**U.S. Department of Education**

# *Identifying and Addressing Priority Education Needs*

## *Appalachia*
*Regional Advisory Committee*

*December 2023*

MSG
MANHATTAN STRATEGY GROUP

# Acknowledgments

# Table of Contents

## Executive Summary

This report summarizes the activities and results of the Appalachia Regional Advisory Committee (RAC), authorized under the Educational Technical Assistance Act of 2002 (ETAA) (Pub. L. 107-279; 20 U.S.C. § 9605). The 10 RACs were established to provide advice and recommendations to the Secretary of Education (Secretary) regarding the educational needs of one of the ten regions served by the Regional Educational Laboratories (RELs) for input regarding technical assistance (TA) activities described in Section 203 of the ETAA and how those needs would be most effectively addressed. The Secretary sought recommendations for nominations to serve on the RAC from the Chief Executive Officers of States, Chief State School Officers, and education stakeholders within each region, and appointed members to the RAC in August 2023. The activities discussed in this report took place from August to November 2023.

Members reviewed a regional profile comprised of educational statistics and other relevant data to inform their individual assessments of the challenges and educational needs in the region. The RAC additionally sought input from Chief Executive Officers of States, Chief State School Officers, REL Governing Boards, and other education stakeholders through processes including online surveys, literature review, and public comment solicitations. The goal of these processes was to solicit the views and needs of schools (including public charter schools), educators, parents, teachers, administrators, local education agencies (LEAs), librarians, businesses, state education agencies (SEAs), and other customers within the region regarding the need for the activities described in 20 U.S.C. sections 9564 and 9602 and how those needs would be most effectively addressed. In total, the RAC conducted two surveys, received two survey responses, and received 25 public comments, further described in the Data Collection section of this report.

The Appalachia RAC held three virtual meetings to discuss and conduct its needs assessment. During the first meeting, held on September 5, 2023, the RAC reviewed educational data and public comments, deliberated, and made recommendations to address the needs of the region. During the second meeting, held on October 13, 2023, the RAC reviewed additional data, deliberated on the educational needs of their region, and voted on the top five recommended priorities to be included in a final needs assessment report. A final meeting was held on November 14, 2023, to review the subcommittees' written recommendations and vote to approve the final needs assessment report for submission to the Secretary.

The five priorities identified by committee members and discussed in further detail in this report are:

➢ **Priority #1: Chronic Absenteeism** – The number of chronically absent students in the Appalachia region has steadily increased, impacting student achievement. There are numerous issues that need to be addressed to support the region in overcoming this priority.

➢ **Priority #2: Employer/Workforce Preparation and Needs** – Workforce development and the role of K-12 education in Appalachia are critical issues given the economic challenges the region has historically faced. There are several key considerations regarding this priority, including

economic competitiveness, bridging skills gaps, reducing unemployment, addressing income inequity, and futureproofing.

➢ **Priority #3: Family Engagement** – Decades of research on family engagement in schools show a positive impact on student academic achievement. The RAC identified two key areas in family engagement: teacher preparation and grandparents raising grandchildren.

➢ **Priority #4: Teacher Shortage and Recruitment** – Results of the needs assessment activities conducted by RAC members indicated teacher shortage and recruitment as a high priority for the Appalachia region. Superintendents throughout the region have cited teacher recruitment and retention as the most common educational challenge and need.

➢ **Priority #5: Student/Teacher Mental Health** – Stakeholders listed additional funding and training for teachers and students as the highest priority needs in mental health and well-being. In particular, there is a critical need for funding and capacity for more nurses, counselors, social workers, and school psychologists.

# Introduction

The Secretary of Education (Secretary) established ten Regional Advisory Committees (RACs), authorized by the Educational Technical Assistance Act of 2002 (ETAA) (20 U.S.C. sections 9601 et. seq.) and governed by the provisions of the Federal Advisory Committee Act (FACA) (Public Law 92-463). The purpose of the RACs is to collect information on the education needs of each region and how those needs may be addressed through technical assistance activities provided by the Comprehensive Centers Program described in section 203 of the ETAA and other Department technical assistance activities.

RAC members are appointed by the Secretary based on recommendations from Chief Executive Officers of States, Chief State School Officers, and education stakeholders within each region. Appalachia RAC membership is comprised of both Special Government Employees (SGEs) and representatives of organizations or recognizable groups of persons including state education agencies (SEAs), local education agencies (LEAs), including rural and urban LEAs, institutions of higher education, parents, practicing educators, including classroom teachers, principals, other school administrators, researchers, and individuals from the business community. For a complete list of Appalachia RAC members, please see Appendix B.

Each RAC sought input on regional educational needs from Chief Executive Officers of States, Chief State School Officers, Regional Educational Laboratory (REL) Governing Boards, and other education stakeholders in the region and the public. The Appalachia RAC conducted outreach activities such as focus groups to obtain input from various constituencies on regional needs and how to address those needs, used statistical data from the Appalachia Regional Profile (Appendix C), and deliberated during public meetings from September 5 through November 14, 2023. The RAC established one subcommittee to draft a report summarizing the results of the needs assessment and their recommendations. A final public meeting was held to review the subcommittee's recommendations and vote to submit the final educational needs assessment report to the Secretary.

This report is based on the assessment of educational needs within the Appalachia region, which includes the following states: Kentucky, Tennessee, Virginia, and West Virginia. The analysis and recommendations herein represent the findings of this assessment and the advice of the Appalachia RAC to the Secretary.

## Data Collection

The Appalachia Regional Advisory Committee (RAC) members were provided an Appalachia Region Profile that included data compiled by the U.S. Department of Education. The states comprising this region are Kentucky, Tennessee, Virginia, and West Virginia. Data for each state, as well as comparisons across the region, included the following topics:

- Information about Districts and Schools
- Student Enrollment Information
- Graduation Information
- Student Academic Information
- Student Non-Academic Information
- Teacher Information
- Teacher Qualifications
- Teacher Shortage
- Financial Resources
- Resources

Initial public comments were gathered concerning the top educational needs, the rationale for each of the needs, information that would provide a better understanding of the needs, and additional comments about educational needs and methods for addressing these needs. A review of the described profile data and the public comments served as the foundation in our needs-sensing process to determine the region's highest priorities.

Next, the Appalachia RAC members, in collaboration with the DFO and Liaisons, developed an action plan where tasks were assigned to various members to gain insight from various stakeholders to identify the priority needs for our region. Each of the following tasks were assigned to various individuals with due dates.

