Schacter, J. & Jo, B. (2005). Learning When School is not in Session: A Reading Summer Day-Camp Intervention to Improve the Achievement of Exiting First-Grade Students Who are Economically Disadvantaged. *Journal of Research in Reading*, 28(2), 158-169.

Schellenber, S. (1998). Concentration of Poverty and the Ongoing Need for Title I. In *Hard Work for Good Schools: Facts not Fads in Title I Reform.* Orfield, G. & DeBray, E. (eds). Cambridge, MA: The Civil Rights Project, Harvard University.

Schmidt, H., Ahrend, A., Kokx, I., & Boon, L. (1993). Peer Versus Staff Tutoring in Problem Based Learning. *Annual Meeting of the American Educational Research Association*. Atlanta, GA.

Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. (2005). Lifetime *Effects: The High/Scope Perry Preschool Study Through Age 40*. Ypsilanti, MI: High/Scope Press.

Slavin, R. E., Karweit, N. L., & Wasik, B. A. (Eds.). (1994). *Preventing early school failure: Research, policy, and practice.* Washington, D.C.: Allyn & Bacon.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R., & Schellinger, K. B. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development*, 82(1), 405-432.

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, 1156-1181.

U. S. Department of Education. (2020). *How the WWC Rates a Study*. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_info_rates_061015.pdf

Vandell, D. L., Reisner, E. R. & Pierce, K. M. (2007). *Outcomes Linked to High-Quality Afterschool Programs: Longitudinal Findings from the Study of Promising Afterschool Programs*. Irvine, CA: University of California, Irvine.

Walston, J., & West, J. (2004). Full-Day and Half-Day Kindergarten in the United States: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99. *Education Statistics Quarterly*.

Wasik, B., & Slavin, R. (1993). Preventing Early Reading Failure with One-to-One Tutoring: A Review of 5 Programs. *Reading Research Quarterly, 28*, 178-200.

WestEd. (2005). Full-Day Kindergarten: Expanding Learning Opportunities. San Francisco, CA: Author.

Wool, S., Fermanich, M., & Reichardt, R. (2015, December). *The Effects of Concentrations of Poverty on School Performance and School Resource Needs: A Literature Review*. Denver, CO: APA Consulting.

Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinoza, L. M., Gormley, W. T., Ludwig, J., Magnuson, K. A., Phillips, D., & Zaslow, M. J. (2013). *Investing in Our Future: The Evidence Base on Preschool*. New York, NY: Foundation for Child Development.

Zvoch, K., & Stevens, J. J. (2013). Summer school effects in a randomized field trial. *Early Childhood Research Quarterly*. 28(1), 24-32.

Appendix 7: College and Career Readiness

Examples of Actionable CCR Definitions from Other States Maryland

In Maryland, college- and career-readiness includes mastery of rigorous content knowledge and the abilities to apply that knowledge through higher-order skills to demonstrate success in college and careers. This includes the ability to think critically and solve problems, communicate effectively, work collaboratively, and be self-directed in the learning process.

More specifically, a student who is college- and career-ready should:

- Be prepared to succeed in credit-bearing postsecondary introductory general education courses or in industry certification programs without needing remediation.
- Be competent in the Skills for Success (SFS), including learning, thinking, communication, technology, and interpersonal skills.
- Have identified potential career goal(s) and understand the steps to achieve them
- Be skilled enough in communication to seek assistance as needed, including student financial assistance.

Ohio

Ohio's college- and career-ready definition is to ensure all students 'Start Ready and Graduate Ready' from their PreK–12 learning environment, qualified for success in a degree or credential-granting postsecondary education program, without remediation, and advanced training for a career of choice. Student readiness for college and careers includes:

- Content Knowledge: A deep core-content knowledge in academic and applicable technical content;
- 21st Century Skills: The effective use of academic and technical skills (e.g., research, problemsolving, systems thinking);
- Readiness Behaviors: The acquisition of readiness behaviors such as goal-setting, persistence, and resourcefulness;
- College and Career Survival Skills: The acquisition of knowledge and skills needed to navigate successfully within the world of higher education and world of work.

Massachusetts

Massachusetts students who are college and career ready will demonstrate the knowledge, skills and abilities that are necessary to successfully complete entry-level, credit-bearing college courses, participate in certificate or workplace training programs, and enter economically viable career pathways.

In order to meet this goal, the Commonwealth has defined a set of learning competencies, intellectual capacities and experiences essential for all students to become lifelong learners; positive contributors to their families, workplaces and communities; and successfully engaged citizens of a global 21st century.

Beyond achieving college and career ready levels of competence in English Language Arts / Literacy and Mathematics, all high school students should:

- Develop a foundation in the academic disciplines identified in the MassCore course of study,
- Build competencies for workplace readiness as articulated in the Integrating College and Career Task Force Report, and
- Focus on applying academic strategies to problem solving in diverse professional and life contexts, appropriate to individual student goals.

Massachusetts has developed specific curriculum frameworks and essential learning items in each area.

College and Career Readiness Indicators, Early Childhood Education through 12th Grade

The following tables from the College & Career Readiness & Success Center at American Institutes for Research's (AIR) November 2013 report *Predictors of Postsecondary Success* identify indicators, predictors, and other potential factors of future success at grade spans ranging from early childhood education through high school.

Table 1	Early	Childhood	Correlates	of	School	Readiness	and	Elementary	Performance
Table T	. Larry	Cilliunoou	Conclates	01	3011001	Neaune33	anu	Liementary	renormance

Early Childhood					
Indicator	Predictor	Other Potential Factor			
	 Participation in child care and early education^a Early approaches to learning^b Positive "school readiness risk profile"^c 	 Cognitive understanding and cognitive control^d Positive play interaction behaviors at home and school^e Emergent literacy^f Working memory skills^g Social-emotional learning^h Attention span persistenceⁱ 			

^aMagnuson, Meyers, Rhum, & Waldfogel, 2004; ^bLi-Grining et al., 2010; ^cHair et al., 2006; ^dLeerkes, Paradise, O'Brien, Calkins, & Lange, 2008; ^eCoolahan et al., 2000; Dilalla et al., 2004; Fantuzzo & McWayne, 2002; ^fDoctoroff, Greer, & Arnold, 2006; ^gGathercole et al., 2003; ^hDenham & Brown, 2010; ⁱMcClelland et al., 2012

Table 2. Elementary School Correlates of Elementary and Middle Grades Success and Secondary Readiness

Elementary School				
Indicator	Predictor	Other Potential Factor		
 Reading by the third grade^a < 10 percent absenteeism in elementary school^b 	 Being rated highly by teachers on attention span and classroom participation^c High scores on the Social Skills Rating System^d 	 Social competence^e 		

^aThe Annie E. Casey Foundation, 2010; Hernandez, 2012; ^bChang & Mariajose, 2008; ^cAlexander, Entwisle, & Dauber, 1993; ^dMalecki & Elliot, 2002; ^eWelsh, Parke, Widaman, & O'Neil, 2001

Middle Grades	
Indicator Predictor Other P	Potential Factor
 < 20 percent absenteeism in the middle grades^a Remaining at the same school through the middle grades^b Receiving no unsatisfactory behavior grades in sixth grade^c Passing all ELA and mathematics courses and meeting benchmarks on state exams^d Passing Algebra I in the eighth grade^e NAEP mathematics score of > 292 in eighth grade^f Meeting the following benchmarks on college preparatory exams: ACT EXPLORE test scores of English 13, mathematics 17, science 20 and reading 15^g; SAT-9 score > 50th percentile^h Taking rigorous coursework in the middle grades¹ Taking rigorous coursework in the middle grades¹ High scores on the Grit-S and Grit-O scales¹ NAEP mathematics score of > 292 In eighth grade¹ Meeting the following benchmarks on college preparatory exams: ACT EXPLORE test scores of English 13, mathematics 17, science 20 and reading 15^g; SAT-9 score > 50th percentile^h 	tional and decision-

Table 3. Middle Grades Correlates of Secondary Success and Postsecondary Readiness

^aBalfanz, 2009; Balfanz, Herzog, & Mac Iver, 2007; Rumberger, 1995; Rumberger & Larson, 1998; ^bMac Iver, Durham, Plank, Farley-Ripple, & Balfanz, 2008; Rumberger & Larson, 1998; ^cBalfanz et al., 2007; ^dBalfanz et al., 2007; Cumpton, Schexnayder, & King, (2012); ^eKurlaender, Reardon, & Jackson, 2008; Wimberly & Noeth, 2005; ^fLee, 2013; ^gACT, 2008; ^hSilver & Saunders, 2008; ⁱAtanda, 1999; Wimberly & Noeth, 2005; ^jDuckworth & Quinn, 2009; ^kFleming et al., 2005

References

American Institutes for Research's (AIR) College & Career Readiness & Success Center. "Predicators of Postsecondary Success." November 2013.

Bottoms, Gene and Kirsten Sundell. "Valuing Both Cs in College- and Career-Readiness Accountability Systems." SREB, 2017.

Michkind, Anne. "Overview: State Definitions of College and Career Readiness." AIR. November 2014.

Appendix 8: District, School and Class Size

This appendix for Chapter 8 provides additional details on four areas: 1) class size policies, impacts these policies have on school sizes, and facilities master planning in Arkansas and comparison states, 2) consolidation of districts and alternatives to consolidation, and 3) Educational Service Cooperatives (ESCs) in Arkansas and best practices for ESCs nationally.