*Appalachia Regional Advisory Committee Action Plan*

| Task (Description) | Action(s) Required |
|---|---|
| Superintendents/Executive Directors<br><br>(All in the Appalachia Region were invited with 37 responses over a period of one week.) | Survey Superintendents/Executive Directors:<br><br>- What are the top three needs/educational challenges in your district?<br>- What approaches are leadership using to address these needs/challenges?<br>- How can the U.S. Department of Education support your district?<br><br>Summarize the results. |

| Task (Description) | Action(s) Required |
|---|---|
| Student Voice<br><br>(Previously collected student voice survey results from statewide and local sources.) | Locate secondary publicly available data, including statewide survey results, etc. Summarize the findings. |
| Parental Involvement<br><br>(A review of US Census data, related articles, and other data sources.) | Locate secondary publicly available data. Include articles that discuss kinship care, grandfamilies, unhoused youth information, and related topics. Summarize the findings. |
| Teacher Shortage and Recruitment<br><br>(A review of available local, regional, and state data and related articles.) | Locate secondary publicly available data. Include articles, reports, analyses, strategies, etc., that provide related information. Summarize the findings. |
| Employers<br><br>(A review of available local, regional, and State data and related articles.) | Locate secondary publicly available data. Include articles, reports, analyses, strategies, etc., that provide related information. Summarize the findings. |
| Attendance/Truancy<br><br>(A review of available local, regional, and State data and related articles.) | Locate secondary publicly available data. Include articles, reports, analyses, strategies, etc., that provide related information. Summarize the findings. |
| REL Governing Board<br><br>RAC Governor/CSSO<br><br>(Input gathered from the REL Governing Board. Only one person responded representing the RAC Governor/CSSO group- Kentucky Lt. Governor Jacqueline Coleman) | Gain input on the following questions:<br><br>• What are the highest priority needs in your region related to ensuring that all students achieve academic excellence and have access to effective instruction?<br>• Which student groups demonstrate the greatest needs?<br>• What are the barriers to addressing these needs?<br>• What are the highest priority needs in your region related to eliminating educator shortages and ensuring a high-quality, well-compensated, well-supported, and diverse educator workforce?<br>• What issues are currently not top priorities might become more pressing in the coming years?<br>• How do you see a Federal technical assistance provider (e.g., a Comprehensive Center or a REL) supporting your regional, State, or local efforts in addressing these priorities?<br><br>Please provide any additional input regarding the educational needs of your region and ways in which the Department's technical assistance can be responsive. |

| Task (Description) | Action(s) Required |
|---|---|
| Administrators, Teachers, Parents, Other Education Stakeholders<br><br>(An open survey during the needs-sensing time frame with 47 responses.) | Gain additional public comments on the following questions:<br><br>• What are one to two educational needs within your region the RAC should prioritize?<br>• Why do you believe these are the educational priorities that your region should address?<br>• What information can the RACs collect about these priorities to better understand and address the need(s)?<br><br>Please add any other comments about educational needs in the region and how they could be addressed. |

Emerging trends from this data collection include the following:

• Student attendance rates have dropped significantly after the COVID-19 pandemic, and administrator input indicates that school districts are struggling to climb back to pre-pandemic rates. Furthermore, many districts have seen a rise in chronic absenteeism while average test scores have dropped significantly.

• Kentucky, Tennessee, Virginia, and West Virginia education and State legislative leaders have emphasized academic knowledge, technical expertise, effective relationships, employability skills, applied knowledge, etc. in secondary and post-secondary educational settings. Unfortunately, the Appalachia region continues to see a shortage of skilled workers.

• Data indicates there has been an increase in the percentage of students who find themselves in kinship care such as grandparents raising grandkids. Kinship care often provides obstacles for family engagement in schools. Effective family engagement contributes to positive student outcomes, including student achievement, decreased disciplinary issues, and improved parent-teacher and teacher-student relationships.

• A majority of educators have voiced concerns about student depression, anxiety, and trauma, and research data shows a large increase in the numbers of students seeking mental health services. Many districts continue to add staff positions, such as counselors, social workers, mental health coordinators, behavior interventionists, etc., to address student and staff mental health issues.

• More than 90% of the superintendents and other state and local education leaders surveyed list teacher shortage and recruitment as one of the top priorities within their State or districts. Identified teacher shortage areas have steadily increased since the 1990s. Post-secondary data also supports that this may not improve in the near future because the number of students who are majoring in education continues to decrease.

In summary, the Appalachia RAC began with State and regional profile data as well as public comments to initiate and inform an action plan. The action plan included surveying various educational stakeholders, analyzing available data, and reviewing research related to the needs of the Appalachia region. This information was used to develop priorities and technical assistance recommendations for the region.

## Summary of Findings

Appalachia RAC members synthesized information from various RAC members, their constituencies, and public comments (see Appendix D) to determine the highest-priority educational need areas within the Appalachia region and recommend strategies to address the needs.

The priority needs, voted on by committee members during a public meeting on October 13, 2023, are presented below are:

- ➢ **Priority #1:** Chronic Absenteeism
- ➢ **Priority #2:** Employer/Workforce Preparation and Needs
- ➢ **Priority #3:** Family Engagement
- ➢ **Priority #4:** Teacher Shortage and Recruitment
- ➢ **Priority #5:** Student/Teacher Mental Health

For each need presented below, the committee summarized the needs, their analysis, and generated strategies to meet the needs through technical assistance.

# Recommendations

## Priority #1: Chronic Absenteeism

### Outcomes and Findings

According to The Annie E. Casey Foundation (2023), chronic absenteeism occurs when a student has missed at least 10% of the school year regardless of the number of excused versus unexcused absences. The Kids Count Data Center division of The Annie E. Casey Foundation provides percentages of fourth grade students who are chronically absent every two years, beginning in 2003. While the percentages fluctuate in the Appalachia region from 2003 to 2015 from a low of 16% (Kentucky, 2009) to a high of 26% (West Virginia, 2009), the percentage of chronically absent students has steadily risen since 2015, with a more dramatic increase since the COVID-19 pandemic.

*Percentage of Fourth Graders Who Are Chronically Absent from School*

| States in the Appalachia Region | 2015 | 2017 | 2019 | 2022 |
|---|---|---|---|---|
| Kentucky | 19% | 22% | 27% | 35% |
| Tennessee | 19% | 24% | 26% | 35% |
| Virginia | 19% | 25% | 24% | 32% |
| West Virginia | 22% | 25% | 29% | 39% |

Source: https://datacenter.aecf.org/data/tables/8816-fourth-graders-who-are-chronically-absent-from-school?loc=1&loct=2#detailed/2/19,44,48,50/false/1729,871,573/any/17670

Chronic absenteeism has a significant impact on student achievement. Students who have regular attendance have greater access to in-person learning and greater opportunity to develop a sense of belonging through relationships with peers and adults. In the chart above, the largest increase in chronic absenteeism occurs between 2019 and 2022. This significant increase in chronic absenteeism coincides with significant drops in student achievement. According to Chang (2023), long-term trend data from the National Assessment of Educational Progress (NAEP) exposes the largest drop in decades in nine-year-olds' reading and math scores occurs from 2020 to 2022. Children who are chronically absent in preschool through first grade are much less likely to read on grade level by third grade (U.S. Department of Education, 2016).

Chronic absenteeism continues to have devastating effects on children beyond their years in elementary school. If the third grade reading proficiency level is not attained on time, a student is four times more likely to drop out of high school. At the high school level, if a student is chronically absent in a single year, the likelihood of the student dropping out increases sevenfold. A high school dropout, who typically experiences chronic absenteeism while enrolled in school, has a greater likelihood of poor life outcomes such as poverty, diminished health, and involvement in the criminal justice system (U.S. Department of Education, 2016).

Clearly, chronic absenteeism is an educational crisis that must be addressed and has been identified as a priority need for the Appalachia region.

*Priority Needs*

Based on this research and RAC members' experiences within the education field in the region, chronic absenteeism has been identified as a priority for the Appalachia region. The needs related to this priority include:

- Supports for families experiencing economic, social, or emotional barriers to regular attendance;

- Parent and student engagement;

- Restorative practices;

- Community engagement and sponsorship;

- Funding; and

- Expanded curriculum to include more opportunities for industry certifications.

*Technical Assistance Recommendations*

The following technical assistance recommendations for this priority were identified by the Appalachia RAC:

- Provide supports to SEAs and LEAs in providing wraparound supports to families experiencing barriers to regular attendance including, but not limited to, financial hardship, food insecurity, homelessness, childcare, chronic illness, and mental health issues;

- Create resources that support SEAs and LEAs in engaging families in the school community and foster relationships between school staff, parents/guardians, and students;

- Develop supports to help SEAs and LEAs leverage restorative alternatives to out-of-school suspensions;

- Help SEAs and LEAs enlist corporate and community school sponsorship to fund programs that support regular attendance, academic and social emotional growth of students, and additional resources for families and schools; and

- Support SEAs and LEAs in taking advantage of greater opportunities for industry certifications and onsite job training for students that are not on the college/university trajectory.

## Priority #2: Employer/Workforce Preparation and Needs

*Outcomes and Findings*

Workforce development and the role of K-12 education in Appalachia are critical issues given the economic challenges the region has historically faced, including higher poverty rates and limited economic opportunities. As one report put it, "Educational attainment, measured in terms of the share of people 25 years and older with at least a bachelor's degree, is lower in Appalachia than the rest of the United States" (ARC, 2023).

Figure 16 from the Appalachian Regional Commission report on Coal Production and Employment in Appalachia illustrates the recent employment trends for Appalachian coal counties, Appalachian non-coal counties, and the rest of the United States:

*Recent Employment Trends for Appalachian Coal Counties, Appalachian Non-Coal Counties, and the Rest of the United States*
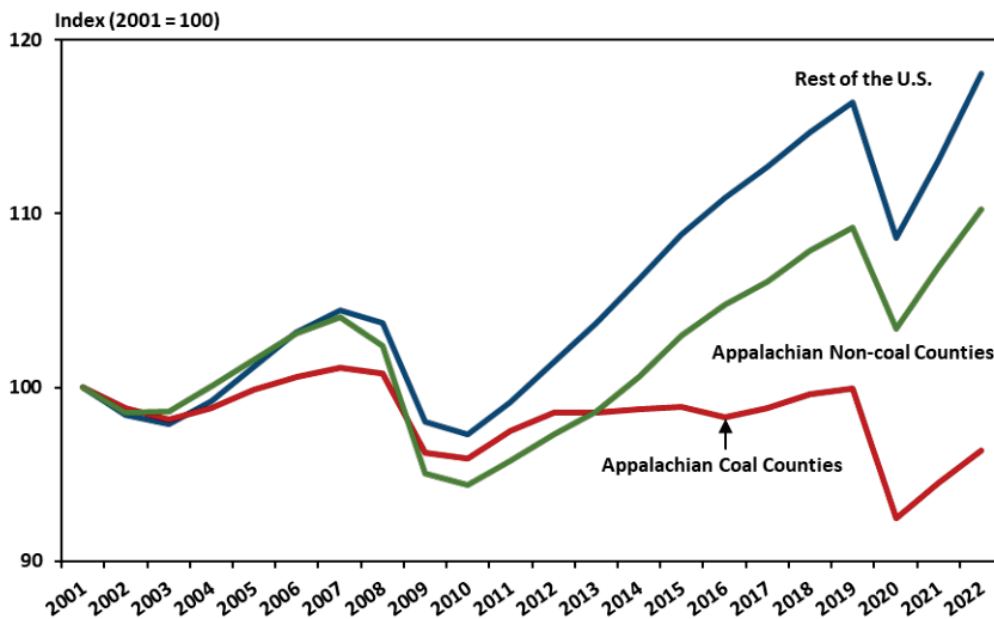


Source: Quarterly Census of Employment Wages (QCEW), U.S. Bureau of Labor Statistics. Note: 2022 figures are January through September averages. Accessed via: https://www.arc.gov/wp-content/uploads/2023/09/Coal-Production-and-Employment-in-Appalachia-2023.pdf

## Priority Needs

The Appalachia RAC identified the following regional and national key considerations regarding this priority:

- **Economic Competitiveness:** A well-educated and skilled workforce is critical for any region's economic success and ensuring sustainable economic growth.

- **Bridging Skills Gaps:** Many industries face significant skills gaps, where there exists a massive shortage of qualified candidates to fill them. Focusing on workforce development in K-12 responsive to the labor market data helps bridge these gaps by providing students with the skills and knowledge necessary to meet the demands of the regional job market.

- **Reduced Unemployment:** When students graduate from K-12 schools with the relevant skills and qualifications to address the demands of the labor market, they are more likely to find employment, reducing unemployment rates, and therefore, lessening the economic burden on the government.

- **Addressing Income Inequality:** By providing all students with access to quality workforce development programs, K-12 education can help reduce income inequality. It ensures that students from all backgrounds can gain valuable skills and access higher-paying jobs, improving overall social and economic equity.

- **Futureproofing:** The job market is constantly evolving due to advances in technology. Preparing K-12 students with adequate skills and the ability to learn and retrain throughout their careers is essential to ensure they can navigate these changes and remain employable.
- **Reduced Reliance on Social Services:** When individuals are well-prepared for the workforce, they are less likely to rely on social services and government support programs. This can lead to more self-sufficient, empowered citizens.

### Technical Assistance Recommendations

The following technical assistance recommendations for this priority were identified by the Appalachia RAC:

- Support SEAs and LEAs in investing in workforce development in K-12, including apprenticeships through public/private partnerships. For example, Kentucky has seen great results using this strategy on the basis that "ninety-one percent of apprentices find employment after completing their program, and their average starting wage is above $60,000" (Perez & Zients, 2016).
- Help SEAs and LEAs establish place-based education opportunities to exemplify community assets and bolster the regional workforce, which can offer a range of benefits for both communities and the individuals within them. Place-based education connects learning to the local environment, making it more relevant and engaging for students by allowing them to see the practical application of what they are learning and how their community fits into a broader context. By connecting education with local assets and workforce needs, students can gain skills and knowledge that are directly applicable to regional job opportunities. This can help to bridge skills gaps and support the growth of local industries.

### Priority #3: Family Engagement

### Outcomes and Findings

### Teacher Preparation

The Appalachia RAC identified engaging teacher preparation related to family engagement as a need. Regardless of decades of research documenting the positive impacts of family engagement, a recent study conducted by the National Association for Families, Schools, and Community Engagement (NAFSCE, 2021) reported only 14% of department heads [of teacher preparation programs] believe their education candidates are as prepared for family engagement as they are in other areas of teaching, and only one third believed family engagement was a high priority for their teacher education programs. The study identified the following potential deficits in teacher preparation:

1. Only half offered a course in family and community engagement, and most of those were courses focused on special needs rather than content;
2. Families as leaders and utilizing family knowledge in school curriculum were rarely taught in courses for future teachers;
3. Practical experience or simulations to practice family engagement was lacking in the curriculum; and
4. Programs lacked opportunities for future teachers to facilitate family workshops or engage in home visits (NAFSCE, 2021).