Class Size Policies, Impacts on School Sizes, and Facilities Master Planning Over many decades, public education decision-makers have decided to reduce the number of school districts and schools to meet the objective of improving the quality of educational programs. States vary in organizational structures for public education—some states have countywide systems, while others have over 1,000 school districts. Geography and land settlement practices have resulted in states facing different circumstances.

Only a few states have addressed school size by adopting specific laws, regulations, or guidelines. Many more have master planning and school construction approval processes that advise and control school design decisions and influence school size in both new construction and renovations of existing buildings. These processes establish the types of spaces needed in a school, the student capacity of each, and the recommended size of each space in square feet. Although these are often recommendations rather than requirements, the funding share provided by states is generally set on the overall student capacity of the school, as calculated by these size and space requirements. State funding mechanisms differ.

As in other states, practical and legal considerations drive decisions in Arkansas on school size. Additions and renovations to maintain and update existing school buildings are subject to district-wide enrollment projections, when sometimes enrollments are changing at the neighborhood level within a district. As enrollments change, it is difficult to assign students to rooms or courses and achieve the maximum class size, as set by state processes. Educational standards change with state and federal laws in areas such as special education, thus imposing restrictions on building capacity and utilization and frequently requiring extensive construction and renovation to meet the needs of a modern educational system.

State-to-state comparisons and other data in this section can help Arkansas's public policymakers determine if they need to make changes to the guidelines that help determine the learning environment experienced by students, their teachers, and the many other people working in public education.

Relationship between Enrollment Projections, Class Size, and School Capacity (Enrollment Size)

While few states have specific laws or regulations on school size, many states influence school size decisions through a combination of guidelines, programs, and processes. Most states have an educational facility master planning process and professional staff at the state level who guide school districts through the process. A separate school construction planning process is followed when the master plan and enrollment projections justify a school construction project. Most school construction design and approval processes start with educational specifications that set the design requirements to

meet the desired educational program. The school construction planning process implements the educational specifications by determining the number of spaces needed of various types ranging from regular classrooms to chemistry labs and gymnasiums. State school construction review and approval processes establish the student capacity of classrooms and other spaces as well as the recommended square footage of each type of space.

The projected enrollment is the primary factor used to determine the number and types of spaces a school will need. For example, an elementary school for 400 students in Arkansas would need 16 regular education classrooms, each with a maximum capacity of 25 students and a minimum of 850 square feet per classroom. Many states reduce the classroom capacity if the room is less than the standard size. Other instructional spaces, such as those for special education or tutoring spaces, would have a capacity of 10 or 15 students and size requirements ranging from 400 to 1,000 square feet. These standards and approval processes apply to new school construction as well as additions to existing schools. When designing an addition and renovation of an existing school to meet enrollment projections, a capacity is assigned for each space, meeting square footage requirements in the existing school. Then the proposed capacity of the new spaces is combined with the existing space capacities to accommodate projected enrollments.

A distinction is made in several states between requiring and recommending class sizes that determine the size and enrollment capacity of a school building. In some states, the state share of funding for a school construction project is set by the required class size. States offer other types of school design guidance, including educational design standards and specifications. In Arkansas, this guidance is in the form of a series of "space plates," which are graphical representations of the size, layout, fixtures, and equipment recommended for selected spaces as well as their location in relationship to other spaces. Most states employ school architectural experts to review and advise on school construction plans. A few states provide prototype or model school designs.

School size can also be restricted by laws and regulations of local government and other state agencies. Local zoning and land development regulations may limit the school capacity due to requirements for maximum lot coverage, parking, traffic circulation, playgrounds and athletic fields, and other site design features. State, county, and municipal water and sewer regulations may limit the size or prohibit expansion of a school if the utilities cannot expand service to accommodate increasing capacity in a school. Stormwater management requirements may also limit school size and capacity. Compliance with zoning and municipal, county, and state planning approvals that establish site size, school size, community use spaces, and other factors can preclude renovation and additions to older schools.

Class Size Requirements Impact on School Size

In Arkansas, as in many other states, class size is governed by school district policies, budget development guidelines, collective bargaining agreements, state and federal requirements for special needs programs, and other mandates. When these class size standards are applied to an existing school building with various types of classrooms and other spaces, the total capacity of the school can be determined. But enrollment at a grade level can change from one year to the next. For example if a class size is set at 25 and 50 students are enrolled, two classrooms are required. Three classrooms would be

required if the following year's enrollment at that same grade level changed to 55. That occurs only if the class size guidelines are seen as set maximums, however, and are not overriden by assignment of instructional aides or other measures. As educational program requirements change, particularly in special education, space previously designed and used for regular education classrooms at 25 or more students per classroom are often converted for use by programs that require fewer students in each room. For these reasons, school capacity can change over time and even annually based on fluctuating enrollments. In schools with declining enrollments, districts often use classrooms below their original design capacity.

Class size guidelines in Arkansas have been established for different purposes, including both school construction planning and state funding. The variations are minimal between the class size guidelines that establish capacity and enrollment size in the Program of Requirements used in facilities planning and the matrix funding levels, as shown in Table 8.A.1 below.

	Class Size	Student- Teacher Ratio for Matrix Funded Ratios	Facilities Planning Manual-Program of Requirements (maximum class size)	Standard Size (Square Feet)
Kindergarten	20	20:1	20	1,000
Grades 1-3	Average of 22, Maximum of 25	23:1	25	850
Grades 4-6	Average of 25, Maximum of 28	25:1	28	850
Grades 7-8	Maximum of 30	25:1	30	850
High School Classroom	Maximum of 30	25:1	30	850
Specialty Classrooms			Minimum of 1, plus 1 for each 500 to 1,000 students	900 to 1,400
Special Education, Self- contained Classroom			Two rooms required for	850
Special Education, Resource Room			1,000 students and above	450
Speech Therapy				350

 Table 8.A.1: Comparison of Class Size, Student-Teacher Ratio, and Maximum Class Size

 for Facilities Planning in Arkansas

Educational Facility Master Planning in Arkansas

In Arkansas, school districts are required to maintain an Educational Facility Master Plan (EFMP), which is a six-year plan that must be updated every two years in accordance with the Arkansas Public School Academic Facility Manual. The EFMP includes several key components, including anticipated enrollment. Enrollment projections are updated annually by the Arkansas Department of Education through a contracted service. According to state officials, these projections have proven relatively accurate in the past. The projections are based on county-level birth rates. Construction can be approved to the maximum capacity needed for the 10-year enrollment projections. Exceptions can be granted if a school board believes that projections are too high and will result in overbuilding and unnecessary expense. The state shares the cost with the school district for approved projects through partnership funding. The state calculates its share using a complex formula, increased periodically through a facility cost index.

The components of the school construction planning process are contained in written and online materials, including an online template to calculate room and size requirements. The program is described in the Public Schools Facility Manual, which is updated regularly. The contents of the manual and the purpose of each section are summarized below (**bold font** provides emphasis on size issues):

- Purpose: Provide clear guidance to school districts and design professionals; provide uniform parameters for school construction balancing quality, cost, and time (construction schedule)
- Chapter 1: How to Use
- Chapter 2: Educational Facility Planning Concepts
 - School facilities must be responsive to a school district's educational program, meeting current and future needs
- Chapter 3: Education Framework
 - **Broad principles** associated with organizational, facility, program, and service issues, including grade configuration, **school size**, **and class size**
 - Design principles for high performance learning environments, special education, career education
- Chapter 4: Site Selection and Design
 - Site access and traffic flow, drainage, play fields, playgrounds, fencing, lighting, exterior security
- Chapter 5: Program of Requirements
 - Assists districts in establishing the size and quantity of instructional and support spaces for new facilities and additions
 - o Identifies an overall size in square feet for a facility and spaces that must be included
- Chapter 6: Program Space Guidelines
 - Contain space plates graphic representations of information related to layout, features, fixtures, and finishes for each type of space
- Chapter 7: Building Systems
 - Design and performance standards for systems including HVAC, electrical, computer networking, plumbing, security
- Chapter 8: Safety and Security
 - Provides safety and security standards and guidelines

Components of School Size Decision-Making

The components of school size decision-making vary by state, as shown in Tables 8.A.2, 8.A.3, 8.A.4, and 8.A.5. The information contained in these tables was developed by a thorough review of documents available online, with interviews with state officials to clarify some items. But states vary in their definitions and interpretations of some of these categories and how each category affects their approach to providing design assistance on school size factors as well as calculating the state share of funding. States exercise different approaches in the ways they influence and control local school board

decisions on school size and school construction design and approval. The primary purpose of reviewing the state and local relationship on school size and design was to identify best practices, which are discussed at the end of this report.