Respondents of the survey also reported a lack of resources for and knowledge among faculty to teach this topic. This may be due to the many other course requirements that programs must cover. Furthermore, hands-on experience engaging with families is difficult because schools partnering with universities for field experience and clinical practice may limit candidate access to families. Finally, the requirements for state teaching certification may minimize family engagement as a prerequisite to licensure (NAFSCE, 2023). Although both teacher preparation accreditation organizations—the Council for the Accreditation of Educator Preparation (CAEP) and the Association for Advancing Quality in Educator Preparation (AAQEP)—have embedded family engagement into their standards, it must be noted that without a State-level emphasis on family engagement in licensure, colleges and universities may not devote resources in family engagement.

## Grandparents Raising Grandchildren

The Appalachia RAC also identified engaging grandfamilies in schools as a current need due to the increase in grandfamilies over the last five decades. According to U.S. Census Bureau in 2018, approximately 1.3 million U.S. children under the age of 18 lived with and received care from a grandparent (U.S. Census Bureau, 2018), a demographic that only accounted for 3% of all American children in 1970 (Casper & Bryson, 1998).

When grandparents assume kinship care for their grandchildren, they also assume responsibility for those grandchildren's education within their legal relationship status as caregivers (Beltran, 2013; Kinship Families in Kentucky, 2013). Although the Family Education Right of Privacy Act (FERPA) protects students' rights to privacy of their educational records, FERPA also allows access to these records to family members who provide care for students under the age of 18. FERPA includes in its definition of parent "an individual acting as a parent in the absence of a parent or a guardian" (34 CFR § 99.3). Regardless, access to records research indicates grandparents who provide informal care may be less likely to ask school staff for assistance (Letiecq et al., 2008; Strozier, McGrew, Krisman & Smith, 2005) than grandparents who have established a legal relationship with their grandchildren (Landry-Meyer & Newman, 2004). Regardless of legal caregiving status, many grandparents are still unsure of their role in supporting their grandchildren's education (Strom & Strom, 2000; Strozier, 2012).

### Priority Needs

Outcomes from the RAC survey indicate family engagement is still a dire need in American schools. Specifically, respondents identified grandparents raising grandchildren as a demographic of interest. During RAC Appalachian member meetings, discussions indicated a lack of emphasis in engagement in teacher preparation programs.

### Technical Assistance Recommendations

The following technical assistance recommendations for this priority were identified by the Appalachia RAC:

Teacher Preparation

- Develop materials and training on family engagement for university programs preparing teachers. For example, CAEP partnered with the W.K. Kellogg Foundation to create The CAEP Family Engagement Mini Course that includes a free faculty handbook (CAEP, 2023). This

document may be used as a starting point for development of more detailed modules and resources for educator preparation programs.

- Examine each state's licensure requirements for family engagement and highlight best practices for effectively preparing candidates, both teachers and school leaders, in all levels and aspects of family engagement, going beyond understanding families and communicating student progress to effectively creating partnerships. NAFSC and/or The National Center for Families Learning may be able to provide technical assistance.

- Create resources for school and university partnerships to develop mutually beneficial and effective ways to utilize candidates in family workshops, family conferences, and other hands-on, real-world teacher preparation experiences developed by research based on best practices.

- Examine specialized professional associations' standards for curriculum and teacher preparation in educational leadership, instruction, and specific content areas on the integration of family engagement. Collaborate with professional organizations to embed family engagement in content standards. NAFSC and/or The National Center for Families Learning may be able to provide technical assistance in making recommendations to these organizations in embedding meaningful family engagement in content area standards.

## Grandparents Raising Grandchildren

- Investigate state-by-state laws regarding the rights of kinship care providers who do not have an established, legal relationship. Provide resources to states on establishing and improving pathways to engagement for these kinship care providers.

- Design and promote professional development to schools on grandfamily engagement. Specifically, outline state-by-state guidelines on the legal rights and responsibilities of grandparents raising grandchildren who do not have custody of their grandchildren or power of attorney in the following areas: 1.) representation on school governing bodies and committees, 2.) access to school academic and discipline records, 3.) representation during student educational decision-making meetings and discipline hearings, and 4.) providing permission for medical treatment.

- Develop professional development modules for schools that follow the research-based guidelines outlined by the Ohio Center for Education and Training Employment, such as the following: 1.) consider grandfamilies when designing school activities that encourage and integrate grandparents, 2.) use grandfamily-inclusive language in all communications, 3.) utilize school documents to identify grandfamilies, 4.) ensure representation of grandfamilies on committees and governing boards, 5.) ensure access to engagement to grandparents with both permanent and temporary care according to state laws, 6.) facilitate social support for grandparents, 7.) provide professional development to staff and faculty, 8.) collect data on grandfamily needs, and 9.) facilitate workshops for grandfamilies on topics relevant to their needs (Walker, Owens, and Boone, 2020). It is recommended that representatives from all stakeholders collaborate in this process: organizations representing kinship care and grandfamilies, higher education organizations, and family engagement organizations.

*Additional References for Further Consideration*

The following information was not compiled during the data collection period, nor was it discussed during Meeting #2; however, the Appalachia RAC presents this information to further support its justification as to why this is a priority for the region.

Decades of research on family engagement in schools show a positive impact on student academic achievement (Anderson, 2000; Hill & Craft, 2003; Park & Holloway, 2017; Sheldon & Epstein, 2005; Topor, Keane, Shelton, & Calkins, 2010). Family involvement is also shown to positively influence the perceptions and motivations of students, caregivers, and teachers (Hill and Craft, 2003; Topor et al., 2010) as well as attendance and retention (Epstein, 2004; Sheldon, 2007; Smith, Reinke, Herman, & Huang, 2019) and graduation rates (Ross, 2016; Hoover-Dempsey, Walker, Sandler, Whetsel, Wilkins, & Closson, 2005). Furthermore, family engagement may also have a positive effect on classroom behaviors (Nokali, Bachman, & Vortruba-Drzal, 2010; Sheldon and Epstein, 2002) and students' social-emotional skills (Smith, Sheridan, Kim, Park, & Beretvas, 2020; Van Voorhis, Maier, Epstein, & Lloyd, 2013).

## Priority #4: Teacher Shortage and Recruitment

*Outcomes and Findings*

Results of the needs assessment activities conducted by RAC members indicated teacher shortage and recruitment as a high priority for the Appalachia region. Survey responses from the REL Governing Board, Governor/State school officials, school district superintendents, administrators, educators, parents, and other education stakeholders repeatedly referenced teacher shortage and recruitment as one of the top educational needs for Appalachia. Also, data collected from the U.S. Department of Education website shows that teacher shortage areas have increased dramatically since the early 1990s.

From a state and regional perspective, representatives from the REL Governing Board and the Kentucky Governor's Office staff listed teacher recruitment and retention as one of the highest priority needs in their respective states in order to ensure that all students achieve academic excellence and have access to effective instruction. Representatives also added student groups with the highest needs—such as students of color, from low-income families, with mild to moderate disabilities, who are English learners, in transient populations, who have insecure housing situations, etc.—are less likely to have access to strong grade-level instruction when compared with students who are in classrooms with mostly white students and in higher income communities.

Educators reinforced the need to address teacher shortage and retention. Superintendents, administrators, teachers, and other educators who were surveyed often identified teacher shortage and recruitment as one of the top three needs within their districts. Nearly 92% (34 of 37) of district superintendents/directors referred to teacher shortages with contributing factors such as low teacher pay, teacher time allotment, student behavior, mental health, and other factors that may be unique to a particular region within their state. Administrators' and other educators' survey feedback reinforces the need to address teacher shortages and adds that similar contributing factors are "pushing" new and veteran teachers out of the profession.

While providing numerous other educational needs, parents and other education stakeholders provided feedback that supported the growing need for recruiting and retaining teachers. Survey respondents in

these categories provided the opinion that education funding should increase in order to recruit high quality teachers, as well as to keep quality educators in the profession. Parents also stated that the teacher shortage, particularly the lack of high-quality teachers, contributes to a school district's inability to address issues such as low math and reading proficiency percentages and the needs of students with disabilities.

The U.S. Department of Education's Office of Postsecondary Education (OPE) provides Chief State School Officials and state representatives the opportunity to propose teacher shortage areas through an application process. If the requirements of Federal regulations for teacher shortage areas are met, the designation is granted and the information (since 1990-1991) can be viewed on the Department's website (https://tsa.ed.gov/#/reports). A review of this website has shown a growing number of subject matters in the Appalachia region that have received the teacher shortage designation. In 1990-1991, teacher shortage areas for the Appalachia region included four subject matters: world languages, special education, early childhood, and science. By 2022-2023, the teacher shortage area designation had expanded to include several additional subject matters, including language arts, mathematics, social studies, health/physical education, career/technical, English as a second language, and elementary core subjects. It also noted support staff shortages, including guidance counselors, school nurses, library/media specialists, social workers, speech/language pathologists, and gifted and talented instructors.

*Number of Designated Teacher Shortage Areas for the Appalachia Region for Selected Years*

| Jurisdiction | 1990-1991 | 2000-2001 | 2010-2011 | 2020-2021 | 2022-2023 |
|---|---|---|---|---|---|
| Kentucky | 2 | 8 | 8 | 14 | 18* |
| Tennessee | 1 | 1 | 4 | 12 | 11 |
| Virginia | 4 | 0 | 10 | 10** | 10** |
| West Virginia | 1 | 7 | 13*** | 16 | 19 |

*In 2022-2023, Kentucky officials listed "General Shortages" for Grades 9-12 as one of the 18 subject matters listed.

**In 2020-2021 and 2022-2023, Virginia officials listed "General Shortages" for Grades 6-8 as one of the 10 subject matters listed for each year.

***In 2010-2011, West Virginia officials listed "General Shortages" with no grade designation as one of the 13 subject matters listed.

Source: U.S. Department of Education's Teacher Shortage Area's Website https://tsa.ed.gov/#/reports

*Priority Needs*

This is a priority area for the Appalachia Region due to the following factors:

- Superintendents throughout the region have cited teacher recruitment and retention as the most common educational challenge and need. More than 90% of surveyed superintendents cited teacher recruitment and retention as an educational challenge. Appalachia RAC members also cited this priority as an issue throughout K-12.

- Within higher education, this priority was also a concern with committee members citing a marked decrease in college and university students pursuing a career in education. It was not the consensus of the committee that alternative career pathways for educators would solve concerns with the teacher shortage we are experiencing in the Appalachia Region, as alternate pathways can contribute to the challenge of teacher retention. Teachers entering the education field with little to no practical teaching preparation increases the workload of already burdened mentors and contributes to funding challenges of districts/divisions who pay mentors a stipend. Professional learning costs are high for those entering education through alternate pathways as they have often not received training in educational pedagogy that a teacher traditionally trained receives.

- It was noted by a committee member from West Virginia that all 55 districts were experiencing a teacher shortage, as well as shortages with service and substitute personnel including bus drivers, cafeteria workers, and various personnel needs within education. Shortages in all areas of education are contributing to havoc, including challenges with mental health concerns for educators. The shortages are especially challenging for small, rural districts that find it challenging to recruit educators. Prioritizing funding for National Board Certification and increased pay for National Board Certified Teachers needs to be considered with teacher retention, particularly in hard to staff schools, regions, and subject areas, particularly in regions of high poverty.

- The teacher shortage is a real concern. Drastic efforts need to be made to recruit and retain teachers and the problem continues to worsen. The teacher shortage creates havoc in school systems across the United States, intensifying the challenges of administrators and educators being required to fulfill the duties of vacant positions, while also intensifying the mental health challenges of educators.

- According to the Economic Policy Institute, the shortage is even more acute than estimated and high-poverty schools suffer the most from the teacher shortage. The number of schools struggling to fill vacancies had tripled even prior to the COVID-19 global pandemic.

- High teacher attrition consumes economic resources better used elsewhere. Teaching is often not viewed as a valued profession and the teacher shortage increases the devalued view of teachers.

- The teacher shortage hurts students. It disproportionately hurts students in low socioeconomic areas. It disproportionately hurts minority students. To raise the bar and lead the world, we must begin by boldly improving efforts to positively impact teacher recruitment, retention, and respect for the teaching profession.

### Technical Assistance Recommendations

The following technical assistance recommendations for this priority were identified by the Appalachia RAC:

- Provide guidance to states on ways to increase the number of students pursuing education as a major and how not to rely heavily on alternate teacher pathways;

- Provide guidance to SEAs and LEAs on Public Service Loan Forgiveness (PSLF) programs;

- Increase encouragement and guidance to states on ways to support teachers through the National Board Certification process, also known as the gold standard of teaching;

- Provide one-on-one, targeted technical assistance to Title I and Title II schools to benefit the areas struggling the most with low socioeconomic issues;

- Provide technical assistance in how to braid Title II grant funding to support teacher quality;

- Create a toolkit to help SEAs and LEAs provide incentives for teachers still working in the classroom;

- Provide guidance to states on administrator mentor supports;

- Provide best practices to states focused on effective on-boarding processes for teachers, particularly new teachers;

- Provide superintendents guidance with how to market their districts/divisions to recruit and retain teachers;

- Establish and implement an advisory council to give feedback to states and the U.S. Secretary of Education from beginning teachers;

- Provide guidance and best practices on how to recruit candidates for support staff, including bus drivers;

- Provide guidance to states on how to create a teacher bill of rights (See Louisiana's Example); and

- Provide guidance and best practices to school leaders on ways to encourage teacher voice.