State	Planning Requirement	nt Approval Authority		
	Educational Facility Master Planning (EFMP) Requirement	Approval Authority by State	Financial Share- State and Local School District	Penalties for Non- Compliance with Guidelines
Arkansas	Yes	Yes	Yes	
Alabama	Yes	Yes	Yes	
Delaware	No	Yes	Yes	Yes
Florida	Yes	Yes	Yes	Yes
Georgia	Yes	Yes	Yes	Yes
Kentucky	Yes	Yes	Yes	Yes
Louisiana				
Maryland	Yes	Yes	Yes	Yes
Massachusetts	Yes	Yes	Yes	Yes
Mississippi				
North Carolina	Yes	Yes	Yes	
Oklahoma	Yes	Yes		Yes
South Carolina	No	Yes		
Tennessee				
Texas	Yes			No
Virginia	No			No

Table 8.A.2: School Construction Planning, Approval, and Finance

Table 8.A.3: Size Guidelines

State	School Size Guidelines (Enrollment)	Class Size Regulations (Maximum, Minimum, Average)	Classroom Space Guidelines	Space Size Guidelines (Square Feet per Student)
Arkansas	No	Yes	Yes	Yes
Alabama	No		No	No
Delaware	No	Yes	Yes	No
Florida	Yes	Yes	Yes	Yes
Georgia	No	Yes	Yes	No
Kentucky	No	Yes	Yes	Yes
Louisiana	No		No	No
Maryland	No	Yes	No	No
Massachusetts	No	Yes	Yes	Yes
Mississippi	No	Yes	Yes	Yes
North Carolina	Yes	No	Yes	Yes
Oklahoma	No	Yes	Yes	Yes
South Carolina	No	No	Yes	Yes
Tennessee	No		No	No
Texas	No	Yes	No	No
Virginia	No	Yes	Yes	No

Number and Size of Spaces				
	Student Capacity Guidelines	Site Size Guidelines	Required Spaces (Classrooms, Special Education, Common Spaces)	Ratio of Required Spaces
Arkansas	Yes	No	Yes	Yes
Alabama	No	Yes	No	No
Delaware	Yes	Yes	Yes	No
Florida	Yes	Yes	Yes	Yes
Georgia		Yes		
Kentucky	Yes	Yes	Yes	
Louisiana		No		
Maryland	Yes	No	Yes	Yes
Massachusetts	Yes	No	Yes	Yes
Mississippi	No	Yes	no	No
North Carolina	Yes	Yes	Yes	Yes
Oklahoma	No	Yes	No	No
South Carolina	No	Yes	No	No
Tennessee		No		
Texas	No	No	Yes	Yes
Virginia	No	Yes		

Table 8.A.4: Number and Size of Spaces

Table 8.A.5: Design Assistance from State

	Design Assistance			
			Design Guidelines by	
	By Educational	Educational	Type of Space	
	Architects	Specifications	(Layout, Size,	Prototype Designs of
State	Employed by State	Required	Furnishings)	Model Schools
Arkansas	Yes	Yes	Yes	No
Alabama	Yes	Yes	No	No
Delaware	Yes	Yes		
Florida	Yes	Yes	Yes	Yes, innovative
				funding grants
Georgia	Yes			
Kentucky	Yes	Yes	Yes	
Louisiana				
Maryland	Yes	yes	Yes	
Massachusetts	Yes	Yes	Yes	Yes
Mississippi	No	No	No	No
North Carolina	Yes	Yes	Yes	
Oklahoma	Yes		No	No
South Carolina	Yes	No	No	No
Tennessee				
Texas	No		Yes	No
Virginia	No		Yes	No
Comparison of Space Sizes and Student Occupancy: Arkansas and North Carolina

Many states have adopted capacity and size guidelines to enable school districts to make better decisions about their buildings and school construction projects and to provide uniform funding support at the state level. Arkansas developed its Program of Requirements, which recommends the maximum numbers of students allowed in various types of spaces. The enrollment capacity of a school is determined by the quantity of spaces required of each type and the student capacity of each type of space.

In Arkansas, to build an elementary school for 350 students who are distributed equally across kindergarten and grades one to six at 50 students per grade level, three kindergarten classrooms of 18 students each would be required, along with two classrooms for each of the other six grade levels. This would require a total of 15 rooms (3 x 18 kindergarten yields a capacity of 54, plus 12 x 25 yields a capacity of 300, requiring a total of 15 classrooms) and result in a school with a total capacity of 354.

Using the North Carolina standards of fewer students per room and larger rooms, kindergarten remains the same at 18 per classroom, but grades one to three would require three classrooms at 17 per room, while grades four to six would require two classrooms each at 26 students per classroom. In North Carolina, a 350-student elementary would take 18 classrooms (three at K, nine at grades one to three, and six at grades four to six). In addition to the three extra rooms at 1,000 square feet of space per room, the North Carolina size of spaces standards add 350 square feet per kindergarten classroom and 150 square feet for grades one to three classrooms. This would call for an additional 2,400 square feet of space to the building. In total, North Carolina's combined standards for students per classroom and size of space differences require adding 5,400 square feet to a 350-student elementary school. This comparison shows the importance of establishing the recommended standards balancing educational and financial objectives.

Table 8.A.6: Arkansas and North Carolina Space Standards							
Type of Space	Students per Classroom or Teaching Station, NC	Students per Classroom or Teaching Station, AR	Size of Spaces (Square Feet), NC	Size of Spaces (Square Feet), AR			
Regular classrooms							
Pre-kindergarten	18	20	1,200	1,000			
Kindergarten	18	18	1,200	850			
Grade 1	17	25	1,000	850			
Grades 2-3	17	25	1,000	850			
Grades 4-5	26	28	850	850			
Grade 6		28		850			
Grades 6-8	26	30	950	850			
Grades 9-12	18 to 21	30	850	850			

Table 8.A.6 shows the standards for all types of classrooms in both states.

	Students per	Students per	<i></i>	
	Classroom or Teaching	Classroom or Teaching	Size of Spaces	Size of Spaces
Type of Space	Station, NC	Station, AR	NC	AR
Other teaching stations				
Art, elementary			1,200	1,200
Art, middle school			1,400	1,200
Computer classroom, elementary			850	900
Computer classroom, middle school			1,000	900
Computer classroom, high school			850	900
Music			1,000	1,200
Science, elementary			1,100	850
Science, middle school			1,100	850
Science, high school			1,200	850
Science, Labs				1,440
Science, high school chemistry			1,500	1,440
Special education, resource rooms			450	450
Special education, classrooms			450	450
Workforce development labs				
Agriculture, trade & industry			3,000	3,000
Trade and industry			2,500	3,000
Technology			2,000	1,500
Communications, miscellaneous			1,500	1,500
Vocation classrooms			750	750

Chart 8.A.1: Applying NC Elementary School Enrollment Size Guidelines to AR Elementary Schools





Chart 8.A.2: Applying NC Middle School Enrollment Size Guidelines to AR Middle Schools (6-8)

Chart 8.A.3: Applying NC School Enrollment Size Guidelines to AR High Schools (9-12)



North Carolina: Timeline to Establish Ideal School Size Standards

Establishing school size standards has taken many years in the states that have addressed ideal size. Recent North Carolina history illustrates how that state moved toward adoption of school facility guidelines that set ranges of ideal school size at each grade level configuration. The effort serves the state's goals of educating its children in safe, appropriate schools while assuring taxpayers that public funds are spent efficiently. North Carolina's facility policies evolved over decades of work in the last half of the 20th century, but particularly in the late 1980s and the 1990s. Briefly, here is the timeline:

- 1949 Statewide bond issue passed to pay state's share of building costs. Other bond proposals passed in 1953, 1963, 1973, and 1996.
- 1987 Public School Building Capital Fund approved and financed by an earmarked portion of the state's corporate income tax.
- 1987 School Facilities Finance Act requires local boards of education to develop long-range organization and facility plans.
- 1996 General Assembly declares facility *standards* will become facility *guidelines*. State creates
 a Public School Facilities Task Force to describe minimum facilities to ensure program
 performance and long-term cost-efficiency (exceptions noted for science rooms to meet lab
 safety regulations).
 - "Guidelines are meant to provide strong direction for school design, while maintaining local control of that process."
 - "... flexibility is essential to good design but cannot be allowed to become a means of lowering guidelines."
 - "The facility guidelines do not replace the need for educational specifications ... that should be developed to describe the education program to be implemented."
- 1998 Deadline for completion of facility plans. Districts plans must develop updates every five years thereafter.
- 2005 North Carolina Education Lottery passed with a portion of revenues dedicated to school construction and class size reductions.
- 2011 Department of Public Instruction and State Board of Education issue guidelines identifying optimal school population sizes that will "offer excellent education programs that include a comprehensive curriculum ..."
 - Elementary schools 450 to 700 students
 - Middle schools 600 to 800 students
 - High schools 800 to 1,200 students
- Research on school climate and safety suggest significant reductions in optimal student numbers
 - Elementary schools 300 to 400 students
 - Middle schools 300 to 600 students
 - High schools 400 to 800 students

School Size Policy Best Practices from Other States: Kentucky Example

In reviewing the master planning and school construction guidelines and processes, certain best practices become apparent. In some states, public input is required at duly advertised public hearings and certain topics must be discussed, such as design efficiency ratios, cost factors compared to established limits, financial penalties for exceeding limits, and affordability based on limits to property tax increases. Transcripts of the public hearings as well as any subsequent written comments are submitted to Department of Education officials for their use in reviewing and approving projects for

state funding eligibility. If design efficiency factors or costs limits are exceeded, school boards are required to take formal action recognizing these decisions and explaining their decision to the public. In Arkansas, according to interviews with school officials, public input is informal at times when Master Plans are adopted, school construction plans are finalized, and school construction bids are awarded. This contrasts with states like Kentucky that have very formalized approaches to public input on school design. In Kentucky, every four years a local planning committee must develop a District Facility Plan and the state Department of Education reviews and comments on the plan. Those comments must be considered by the local committee at open public meetings.

Enrollment projections are generally provided by the state government using the cohort survival method, which incorporates birth rates in the projections and bases future projections on past patterns of enrollment change as an age cohort progresses through the grade levels. Arkansas uses county-level birth rates, but some other state projections are based on municipal-level birth rates. As proven by the Great Recession, birth rates can decline as much as 30 percent due to economic uncertainty and variations in birth rate in areas within a school district. These variations mean that some attendance areas within a district can be growing while others are declining. Variations between years can also result in different sizes of age cohorts (students in a grade level) between years. In other words, enrollments may be growing at some grade levels and declining in other grade levels.

Because expensive and difficult decisions about facilities and staffing are based on enrollment projections, it is best to utilize the latest techniques, including the use of geographic information systems with extensive demographic data that provide additional insight into enrollment change and reliability of enrollment projections. At this time, news reports are indicating higher birth rates due to the pandemic lockdown, whereas birth rates declined as much as 30 percent due to economic uncertainty in the Great Recession. Students born during the birth rate decline a decade ago are now in schools, resulting in significant fluctuations of enrollment as bubbles move through the grade levels. Therefore, it is important to understand the potential for enrollment growth at a local level in order to avoid expensive mistakes, such as selling an unused facility now when there is a possibility of needing it again soon. These spikes in birth rates, even if known in advance, require planning to accommodate the need for more space as well as more staff. If not anticipated with enough time to take appropriate actions, detrimental mistakes can occur.

For many decisions at all levels of educational decision-making, it is helpful to calculate a capacity for each school, then maintain those calculations for school district and statewide planning. Online facility planning calculators, similar to Arkansas's Program of Requirements, can be used to establish a school capacity for each school and by grade level configuration for all schools in a district. This allows analysis of projected enrollment compared to capacity at a district and school level. When combined at a regional or state level, the differences between school capacity and projected enrollment can assist in state-level policy discussions. These capacity and projected enrollment calculations allow consideration of sharing agreements between bordering districts when one district has excess capacity, and the other district needs capacity.

The Arkansas system also uses student classroom capacity standards, such as 30 students per high school classroom, which are often above actual student-teacher ratios. Also, the Arkansas system does not assign a capacity to specialized classrooms, including computer labs, music rooms, art rooms, science labs, gymnasiums, and other spaces. In other states, a gymnasium, for example, is given a capacity of 50 since the space provides two teaching stations. States that assign a student capacity to most spaces, use a utilization factor, such as 90 percent at the high school level, to reduce a total capacity figure to reflect the inability to schedule every room for every period of the school day. Since these capacity numbers are interpreted and used by many decision-makers at all levels throughout the school planning and design processes, it is valuable to have accurate space and capacity figures.

The enrollment capacity of a school should reflect the realistic capacity of each space. If the capacity of small spaces is overstated, it can result in an actual utilization below the capacity assumed during the design process. For example, in Kentucky, model elementary classrooms of 800 square feet or more are given a maximum class size of 24 for grades one to three, 28 for grade four, 29 for grades five and six. Between 721 and 800 square feet, the capacity is reduced to 25 at the upper grades. Between 651 and 720 square feet, the maximum class size is 22 and between 600 and 650, the maximum is 20 students. For the secondary level, 750 square feet is the model size with a base capacity of 25; 651 to 700 square feet for a maximum of 22 students; and 563 to 650 square feet with a maximum of 21 students. Secondary classrooms below 563 square feet may not be used as standard classrooms.

Kentucky also sets minimum and maximum school enrollments by type of school, shown in Table 8.A.7.

Grade Levels	Minimum Enrollment	Maximum Enrollment
Pre-school	100	300
Elementary	300	600
Middle School	400	900
High School	500	1,500
Alternative School	50	Not specified

Table 8.A.7: School Size Ranges in Kentucky

Modern educational programs require spaces for a growing percentage of students identified as special needs. The space and capacity requirements for special needs students are important considerations in any school construction project. If school renovation and new construction projects do not consider the spaces needed for special education students, schools are required to use other spaces designed for regular education uses, thereby reducing the capacity of the school. In Arkansas, two special education rooms of various types are required for 1,000 students and above. The various special education rooms are self-contained classrooms (850 square feet), workrooms/conference rooms (150 square feet), restrooms/showers (100 square feet), special education resource rooms (350 square feet), and occupational/physical therapy rooms (350 square feet), and gifted and talented rooms (850 square feet).

The school construction process is the best opportunity to make decisions on school size. Budget constraints at certain points during the planning and decision-making processes provide opportunities for decision-makers to consider school size for financial reasons. Kentucky requires special justification if

the cost of renovating a new facility exceeds 80 percent of the cost of new construction. Other states require project justification to consider long-term financial impacts using concepts such as total costs of ownership and 40-year life-cycle costing. In Kentucky, schools can be declared transition facilities to be phased out to minimize renovation costs.

In most states, school design plans and specifications are reviewed in detail at various stages of the design process by specialists in school architecture. Some states use a highly sequential review and approval process at all stages of school design and construction. This allows project managers to make interim decisions for the overall benefit of the project. For example, it is important not to spend large sums to renovate buildings that will still be deficient based on original design or site limitations. The interim decision would consider whether the estimated costs of a proposed renovation project exceed an established percentage of new construction costs. As the design process proceeds, another interim decision regards design efficiency ratios, where the total space to be constructed is limited by a ratio to classroom space, e.g. total space, including hallways, administrative, health, and instructional support spaces, cannot exceed 1.58 times classroom space in the Pennsylvania process. In some states, based on the experience of some school districts and the school design specialists employed at the state level, it is common to perform independent value engineering and constructability reviews that provide an independent opinion on the cost-effectiveness of the design.

School site location decisions can impose long-term costs and other impacts. Kentucky sets a requirement that 75 percent of its bus riders cannot ride for longer than 45 minutes at the elementary level and 60 minutes at the secondary level. The site selection process for new schools can address these considerations. For existing schools, site considerations may limit the size of an addition, forcing decision-makers to look at other options. These decisions must occur after master planning but early in the consideration of school construction options.

States that share in school construction funding can achieve school size objectives over time. The state's contribution provides an incentive for local school districts to meet the space, size, and capacity standards of a modern educational program. Implementation of state school size standards is achieved through a combination of providing technical advice and sharing in the financial support.

Impacts of Consolidation

Opponents of consolidation have found that additional administrative costs in large schools can undermine economies of scale.³ Meier (1996) found that educational and fiscal accountability were more likely in small schools because teachers and administrators are more visible and organizations are simpler. Monk (1987) found that after enrollment reached 400 students in a school, no additional benefit was achieved through economies of scale. Turner and Thrasher (1970) found that decreases in cost per student were minimal once enrollments reached 1,000 students. Fox (1981) found that cost curves are "U" shaped, meaning that increasing school size beyond an optimal level increases rather than decreases per-pupil cost. Monk (1992) found that projected savings for central administrative staff were not realized through consolidation because administrative expenses are a small proportion of a

³ McKinzie, 1983; Haller, 1992

total district budget. Fox (1981) noted that as school size increases and maximum class size is reached, no additional savings in instructional costs are possible and that increases in school size continue to increase administrative and supervisory costs. Alspaugh (1994) found that both very small and very large schools tend to be expensive to operate. McGuire (1989) concluded that schools with over 2,000 students are on the upward slope of the "U" shaped curve and that course offerings could be made available in more economical settings in smaller schools. Small schools, often found in rural areas with low population density, have high transportation costs due to longer distances.⁴

School district consolidations resulting in larger school districts and school closures and mergers resulting in larger schools pose an array of community, economic, financial, and academic issues that require comprehensive analysis by decision-makers. Closure can heighten tensions between affected communities and the government. For example, the 2006 closure of Paron High School in Arkansas's Saline County resulted in public protests, and supporters of the school filed a lawsuit against the Department of Education (Encyclopedia of Arkansas).

Civic Life and Economic Considerations

Schools are vital to rural communities because they provide many social, cultural and economic benefits. In smaller communities, they become the hub of social and cultural life where people gather for extracurricular activities and other events. Rural communities with schools rank higher than communities without schools on most indicators of social and economic well-being. Parents want their children to attend good schools. If a school is closed and not put to some other use, its abandoned buildings can become evesores or worse.⁵ Research also indicates that property values tend to be higher in rural communities and in urban neighborhoods with high-performing schools, both reflecting market demand. A 2002 study of rural areas in New York found that home values were significantly higher and better infrastructure was in place in small communities with schools.⁶ In larger New York villages with schools, property values were found to be about six percent higher. A more recent study in New York did not find that villages with a school enjoyed higher home values, but it did find economic benefits for those living closer to schools.⁷ A 2012 Brookings study on the cost of housing in the national's 100 largest metropolitan areas found that home values are \$205,000 higher on average in neighborhoods with high-scoring vs. low-scoring schools.⁸ Income inequality is greater in small rural communities without schools than in communities with schools. The study also found that more households receive public assistance in communities without schools, "although the differences are not large."