## Priority #5: Student/Teacher Mental Health

### Outcomes/Findings

The needs assessment activities conducted by the Appalachian RAC members indicated that both student and educator mental health is a high priority for our region. Superintendents and other district leaders emphasized student mental health as an area that needs substantial investment. For example, a statewide survey of students in Virginia revealed that 40% of students have "ever felt so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities." Moreover, between 25-35% of students surveyed said that they felt nervous or anxious; not able to stop or control worrying; felt down, depressed, or hopeless; or had little interest or pleasure in doing things more than half the days in the last two weeks. Moreover, one in three superintendents that responded to the Appalachia RAC needs assessment survey noted an increased need in mental health resources since the COVID pandemic.

As one stakeholder in our data commented, "Students cannot learn well academically and cognitively when they are suffering from health and mental health issues. School settings are a prime access point for students to receive these services. […] We must also focus on promoting wellness and preventing illness in addition to the treatment services that some children desperately need." Another stakeholder shared it is "important than ever that we have schools that can deal with the growing mental health crisis, especially when we know students are six times more likely to receive mental health support if it

is available in their school building. Having adequate, highly qualified, accessible mental health personnel in our schools are no longer a luxury, they are a necessity."

*Priority Needs*

Stakeholders listed additional funding and training for teachers as the highest priority needs in mental health and well-being. In particular, there is a critical need for funding and capacity for more nurses, counselors, social workers, and school psychologists.

*Technical Assistance Recommendations*

The following technical assistance recommendations for this priority were identified by the Appalachia RAC:

- Training and professional development for teachers, bus drivers, counselors, social workers, school psychologists, principals, and district administrators, and other supports for the provision of such training, related to mental health and social-emotional well-being;

- Providing guidance to help administrators acknowledge that educators are being asked to engage in a lot of training right now and that collaboration is needed when developing and setting training times. For example, those implementing the training must think of school calendars and how mandates for training are rolled out and teachers should be compensated for their time in training;

- Align training around mental health and well-being with efforts to support parent and family engagement;

- Best practices for LEAs on how to reduce counselor-to-student ratios;

- Best practices for LEAs to support additional mental health coordinators/specialists, school social workers, behavioral interventionists, school psychologists, and counselors;

- Guidance for educator preparation programs on how to incorporate training and support for aspiring educators and education leaders in the area of mental health—both for themselves, and for their students;

- Support for schools and districts to integrate trauma-informed instruction into their day-to-day work, and for educator and leader preparation programs to incorporate training on trauma-informed instruction into their curriculum; and

- Supports to help LEAs identify the impact of ESSER funds ending and sustainability of mental health and well-being programs that were launched using those funds.

*Additional References for Further Consideration*

The following information was not compiled during the data collection period, nor was it discussed during Meeting #2; however, the Appalachia RAC presents this information to further support its justification as to why this is a priority for the region.

Mental health and well-being are essential to learning and working, particularly within our complex and evolving society (Weist et al., 2023). For students, mental health directly influences a students' access to educational opportunities, academic growth, and overall well-being (Hoover & Lever, 2023). Moreover,

when students have access to mental health supports and have their emotional needs met, schools can more effectively help them grow and learn, and behavioral problems are often reduced (Bradshaw et al., 2010). Educators at all levels (classroom, school, district) are also facing increasingly significant stress (Steiner et al., 2022). Care and attention around educator well-being is critical if educators are to support their students' needs and create positive, effective learning environments (Steiner et al., 2022).

Addressing the mental health of both students and educators is particularly important if we are to work toward more equity in educational access, opportunity, and success. At the educator level, mental health is important for teacher job satisfaction, retention, and effectiveness (Diliberti et al., 2021). Given current teacher shortages in the Appalachian region, and across the nation (Nguyen et al., 2023), it is essential that educator health and well-being is prioritized. Students' mental health has been characterized as "in crisis" (Abramson, 2022). For example, between March and October 2020, mental health-related emergency department visits increased 25% for children ages five to 11 and 31% for those between the ages of 17-18 (Leeb, 2020). Moreover, youth with intellectual and developmental disabilities, low-income youth, youth in rural areas, youth in immigrant households, LGBTQ+ youth, and Black youth, Latino youth, American Indian and Alaska Native youth, and Asian American, Native Hawaiian and Pacific Islander youth are all at greater risk of mental health challenges (U.S. Surgeon General, 2021).

## Conclusion

The Appalachia Regional Advisory Committee was tasked with collecting information on the education needs specific to Kentucky, Tennessee, Virginia, and West Virginia and how those needs may be addressed through technical assistance activities. After conducting various needs sensing activities that involved local, state, and regional education stakeholders, RAC members identified five priority needs:

> ➢ **Priority #1:** Chronic Absenteeism

> ➢ **Priority #2:** Employer/Workforce Preparation and Needs

> ➢ **Priority #3:** Family Engagement

> ➢ **Priority #4:** Teacher Shortage and Recruitment

> ➢ **Priority #5:** Student/Teacher Mental Health

This report sets forth how each of these priority needs could be addressed by the Comprehensive Centers described in Section 203 of the Educational Technical Assistance Act (ETAA) and should be considered as priorities by the U.S. Secretary of Education under Section 207 of the ETAA.

# References

Abramson, A. (2022). Children's mental health is in crisis. *Monitor on Psychology, 53*(1), 69.

Appalachian Regional Commission. (2023). Coal Production and Employment in Appalachia. Retrieved from: https://www.arc.gov/wp-content/uploads/2023/09/Coal-Production-and-Employment-in-Appalachia-2023.pdf.

Beltran, A. (2013). *Policy Brief: State Educational and Health Care Consent Laws*. Generations United. Retrieved from https://www.gu.org/app/uploads/2018/05/Grandfamilies-Report-State-Ed-and-Health-Care-Consent-Laws-Brief-Summary.pdf.

Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). *Examining the effects of schoolwide positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools*. Journal of Positive Behavior Interventions, 12(3), 133–148.

Casper, L. M. & Bryson, K. R. (1998). *Co-resident grandparents and their grandchildren: Grandparent maintained families*. Presented at the Annual Meeting of the Population Association of America (PAA), Chicago, IL, May 1998.

Chang, H. (2023). *Addressing Chronic Absenteeism.* The Education Trust. Retrieved from https://edtrust.org/the-equity-line/addressing-chronic-absenteeism/.

Diliberti, M. K., Schwartz, H. L., and Grant, D. (2021). *Stress topped the reasons why teachers quit, even before COVID-19.* RAND Corporation.

El Nokali, N. E., Bachman, H. J., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school. *Child Development, 81*(3), 988–1005. Retrieved from https://doi.org/10.1111/j.1467-8624.2010.01447.x.

Garcia, E., & Weiss, E. (2019). *U.S. schools struggle to hire and retain teachers The second report in 'The Perfect Storm in the Teacher Labor Market' series*. Economic Policy Institute. Retrieved from https://www.epi.org/publication/u-s-schools-struggle-to-hire-and-retain-teachers-the-second-report-in-the-perfect-storm-in-the-teacher-labor-market-series/.

Hoover, S., & Lever, N. (2023). *Are social and emotional learning and mental health the business of schools?* National Center on Safe Supportive Learning Environments.

Hoover-Dempsey, K., Walker, J. M., Sandler, H. M., Whetsel, C., Wilkins, A. S., & Closson, K. (2005). Why do parents get involved? Research findings and implications. *The Elementary School Journal, 106*(2).