Academic Considerations

In 2008, University of Arkansas researchers found that students and staff who moved to a new school following a merger often reported being extremely anxious about finding their place in a new setting.⁹ Students and teachers in the receiving schools generally did not suffer from such anxiety. Students were

⁴ Fox, 1981

⁵ Lyson, 2002

⁶ Lyson, 2002

⁷ Sipple, Francis, Fiduccia 2019

⁸ Rothwell, 2012

⁹ Nitta, Halley, 2008

found to be more flexible than adults involved in the moves, saying that negative feelings about the change dissipated in a few months. Some teachers said they still did not feel comfortable in the new building even after two years. But most students, teachers, and administrators told the Arkansas researchers that the larger classes following a merger had few adverse effects on academic support. The study found benefits to students, including more variety in advanced courses and more extra-curricular activities. Heightened competition to take part in some activities was noted. A 2019 University of Pennsylvania study of school consolidation in Arkansas in 2004 found that graduation rates suffered.¹⁰ A 2013 study of consolidations in Texas found that student passing rates did not improve after consolidation and small rural districts experienced a decline in student achievement.¹¹

Financial Considerations

The same University of Pennsylvania study reported that improvements in efficiency should not be expected automatically. Consolidated schools reported administrative cost savings through reductions of central office personnel, but the study noted increased transportation costs offset half of those small savings.¹² The fear that a merger will require students to spend more time on buses is common among parents, but the Arkansas study found no significant increases, saying "It was usually 10-15 minutes at the most."¹³ The Texas study found no savings in per-pupil expenditures through consolidation when comparing consolidated districts and non-consolidated districts with similar organizational structures. Consolidation resulted in increases in per-pupil spending for districts that absorb another; joining districts saw only minimal declines in per-pupil expenditures. Though consolidation could prove cost-effective in a few instances, the study authors said they found no compelling evidence that mergers are cost-effective alternatives to small rural schools.¹⁴

Conclusions

School closures and mergers resulting in larger schools and school districts must be carefully considered because schools are important economically and culturally to a community. These decisions have advantages and disadvantages, and the research findings are not consistent. In larger schools, use of teaching staff may more closely approach desired student-teacher ratios. Students may have more course offerings and extracurricular activities. Financial and academic tradeoffs result from sharing of administrative personnel, but depending on the geographic circumstances, the savings may be offset by increased transportation cost.

Educational Service Cooperatives (ESCs)

Laws in most states enable the creation of regional education services agencies. These are known as Educational Service Cooperatives (ESCs) in Arkansas. The purpose of these agencies is to provide access to high quality and diverse services needed by school districts, particularly small and rural districts. In Chapter 8, each ESC and the number districts, school, and students served were identified.

¹⁰ Collins, 2019

¹¹ Cooley, Floyd, 2013

¹² Collins, 2019

¹³ Nitta, Halley, 2008

¹⁴ Cooley, Floyd, 2013

Map 8.A.1 shows the boundaries of the ESCs in dark blue boundary lines, with white school district boundaries showing all districts served by each ESC.





Table 8.A.8 notes the services provided by ESCs. Each was identified by reviewing ESC websites and were verified by telephone. This table provides an overview of the types of services provided by each ESC and may not include all services each provides.

Service Provided By ESC	Arch Ford ESC	Arkansas River ESC	Crowley's Ridge ESC	Dawson ESC	Dequeen/Mena ESC	Great Rivers ESC	Guy Fenter ESC	North Central Arkansas ESC	Northeast Arkansas ESC	Northwest Arkansas ESC	Ozark Unlimited Resources ESC	South Central Services COOP	Southeast Arkansas ESC	Southwest Arkansas ESC	Wilbur D. Mills ESC
Academic Attainment	Х														
AmeriCorps													Х		
Board Training			Х												
Bulk Ordering			Х												
Community Health Nurse		Х			Х	Х	Х				Х	Х		Х	
Computer Science	Х	Х	Х		Х			Х		Х				Х	
CTE	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х
CTE Perkins Consortium			Х												
Curriculum and Assessment														Х	
Digital Education		Х				Х									Х
Dyslexia Specialist	Х	Х			Х	Х									
Early Childhood	Х	Х	Х	Х	Х		X	Х		Х	Х		Х	Х	Х
Education Psychologist			Х												

 Table 8.A.8: Types of Service Provided by Each ESC

	ord ESC	as River	:y's Ridge	n ESC	en/Mena	Rivers ESC	nter ESC	Central as ESC	east as ESC	vest as ESC	Unlimited ces ESC	Central ss COOP	east as ESC	vest as ESC	D. Mills
	ch Fe	kans C	owle	IWSO	one. C	eat I	ıy Fe	orth (kans	orthe kans	brthv kans	ark l sour	uth rvice	uthe kans	uthv kans	ilbur C
Service Provided By ESC	Ar	Ar	ъ S	Da V	E D	Ğ	ษี	Ă Ă	A A	A N	O2 Re	Se Se	So Ar	So Ar	E K
ESOL Specialist		V		X						X					
Extended Learning Program	V	X	V	V	V	V	N						V	V	V
Fingerprinting	X	X	X	X	X	X	×						X	X	X
Foster Grandparents		V			X										
Free Books Unline		X													
Specialist	х	X	Х	Х	Х	Х	х	Х			х	Х	Х	Х	Х
Home Instruction for															
Parents of Preschool		x		x				x			x			x	x
Youngsters (Hinny)				~							~			~	~
Instructional Leadership		x													
K-12 Behavior Support															
Service		X	Х	Х	Х			Х		Х	Х	Х	Х		
K-12 Special Education															
Services					X	X									
Literacy Specialist	Х	Х	Х	Х	Х	Х				Х	Х	Х	Х	Х	Х
Math Specialist	Х	Х	Х	Х	Х			Х		Х	Х	Х	Х	Х	Х
Media Center Specialist		Х						Х							Х
Mentoring												Х		Х	
Migrant Program					Х		Х								
Non-traditional Learning		Х													
Novice Teacher		Х	Х	Х	Х	Х		Х					Х		
Occupational Therapy								Х							
Online Forms														Х	
Parents as Teachers (PAT)		Х													
Physical Therapy								Х							
Preschool Special Services						Х									
Print Shop										Х		Х	Х		
Professional Development	Х		Х				Х							Х	
Response to Intervention (RTI)					х										
Science Specialist	Х	Х	Х	Х	Х	Х						Х	Х	Х	
Science/STEM Specialist						Х	Х			Х					Х
SLP Support Personnel Program	x														
Special Education	Х		Х					Х			Х			Х	Х
Staff Development	Х														
Teacher Center											Х			Х	Х
Teacher Recruitment and															v
Retention															^
Technology						Х	Х	Х			Х		Х	Х	Х
The HUB/ALE	Х														
Vision Hearing Machine Calibration			х												
Vision Specialist			Х												

Table 8.A.9 displays the results of the LEA survey to determine which services are used to serve a need entirely or partially. In addition, it shows the percentage of school districts that do not utilize ESC services for a specific need.

Question	Services Used to Meet Entire Need	Services Used to Partially Meet Need	Services Not Used
Academic Attainment	13.61%	40.83%	45.56%
Career and Technology Education	20.71%	57.40%	21.89%
Community Health Nurse	13.61%	44.38%	42.01%
Computer Science	9.47%	36.09%	54.44%
Digital Education	11.24%	45.56%	43.20%
Dyslexia Specialist	13.02%	47.34%	39.64%
Early Childhood	36.09%	39.64%	24.26%
Electronic Fingerprinting	60.36%	15.38%	24.26%
ESOL Specialist	20.71%	33.73%	45.56%
Gifted and Talented Specialist	15.98%	55.62%	28.40%
K-12 Behavior Support Service	15.98%	52.66%	31.36%
K-12 Special Education Services	21.30%	44.97%	33.73%
Literacy Specialist	23.08%	54.44%	22.49%
Math Specialist	22.49%	55.62%	21.89%
Mentoring	35.50%	40.24%	24.26%
Novice Teacher Program	47.93%	41.42%	10.65%
Preschool Special Services	44.38%	30.18%	25.44%
Print Shop	9.47%	27.81%	62.72%
Professional Development	18.34%	77.51%	4.14%
Science Specialist	24.26%	51.48%	24.26%
Science/STEM Specialist	18.34%	47.93%	33.73%
SLP Support Personnel Program	8.28%	43.79%	47.93%
Special Education	17.16%	50.89%	31.95%
Staff Development	15.38%	75.15%	9.47%
Technology	11.83%	55.62%	32.54%
The HUB/ALE	17.16%	18.34%	64.50%
Vision Specialist	10.06%	34.91%	55.03%

Table 8.A.9: Use of ESC Services

Whether larger ESCs provide more services is addressed by Chart 8.A.4. The chart indicates that larger ESCs serving more districts do not provide more services.



Chart 8.A.4: Services Provided vs. Number of Districts Served

Chart 8.A.5: ESC Services Provided vs Number of Students Served



Conclusions on ESC Services

This analysis found that ESCs provide a wide variety of services to small and rural school districts and schools. The analysis also found that ESCs serving the largest number of students provide fewer services, which may reflect that the larger districts can serve their students cost-effectively without requesting

additional support from ESCs. It also may reveal that ESCs dominated by a large district may not serve the small and rural school districts within its boundaries as well. In ESCs without a large urban district, the districts served may demand a wider range of services. While this issue requires additional research, the concern is addressed by several of the recommendations, one of which is to conduct a statewide study with the participation of school leaders from rural and small schools to determine the needs, whether services can be created to meet those needs, whether other ESCs provide those services that might be offered statewide, and other related issues.

Another recommendation is to consider providing specialized services for rural and small schools by another entity, for example a statewide entity focusing primarily on the specific needs of rural and small schools. These needs range from specialized staffing directed at rural problems to specific supports such as financial recovery specialists who would be assigned to small or rural districts experiencing the greatest financial challenges. Arkansas has some examples of this type of arrangement, including facility planning experts working for several districts.

Further Efficiency Opportunities Shared Services and Cooperation Agreements

Further efficiency can be obtained through several other options. The state could encourage intergovernmental agreements between two or more districts. These agreements could help a district deal with short-term student population increases that bring a "bubble" of students by allowing one district to pay tuition to send some of its students to another district while the bubble persists. The district paying the tuition would avoid expensive construction to accommodate the short-term increase in students. Districts could share transportation needs when vehicles from one district take students through a neighboring district for special education, to address homeless needs, or other reasons. Small rural schools could pay tuition for students to participate in another district's distance learning options for advanced and diverse coursework. The agreements could enable one district to rent specialty spaces, such as science labs, computer labs, and planetariums to other districts. Districts also could share specialists on alternating days. These cooperative arrangements also could include purchasing agreements and combining financial services. It is common for small school districts to share certain types of expertise, including food service managers, grant writers, HVAC mechanics, heavy equipment operators, professional development experts on specific topics, and many others listed in the Appendices. These arrangements are not limited to school district agreements only because many of these needs can be met by other local government agencies. State grants for pilot programs are used in many states to implement and evaluate options.