Leeb, R. T., Bitsko, R. H., Radhakrishnan, L., Martinez, P., Njai, R., & Holland, K.M. (2020). Mental health-related emergency department visits among children aged <18 years during the COVID-19 pandemic. *Mobility and Mortality Weekly Report, 69*(45), 1675-1680.

Letiecq, B. L., Bailey, S. J. & Porterfield, F. (2008). We have no rights, we get no help: The legal and policy dilemmas facing grandparent caregivers. *Journal of Family Issues, 29*(995).

National Association for Families, Schools, and Community Engagement. (2021). *National Survey of Colleges and Universities Preparing Educators for Family Engagement*. Retrieved from https://nafsce.org/page/IHEsurvey.

Nguyen, T. D., Lam, C. B., & Bruno, P. (2022). *Is there a national teacher shortage? A systematic examination of reports of teacher shortages in the United States.* (EdWorkingPaper: 22-631). Annenberg Institute at Brown University. Retrieved from https://doi.org/10.26300/76eq-hj32.

Park, S., & Holloway, S. D. (2017). The effects of school-based parental involvement on academic achievement at the child and elementary school level: A longitudinal study. *The Journal of Educational Research, 110*(1), 1–16.

Perez, T., and Zients, J. (2016) *ApprenticeshipUSA is Upskilling America*. White House Blog. October 21, 2016. Retrieved from https://obamawhitehouse.archives.gov/blog/2016/10/21/apprenticeshipusa-upskilling-america.

Reinke, W. M., Smith, T. E., & Herman, K. C. (2019). Family-school engagement across child and adolescent development. *School Psychology, 34*(4), 346–349. Retrieved from https://doi.org/10.1037/spq0000322.

Ross, T. (2016). The differential effects of parental involvement on high school completion and postsecondary attendance. *Education Policy Analysis Archives, 24*(30).

Smith, T. E., Reinke, W. M., Herman, K. C., & Huang, F. (2019). Understanding family-school engagement across and within elementary and middle school contexts. American Psychological *Association, 34*(4), 363–375.

Steiner, E. D., Doan, S., Woo, A., Gittens, A. D., Lawrence, R. A., Berdie, L., Wolfe, R. L., Greer, L., & Schwartz, H. L. (2022). *Restoring teacher and principal well-being is an essential step for rebuilding schools: Findings from the State of the American Teacher and State of the American Principal Surveys*. RAND Corporation. Retrieved from https://www.rand.org/pubs/research_reports/RRA1108-4.html.

The Annie E. Casey Foundation. (2023, September 20). *Absenteeism in U.S. Schools Rose During Pandemic — and Hasn't Recovered.* Retrieved from https://www.aecf.org/blog/chronic-absenteeism-in-u-s-schools-rose-during-pandemic-and-hasnt-recovered.

U.S. Census Bureau. *Grandparents Still Work to Support Grandchildren, 2019 American Community Survey*. Retrieved from www.census.gov/programs-surveys/acs/.

U.S. Department of Education. (2016, October 27). *Chronic Absenteeism in the Nation's Schools – A Hidden Educational Crisis.* Retrieved from https://www2.ed.gov/datastory/chronicabsenteeism.html#four.

U.S. Surgeon General (2021). *Protecting Youth Mental Health*.

Walker, K. N., Owens, S. Boone, B. J. (2020). *School Family Engagement with Grandfamilies in Mind: Research-based strategies for educators engaging grandfamilies.* Ohio Center for Education and Training Employment. Retrieved from https://www.grandfamilies.org/Portals/0/Documents/Education/Grandfamily-School-Engagment-Brief-2.23.21%20(2).pdf.

Weist, M. D., Hoover, S. A., Daly, B. P., Short, K. H., & Bruns, E. J. (2023). Propelling the global advancement of school mental health. *Clinical Child and Family Psychology Review.* Advance online publication. Retrieved from https://doi.org/10.1007/s10567-023-00434-7.

## Appendix A. Nominated, Recommended, and Serving RAC Members

*Number of Individuals Nominated, Recommended, and Serving on the Appalachia RAC*

| Region | Nominated | Recommended by the U.S. Department of Education | Declined | Resigned | Accepted, Serving |
|--------|-----------|-------------------------------------------------|----------|----------|-------------------|
| Appalachia | 31 | 17 | 0 | 0 | 17 |

# Appendix B. List of RAC Members

Appalachia RAC members represented local and state education agencies; institutions of higher education; parents; practicing educators, including classroom teachers; and organizations serving youth, educators, or both. Members include:

**Regional Chair**

- Dr. Robbie Fletcher, Superintendent, Lawrence County Schools

**RAC Members**

- Dr. Adam Cheeseman, Superintendent, Doddridge County
- Dr. Cora Coefield, Federal Programs-Title II Specialist, Virginia Department of Education
- Ms. Heather Crabbe, Parent Volunteer, Prichard Committee for Academic Excellence
- Dr. Shannon Grimsley, Superintendent, Rappahannock County Public Schools
- Dr. Angela Hargrave, Director of Student Services and Attendance/Discipline, Shelby County Schools
- Ms. Brandi E. Hitzelberger, Treasurer, National Family Association for Deaf-Blind
- Mr. Mike Hogg, Vice President of Place-Based Partnerships, Partners for Rural Impact
- Ms. Aimee McDonald, Family Ambassador/ ESL Teacher, Kenwood Elementary
- Ms. Sabrina McElroy, Federal Programs Director, Breathitt County Board of Education
- Dr. Chaney Mosley, Assistant Professor of Agricultural Education, Middle Tennessee State University
- Ms. Amber Nichols, Kindergarten/Special Education Teacher, Eastwood Elementary
- Ms. Brittany Oman, Special Education Teacher, Arlington Public Schools
- Ms. Rebecca Roach, Assistant Professor in the Department of Early Childhood, Elementary, and Special Education, Moorehead University
- Ms. Andrea Trio, Principal, Madison Elementary School
- Dr. Andi Webb, Teacher/Professional Learning Specialist
- Dr. Rachel White, Assistant Professor in the Department of Educational Leadership and Policy Studies, University of Tennessee-Knoxville

# Appendix C. Appalachia Profile (Comprehensive)

The following profile shows recent data compiled by the U.S. Department of Education for the Appalachia Region, which includes Kentucky, Tennessee, Virginia, and West Virginia. Data for each state is included along with high-level data comparing information across the regions. The following topic areas are included:

- Information about Districts and Schools
- Student Enrollment Information
- Graduation Information
- Student Academic Information
- Student Non-Academic Information
- Teacher Information
- Teacher Qualifications
- Teacher Shortages
- Financial Resources
- Resources

Note that data includes the most recent tables available in July 2023. In some instances, data have not been disaggregated by jurisdiction so national data have been included as a reference point. Where appropriate, Reflection Questions have been provided for consideration.

<div style="background:#1F4E96;color:white;padding:1em;">

### Overall Reflection Questions

- What is your overall reaction to the data presented?
  - *Is it what you expected?*
  - *If it was not what you expected, what surprised you?*
- What other data do you need to help you better understand the needs in your jurisdiction or region?
- Are the data available at the state level or do you have access to this data through another vehicle?
- How can the needs assessment help you attain this data?
- What do you believe are the top priorities facing your jurisdiction/region?
- Why do you believe these are the top priorities facing your jurisdiction?
- What input would you like to hear from other stakeholders?
- How will you collect that input?