Potential to Share One-of-a-Kind Positions

Sharing one-of-a-kind positions offers potential to address specialized needs with flexible and costeffective arrangements. Districts could use cooperative agreements to share the costs of these specialized positions, including managers of curriculum, facilities, federal programs, food services, technology, human resources, and transportation and other functions. Specialized services not needed on a full-time basis by small school districts include strategic planning, recruiting and hiring, professional development, grant writing, fundraising, public relations, facility planning, construction management, and similar functions. In technology, shared employees could address planning and specialized software instruction, infrastructure planning, and network support and equipment repair. On operational functions, districts could share expertise on equipment repair, bus driver training and retention, bus route planning, vehicle maintenance, energy management, preventative maintenance, and other specialized functions. Districts also could consider sharing vehicle maintenance staff and facilities.

Potential to Share Equipment

Instructional equipment could be shared among schools and school districts. Examples include science, computer, and robotics labs as well as mobile planetariums. Science kits can also travel among schools and districts. Expensive printing equipment ranges from high-speed copiers to 3D printing. The potential to share equipment is not limited to other school districts or educational cooperatives. Equipment sharing with local and state government agencies can involve expensive, seldom needed equipment, such as excavators, backhoes, dump trucks, boom lifts, and groundskeeping equipment.

Examples of Sharing for Gifted and Talented Programs

Programs serving a small number of students, such as gifted and talented programs, provide opportunities to share specialized staffing and instructional resources. Regional professional development for teachers of this population can result in sharing of lessons and activities. Shared assemblies, even a Ted Talk type format, are now possible with interactive video conferencing. Circuit rider specialists are used in some areas, and this could expand into traveling assemblies. Collaborative projects between students living in rural areas are now possible with technological improvements. Online programs may also increase cost-effectiveness in providing gifted and talented programs.

Expansion of ESCs

ESCs that can provide expanded services are often referred to as Regional Education Service centers in other states. Selected examples from other states include:

- Texas: 20 Regional Education Service Centers offer approximately 400 different instructional, administrative, financial, training, and technology services estimated to save school systems over \$60 million per year.
- Connecticut: instructional, administrative, programs for gifted and talented students, early childhood education, community business and adult education, technology, strategic planning, special education and pupil services, cooperative purchasing, public relations, academic audits, behavioral intervention strategies.
- Pennsylvania: distance learning network, healthcare consortiums, administrative software, specialized transportation, training, grant writing, financial benchmarking.
- Montana: gifted and talented professional development, resource sharing-equipment and personnel, distance learning training.

In Arkansas, while many services are offered, more services could be added. Regular performance evaluation of existing programs and services should also be implemented for all offerings to ensure that the needs of small and rural districts are being met.

References

Alspaugh, J. (1994). The relationship between school size, student teacher ratio, and school efficiency. *Education*, 114, 593-597.

Balcom, J.J. (2013). Leadership in school district consolidation and the impact on student outcomes. Drexel University

Barker, R. G., & Gump, P. V. (1964). *Big school, small school*. Palo Alto, CA: Stanford University Press.

Barrington, B., & Hendricks, B. (1989). Differentiating characteristics of high school graduates, dropouts, and non-graduates. *Journal of Educational Research*, 82, 309-319.

Bingler, S., Diamond, B. M., Hill, B., Hoffman, J.L., Howley, C.B., Lawrence, B.K., Mitchell, S.& Washor, E. (2002) *Dollars and sense: The cost effectiveness of small schools*. Retrieved from http://eric.ed.gov/:ed=ED473168

Boser, U. (2013). *Size Matters: A look at school-district consolidation*. Center for American Progress. Retrieved from https://www.americanprogress.org/wp-content/uploads/2013/08/SchoolDistricSize.pdf

Carruthers, W. (1993). *All about attendance: A manual and case studies for schools and families* (Report No. CG 025 119). Raleigh, NC: Wake County Public School System. (ERIC Document Reproduction Service No. ED 364 799).

Collins, Gregory, "School District Consolidation and Its Academic and Financial Effects" (2019) *Publicly Accessible Penn Dissertations*. 3235. <u>https://repository.upenn.edu/edissertations/3235</u>

Conant, J.B. (1967). The comprehensive high school. New York: McGraw-Hill.

Connecticut Alliance of Regional Education Service Centers. RESC Alliance Services. Retrieved November 11, 2017 http://www.rescalliance.org/instructional.html. November 11, 2017.

Cooley, Dwight A., University of Texas at Arlington, and Koy A. Floyd, Tarleton State University, "Small Rural School District Consolidation in Texas: An Analysis of Its Impact on Cost and Student Achievement" (2013) *Administrative Issues Journal: Education, Practice, and Research, Vol.3, Issue 1*

Crone, L., Glascock, C., Franklin, B., & Kochan, S. (1993, November). *An examination of attendance in Louisiana schools.* Paper presented at annual meeting of the Mid-South Educational Research Association, New Orleans, LA.

Duncombe, W., & Yinger, J. (2007). Does school district consolidation cut costs? *Education*, 2(4), 341-375. doi: 10.1162/edfp.2007.2.4.341

Duncombe, W. & Yinger, J. (2015). Does School District Consolidation Cut Costs? Syracuse, New York: Center for Policy Research.

Encyclopedia of Arkansas, "School Consolidation" https://encyclopediaofarkansas.net/entries/school-consolidation-5052/

Fetler, M. (1989). School dropout rates, academic performance, size, and poverty: Correlates of educational reform. *Educational Evaluation and Policy Analysis*. II, 109-116.

Finn, J. (1998). *Class size and students at risk: What is known? What is next?* A commissioned paper. National Institute on the Education At-Risk Students. Office of Educational Research and Improvement. Washington, DC: U.S. Department of Education.

Forbes, R. H., Fortune, J.C., & Packard, A.L. (1993, February). North Carolina rural initiative study of secondary schools: Funding effects on depth of the curriculum. Paper presented at the annual meeting of the Eastern Educational Research Association, Clearwater, FL (ERIC Document Reproduction Service NO. ED 360 133).

Fowler, W.J., Jr. (1995) School size and student outcomes. In H.J. Walberg & W. S. Barnett (Eds.), *Advances in educational productivity*: Vol. 5. (pp. 3-26) Greenwich, CR: JAI Press, Inc.

Fowler, W.J., Jr., & Walberg, H. J. (1991). School size, characteristics, and outcomes. *Educational Evaluation and Policy Analysis*, 13, 189-202.

Frederick, W., & Walberg, H.J. (1980). Learning as a function of time. *Journal of Educational Research*, 73, 183-194.

Gershenson, S., & Lengbein, L. (2015). The effect of primary school size on academic achievement. *Educational Evaluation and Policy Analysis*, 1(37), 135-155. doi:10.3102/0162373715576075.

Gooding, R.Z., & Wagner, J.A., III. (1985). A meta-analytic review of the relationship between size and performance: The productivity and efficiency of organizations and their subunits. *Administrative Science Quarterly*, 30, 462-481.

Gregory, T. (1992). Small is too big: Achieving a critical anti-mass in the high school (Report No. RC 019 319). In *Source book on school and district size, cost, and quality* (Report No. RC 019-318). Minneapolis, MN: Minnesota University, Hubert H. Humphrey Institute of Public Affairs; Oak Brook, IL: North Central Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 361 159).

Haller, E. J. (1992). High school size and student discipline: Another aspect of the school consolidation issue? *Educational Evaluation and Policy Analysis*, 14, 145-156.

Holland, A., & Andre, T. (1994). The relationship of self-esteem to selected personal and environmental resources for adolescents. *Adolescence*, 29, 345-360.

Howley, C. (1994) *The academic effectiveness of small-scale schooling: An update*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No 372-897).

Howley, C., Johnson, J., & Petrie, J. (2011), Consolidation of Schools and Districts: What the Research Says and Means. Boulder, Colorado: National Education Policy Center.

Inerman, M., & Otto, D. (2003). A preliminary investigation of school district expenditures with respect to school district size in Iowa. Retrieved from www.econ.iastate.edu/research/webpapers/paper-10183.pdf

Jackson, J. L. (1996). *School size and program quality in southern high schools*. Nashville, TN: Center for Sourthern Education Studies, George Peabody College for Teachers.

Lindsay, P. (1982). The effect of high school size on student participation, satisfaction, and attendance. *Educational Evaluation and Policy Analysis*, 4, 57-65.

Lyson, Thomas A. 2002. "What does a school mean to a community? Assessing the social and economic benefits of schools to rural villages in New York". *Journal of Research in Rural Education* 17:131-137.

McGuire, K. (1989). *School size: The continuing controversy*. Education and Urban Society, 21, 164-174.

McKenzie, P. (1983), April). *The distribution of school size: Some cost implications*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada. (ERIC Document Reproduction Service No. ED 232 256).

Meier, D. W. (1996, September). The big benefits of smallness. *Educational Leadership*, 54, 12-15.

Monk, D.H. (1987) Secondary school size and curriculum comprehensiveness. *Economics of Education* Review, 6, 137-150.

Monk, D. H. (1992). *Modern conceptions of educational quality and state policy regarding small schooling units* (Report No. RC 019 320) In Source book on school and district size, cost, and quality (Report No. RC 019 318). Minneapolis, MN: Minnesota University, Hubert H. Humphrey Institute of Public Affairs; Oak Brook, IL: North Central Regional Educational Laboratory. (ERiC Document Reproduction Service No. ED 361 160).

Nitta, Keith, Holley, Marc, & Wrobel, Sharon, (2008) A Phenomenological Study of School Consolidation. Published in 2010 in the Journal of Research in Rural Education, 25(2), 1-19. Retrieved from <u>http://jrre.ppsu.edu/articles/25-2.pdf</u> Nguyen-Hoang, P., & Yinger. J. (2014). Education finance reform, local behavior, and student performance in Massachusettts. *Journal of Education Finance*, 4(39), 297-322.

Preston, J.P., Jakubiec, B. A. e., & Kooymans, R. (2013). Common challenges faced by rural principals: A review of the literature. *Rural Educator*, 1(35).

Rothwell, Jonathan, "Housing Costs, Zoning, and Access to High–Scoring Schools" (2012) *Metropolitan Policy Program at Brookings* <u>https://www.brookings.edu/research/housing-costs-zoning-and-access-to-high-scoring-schools/</u>

Sipple, John W., Francis, Joe, Fiduccia, Peter Cody, "Exploring the gradient: The economic benefits of 'nearby' schools on rural communities" (2019) *Journal of Rural Studies, Vol. 68, May 2019, Pages 251-263*. <u>https://doi.org/10.1016/j.jrurstud.2019.02.018</u>

Standard and Poors School Evaluation Service. (2007). Study of the Cost-Effectiveness of Consolidating Pennsylvania School Districts. New York: Author.

Sybouts, W, & Bartline, D. (1998). *Rural school board presidents look at school reorganization*. Lincoln, NE: Bureau of Educational Research and Field Services. (ERIC Document Reproduction Service No. ED 317 359).

Texas System of Education Service Centers. (2012). Rider 39 Report: Cost Savings Experienced by School Districts and Charter Schools. Austin, TX: Author

Turner, C. C., & Thrasher, J. M. (1970). *School size does make a difference*. San Diego, CA: Institute for Educational Management. (ERIC Document Reproduction Service No. ED 043 946).

Unks, G. (1989). Differences in curriculum within a school settling. *Education and Urban Society*, 21, 175-191.University of Arkansas, "University of Arkansas Researchers Study Effects of School Consolidation on Students, Educators" (March 27, 2008) *University of Arkansas News*. Study by Marc Holley. <u>https://news.uark.edu/articles/12851/university-of-arkansas-researchers-study-effects-of-schoolconsolidation-on-students-educators</u>

Viadero, D. (1998, May 6). N.Y.C. study weighs costs of small schools. *Education Week*. <u>http://www.edweek.org/ew/ewstory.cfm?slug=34study. hl7&keywords=Viadero</u>

Welsch, D.M., & Zimmer, D.M. (2016). The dynamic relationship between school size and academic performance: An investigation of elementary schools in Wisconsin. *Research in Economics*, 1(70-169. 158-169. Doi: 10.1016/j.rie.2015.07.006.

Appendix 9: Attraction and Retention of Staff

References

American Association of Colleges of Nursing, Nursing Shortage. Accessed on the web: <u>https://www.aacnnursing.org/News-Information/Fact-Sheets/Nursing-Shortage</u>

Carver-Thomas, D. & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it.* Palo Alto, CA.

Centers for Disease Control and Prevention, *Results from the School Health Policies and Practices Study 2014* (Washington, DC: Department of Health and Human Services, 2015), 75.

Gould, Elise (2019), Back-to-School Jobs Report Shows a Continued Shortfall in Public Education, Washington, D.C. Economic Policy Institute.

Kovner, Christine T, et al. (2007), Newly licensed RNs' characteristics, work attitudes, and intentions to work. New York University College of Nursing, New York City, NY.

Maughan, Erin (2016), Building Strong Children – Why We Need Nurses in Schools. American Educator, Spring 2016. 19

National Association of School Nurses. How is School Nursing Funded in the United States? Accessed on the web: <u>https://higherlogicdownload.s3.amazonaws.com/NASN/3870c72d-fff9-4ed7-833f-215de278d256/UploadedImages/PDFs/Advocacy/2017 Workforce Study Infographic Funding.pdf</u>

National Association of School Nurses. The Role of the 21st Century School Nurse. Accessed on the web: <u>https://www.nasn.org/advocacy/professional-practice-documents/position-statements/ps-role</u> ¹Baisch, Mary J., Sally P. Lundeen, and M. Kathleen Murphy (2011), Evidence-Based Research on the Value of School Nurses in an Urban School System, *Journal of School Health* 81:74–80. ¹National Association of School Nurses. Five Ways School Nurses Benefit Schools. Accessed on the web: <u>https://neusha.org/student/programs/attachments/FiveWays.pdf</u>

National Association of School Nurses. School Nurse Workload: Staffing for Safe Care. Accessed on the web: <u>https://www.nasn.org/advocacy/professional-practice-documents/position-statements/ps-workload</u>

National Center for Education Statistics (2019), Public School Enrollment. Washington, D.C. Accessed on the web: <u>https://nces.ed.gov/programs/coe/indicator_cga.asp</u>

Pediatrics June 2016, Volume 137, Issue 6. Role of the School Nurse in Providing School Health Services. Accessed on the web: <u>https://pediatrics.aappublications.org/content/137/6/e20160852</u>

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Palo Alto, CA: Learning Policy Institute. 2.

United States Bureau of Labor Statistics (2018), Occupational Handbook. Accessed on the web: <u>https://www.bls.gov/ooh/healthcare/registered-nurses.htm</u>

United States Bureau of Labor Statistics (2018), Occupational Employment Statistics. May, 2018. Accessed on the web: <u>https://www.bls.gov/oes/2018/may/oes291141.htm#st</u>

United States Bureau of Labor Statistics (2018), Occupational Employment Statistics. May, 2018. Accessed on the web: United States Bureau of Labor Statistics (2018), Occupational Employment Statistics. May, 2018. Accessed on the web: <u>https://www.bls.gov/oes/2018/may/oes291141.htm#st</u>

United States Department of Education – National Center for Education Statistics (2016). Teacher Turnover: Stayers, Movers, and Leavers.

Appendix 10. Other Requested Studies

Professional Development No additional materials

Student Mental Health No additional materials

Waivers

Topic Area	Statute	ADE Rule	Accreditation Standard	Total Individual Waivers
Teacher Licensure	11	2	4	17
Library Media	7	-	5	12
Salaries/Compensation/Personnel Policies	7	1	3	11
Curriculum	1	-	9	10
Class Size and Teaching Load	1	1	6	8
Flexible Schedule	4	-	3	7
Alternative Learning Environment	3	1	2	6
Personnel Policies	6	-	-	6
Board of Directors	4	-	-	4
Guidance and Counseling	1	-	3	4
Principal	1	-	3	4
Attendance	2	1	-	3
Grading Scale	1	1	1	3
Advanced Placement	1	1	-	2
Credit Hours	-	-	2	2
Student Services	1	1	-	2
Superintendent	2	-	-	2
Achievement Gap Task Force	1	-	-	1
College Credit	1	-	-	1
Duty-Free Lunch	-	-	1	1
Facilities	-	-	1	1
Planning Periods	1	-	-	1

Table A.10.1: Number of Individual Waivers in Each Topic Area

Table A.10.2: Number of 1240 Schools with Waivers in Each Topic Area

	15-16	16-17	17-18	18-19	19-20
Flexible Schedule	10	136	212	951	979
Teacher Licensure	30	116	293	311	258
Attendance	0	110	146	143	143
Library Media	0	54	84	91	102
Credit Hours	22	33	79	88	87
Class Size and Teaching Load	2	21	68	73	79

	15-16	16-17	17-18	18-19	19-20
Salaries/Compensation/Personnel Polices	4	57	59	55	79
Grading Scale	13	23	29	27	28
Facilities	19	19	19	19	19
Principal	0	3	3	14	15
Alternative Learning Environment	0	5	11	10	11
Planning Periods	0	8	12	11	11
Guidance and Counseling	0	5	9	8	10
College Credit	9	9	9	9	9
Curriculum	0	8	12	11	9
Duty-Free Lunch	0	6	6	5	5
Superintendent	0	3	3	2	5
Achievement Gap Task Force	0	3	5	4	4
Student Services IR	0	3	7	6	4
Advanced Placement	0	3	3	2	2
Board of Directors	0	3	3	2	2
Total Schools	32	219	447	952	988

Table A.10.3: Aggregated Waiver Achievement/Growth Regression Analysis Results

Is having waiver(s) associated with:	Instruction Waiver	Resource Waiver
All Students		
Change in Math Achievement	NS +	NS +
Change in Math Growth	NS +	NS +
Change in Literacy Achievement	NS +	NS +
Change in ELA Growth	NS -	NS +
FRL Students		
Change in Math Achievement	NS +	NS +
Change in Math Growth	NS +	NS +
Change in Literacy Achievement	NS +	S + (1.2 % pt. 个)
Change in ELA Growth	NS +	NS +

Table A.10.4: Aggregated Waiver Expenditure Regression Analysis Results

Is having waiver(s) associated with:	Instruction	Resource
Change in Instructional Expenditures Per Pupil	NS -	NS +
Change in Total Expenditures Per Pupil	NS +	S + (\$613 个)

Table A.10.5: Individual Waiver Topic Area Achievement/Growth Regression Analysis Results

Is having a waiver associated with:	Attendance	Licensure	Library Media
Change in Math Achievement	S + (2.0 % pt. 个)	S - (1.9 % pt. ↓)	NS -
Change in Math Growth	S + (.64 pt. 个)	NS-	S - (.74 pt. ↓)
Change in Literacy Achievement	NS +	NS -	NS -
Change in ELA Growth	S + (.54 pt.个)	NS -	NS -

Vouchers

School Voucher and Tax Credit Programs, SREB States and Massachusetts			
Alabama		Х	
Arkansas	Х		
Delaware			
Florida	X	Х	
Georgia	Х	Х	
Kentucky			
Louisiana	X	Х	
Maryland	Х		
Massachusetts			
Mississippi	X		
North Carolina	X		
Oklahoma	X	Х	
South Carolina		Х	
Tennessee	Х		
Texas			
Virginia		Х	
West Virginia			

Table A.10.6: School Voucher and Tax Credit Programs in Comparison States

Table A.10.7: Brief Descriptions of Comparison State Voucher Programs

State	Brief Description of Voucher Program
Florida	Two voucher programs : John M. McKay Scholarships for Students with Disabilities Program (since 1999), voucher amount is based upon what the district would have spent on the participating child per their individual plan; and <u>Family Empowerment Scholarship</u> (enacted in 2019); students from households up to 300% of federal poverty level (or direct certification list), and those in foster care or out of home placement are eligible; requirement for attendance in public school the prior school year. Voucher amount is the lesser of the school's tuition and fees or the calculated scholarship amount - based upon the grade level and district of residence, be calculated at 95% of the funds per unweighted FTE full-time equivalent in the Florida Education Finance program for a student in the basic program, plus a per-full-time equivalent share of funds for all categorical programs, except special education.
Georgia	<u>Special Needs Scholarship Program</u> , a school choice program available for special needs students attending Georgia public schools who are served under an Individualized Education Plan (IEP). Scholarship award amounts can be used at in- or out-of-district public schools or private schools and are based upon the services the student received in the local school district.
Louisiana	Two voucher programs : <u>School Choice Program for Students with Exceptionalities</u> , provides special needs students in certain parishes tuition assistance to attend participating schools with special needs programming. Tuition assistance is approximately 50% of the state per pupil funding for the district. <u>Louisiana Scholarship Program</u> is available to families with income below 250% of the federal policy level and enrolled in a public school with a C, D or F letter grade. Voucher amount is the lesser of 90% percent of the per pupil amount the district receives from state and local sources or total school tuition and fees.
Maryland	Broadening Options and Opportunities for Students Today (BOOST) program, provides scholarships for students who are eligible for the Free or Reduced-Price Meals program. Awards are granted based on household income, with the lowest income served first; availability of awards subject to program appropriation.

State	Brief Description of Voucher Program
Mississippi	Two voucher programs: one for students with dyslexia, one for students with disabilities. <u>Dyslexia</u> <u>Therapy Scholarship for Students with Dyslexia Program</u> provides students with dyslexia the option to enroll at an approved public or nonpublic school with dyslexia therapy programs. Maximum scholarship is an amount equivalent to the Mississippi Adequate Education Program base student cost. <u>Nate Rogers Scholarship for Students with Disabilities Program</u> provides K-6 students with speech- language impairment to attend an approved public or nonpublic school that emphasizes speech- language therapy and intervention. Maximum scholarship is an amount equivalent to the Mississippi Adequate Education Program base student cost.
North Carolina	Two voucher programs , one for students with disabilities, one for low-income students to attend private school. The <u>Disabilities Grant Program</u> provides assistance of up to \$8,000 per year for awarded students with disabilities who enroll in a participating nonpublic school, including home school. <u>NC Opportunity Scholarship Program</u> provides a maximum of \$4,200 per year for students from low income families to attend a participating private school.
Oklahoma	The <u>Lindsey Nicole Henry Scholarships for Students with Disabilities</u> provides scholarships for students with disabilities and students in foster care/out-of-home placements with funding to attend a private school. Amount is equivalent to total state aid, including grade and disability weights
Tennessee	Newly enacted, planned to launch for the 20-21 school year, <u>Education Savings Account Program</u> , would allow low-income families in two counties (Memphis and Nashville) to use state and local Basic Education Program funds at participating private schools. Funds would be deposited into ESA accounts, and could also be used for transportation, tutoring, other school expenses, and higher education. Current legal challenge has delayed implementation.

Table X. Brief Descriptions of Comparison State Tax Credit Scholarship Programs

State	Brief Description of Tax Credit Scholarship Program
Alabama	Opportunity Scholarship Fund: individuals may donate up to one half of their annual Alabama income tax liability and receive a dollar-for-dollar credit. Individual donations are capped at \$50,000. Provides scholarships to low-income, K-12 children to attend public or private school of their choice; first priority is for students zoned to attend a "failing" public school. \$30 Million annual cap on tax credits.
Florida	Two tax credit scholarship programs. <u>Florida Tax Credit Scholarship Program</u> provides for state tax credits for contributions to nonprofit scholarship funding organizations (SFOs). SFOs then award scholarships to eligible children of low-income families. Tax credit cap for the 2019-2020 fiscal year is \$873,565,674. During the 2018-19 school year, scholarships in the amount of \$644 million were awarded to 104,091 students enrolled in 1,825 participating Florida private schools; <u>Hope Scholarship Program</u> (enacted 2018) allows purchasers of motor vehicles to contribute their vehicle sales tax to fund private school scholarships. Hope Scholarships may be used by students who are victims of bullying or are physically attacked in school. These students may also transfer to other public school districts.
Georgia	The <u>Qualified Education Expense Tax Credit</u> allows taxpayers (individuals and corporations) to receive tax credits for donations to Student Scholarship Organizations (SSOs). SSOs will provide student scholarships to parents of eligible children who plan to attend private schools; \$100 million donation cap annually.
Oklahoma	The <u>Oklahoma Equal Opportunity Education Scholarship</u> allows individuals and businesses to receive state income tax credits for donating to a scholarship granting organization (SGO) recognized by the Oklahoma Tax Commission. The SGO then uses those contributions to provide scholarships for eligible students to attend an accredited private school; \$5 million credit cap annually.

State	Brief Description of Tax Credit Scholarship Program
Louisiana	Louisiana authorizes School Tuition Organizations (STOs) to collect and use taxpayer donations to provide scholarships to students that meet the program's income requirements to attend nonpublic schools through its <u>Tuition Donation Credit Program</u> . All School Tuition Organizations are tax-exempt, not-for-profit organizations with 501(c)(3) status. Taxpayers earn a credit toward their Louisiana state taxes for the year in which they make a donation. To be eligible for a scholarship from an STO, students must have a family income that does not exceed 250% of the federal poverty line and must be entering kindergarten, currently enrolled in a Louisiana public school, or enrolled in the Louisiana Scholarship Program. School Tuition Organizations determine the amount of the scholarship. Scholarship amounts cannot exceed the lesser of either the school's tuition and mandatory fees or 80% of the state average per pupil funding for elementary and middle school students (approximately \$4,200) and 90% of the state average per pupil funding for high school students (approximately \$4,700).
South Carolina	<u>Exceptional South Carolina</u> allows taxpayers (individuals and corporations) to receive tax credits for donations to the Exceptional SC Scholarship Fund, up to 60% of income tax liability, which provides scholarships to exceptional needs students. \$12 million annual statewide cap.
Virginia	The <u>Education Improvement Scholarships Tax Credits Program</u> provides state tax credits for persons or businesses making monetary donations to foundations that provide scholarships to eligible students and children attending eligible private schools and eligible nonpublic pre-kindergarten programs. \$25 million annual statewide cap.

References

Archibald, Sarah; Coggshall, Jane G.; Croft, Andrew; Goe, Laura. (2011). *High-Quality Professional Development for All Teachers: Effectively Allocating Resources. Research & Policy Brief.* National Comprehensive Center for Teacher Quality.

Costrell, R., (2010). *The Fiscal Impact of the Milwaukee Parental Choice Program: 2010-2011 Update and Policy Options,* SCDP Milwaukee Evaluation Report #22, University of Arkansas, Fayetteville, AR.

Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). Effective Teacher Professional Development. Palo Alto, CA: Learning Policy Institute.

Jimerson, Lorna. *Breaking the Fall: Cushioning the Impact of Rural Declining Enrollment,* Rural School and Community Trust, Arlington, VA, 2006, p3.

Labone, Elizabeth, and Long, Janette. (2014). *Features of effective professional learning: a case study of the implementation of a system-based professional learning model*. Professional Development in Education.

Moon, J. & Stewart, M., (2016) Research Brief: *Understanding How School Vouchers are Funded: Summary of Funding for the Indiana Choice Scholarship Program.* Center for Evaluation and Education Policy, Indiana University, Bloomington, IN.

Appendix 11. Review of Resources in Matrix and Methods for Routinely Reviewing Adequacy

No additional materials

References

Lawrence O. Picus and Associates (2003). *An Evidenced-Based Approach to School Finance Adequacy in Arkansas.*

Lawrence O. Picus and Associates (2006). Recalibrating the Arkansas School Funding Structure.

Picus Odden and Associates (2014). *Desk Audit of the Arkansas School Funding Matrix and Developing an Understanding of the Potential Costs of Broadband Access for All Schools.*

Appendix 12: Recommendations

No additional materials