</div>

## Information about Appalachia Districts and Schools

### Totals by Jurisdiction

| Jurisdiction | Total Number of Operating Districts (2020-21) | Total Number of Operating Public Schools (2020-21) | Total Number of Charter Schools (2020-21) | Total Number of Private Schools (Fall 2019) |
|---|---|---|---|---|
| Kentucky | 185 | 1,532 | 0 | 410 |
| Tennessee | 148 | 1,880 | 116 | 570 |
| Virginia | 214 | 2,125 | 7 | 1,020 |
| West Virginia | 60 | 710 | 0 | 130 |

**Note 1:** Profiles were prepared using the most recent publicly available data. The most recent set of private school data provided was fall 2019, whereas the tables used for reporting the districts and public/charter school data were updated for the 2020-21 school year.

**Note 2:** Operating schools/districts include all those providing services at the start of the reported school year.

### Student Enrollment Information

| Jurisdiction | Total Public School Enrollment (Fall 2019) | Public PreK-8 Enrollment (Fall 2021) | Public Grades 9-12 Enrollment (Fall 2021) | Enrollment in Private Schools |
|---|---|---|---|---|
| Kentucky | 654,239 | 454,627 | 199,612 | 84,040 |
| Tennessee | 996,709 | 698,341 | 298,368 | 119,880 |
| Virginia | 1,249,815 | 853,678 | 396,137 | 151,440 |
| West Virginia | 252,720 | 175,355 | 77,365 | 14,380 |

**Note:** Public schools include traditional public and charter schools.

### 3–5-year-old Enrollment by Race/Ethnicity (% distribution by race/ethnicity) (2021)

| Jurisdiction | Total | White | Black | Hispanic | Asian | Pacific Islander | American Indian/Alaska Native | Two or More Races |
|---|---|---|---|---|---|---|---|---|
| Kentucky | 50.2% | 50.0% | 51.7% | 49.2% | ++ | ++ | ++ | 48.5% |
| Tennessee | 48.0% | 50.6% | 44.7% | 47.4% | 18.9% + | ++ | ++ | 38.7% |
| Virginia | 51.7% | 55.0% | 45.6% | 52.3% | 44.4% | ++ | ++ | 49.9% |
| West Virginia | 38.4% | 38.9% | ++ | ++ | ++ | ++ | ++ | 26.0% |

† Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

++ Reporting standards not met. Either there are too few cases for a reliable estimate, or the coefficient of variation (CV) is 50 percent or greater.

**Note:** Pacific Islander and American Indian/Alaska Native did not meet reporting standards. Either there are too few cases for a reliable estimate, or the CV is 50 percent or greater.

*Public Elementary and Secondary School Enrollment by Race/Ethnicity (% distribution by total) (Fall 2021)*

| Jurisdiction | White | Black | Hispanic | Asian | Pacific Islander | American Indian/Alaskan Native | Two or More Races |
|---|---|---|---|---|---|---|---|
| Kentucky | 73.9% | 10.7% | 8.3% | 2.0% | 0.2% | 0.1% | 4.9% |
| Tennessee | 59.7% | 20.7% | 13.1% | 2.0% | 0.1% | 0.2% | 4.2% |
| Virginia | 45.8% | 21.8% | 18.1% | 7.4% | 0.2% | 0.3% | 6.5% |
| West Virginia | 89.0% | 4.1% | 2.1% | 0.6% | # | 0.1% | 4.1% |

#Rounds to zero.

*Number of Students by School Locale (Fall 2019)*

| Jurisdiction | City | Suburban | Town | Rural |
|---|---|---|---|---|
| Kentucky | 151,869 | 117,620 | 163,583 | 258,796 |
| Tennessee | 332,760 | 208,046 | 161,961 | 312,472 |
| Virginia | 288,708 | 598,980 | 85,209 | 324,044 |
| West Virginia | 41,140 | 53,399 | 55,586 | 113,361 |

*English Language Learners (Fall 2020)*

| Jurisdiction | Total | Percentage of Total Enrollment |
|---|---|---|
| United States | 4,963,388 | 10.3% |
| Kentucky | 31,842 | 5.0% |
| Tennessee | 51,568 | 5.4% |
| Virginia | 117,553 | 9.6% |
| West Virginia | 2,040 | 0.7% |

*Students Eligible for Free or Reduced-Price Lunch (2019–2020)*

| Jurisdiction | Total | Percentage of Total Enrollment |
|---|---|---|
| United States | 26,000,645[a] | 52.1%[a] |
| Kentucky | 385,469 | 55.7% |
| Tennessee | 596,760[b] | 58.8%[b] |
| Virginia | 581,521 | 45.1% |
| West Virginia | 134,897 | 51.2% |

[a] For the United States data, total includes imputation for nonreporting states.

[b] Imputation for survey nonresponse. State-level imputations for 2017-18 through 2019-20 were based on the reported percentages for 2015-16 (the most recent year for which percentages were reported) applied to the 2017-2018 through 2019-20 enrollments.

*Special Education Enrollment Numbers by Race/Ethnicity and Age Group Served under Individuals with Disabilities Act (IDEA) – Kentucky*

| Age Group | American Indian or Alaska Native | Asian | Black or African American | Hispanic/ Latino | Native Hawaiian or Other Pacific Islander | White | Two or More Race |
|---|---|---|---|---|---|---|---|
| Ages Birth-2 (Served under IDEA, Part C) | 4 | 52 | 309 | 229 | 10 | 2,693 | 216 |
| Ages 3-5 (Early Childhood) (Served under IDEA Part B) | 12 | 130 | 790 | 719 | 9 | 8,047 | 518 |
| Ages 5 (school age) through 21 (Served under IDEA Part B) | 138 | 870 | 10,482 | 5,965 | 64 | 73,694 | 4,341 |

*Special Education Enrollment Numbers by Race/Ethnicity and Age Group Served under Individuals with Disabilities Act (IDEA) – Tennessee*

| Age Group | American Indian or Alaska Native | Asian | Black or African American | Hispanic/ Latino | Native Hawaiian or Other Pacific Islander | White | Two or More Races |
|---|---|---|---|---|---|---|---|
| Ages Birth-2 (Served under IDEA, Part C) | 16 | 138 | 1,442 | 703 | 14 | 5,490 | 397 |
| Ages 3-5 (Early Childhood) (Served under IDEA Part B) | 13 | 172 | 1,303 | 832 | 11 | 5,686 | 291 |
| Ages 5 (school age) through 21 (Served under IDEA Part B) | 233 | 1,294 | 26,802 | 10,712 | 75 | 73,392 | 4,281 |

*Special Education Enrollment Numbers by Race/Ethnicity and Age Group Served under Individuals with Disabilities Act (IDEA) – Virginia*

| Age Group | American Indian or Alaska Native | Asian | Black or African American | Hispanic/ Latino | Native Hawaiian or Other Pacific Islander | White | Two or More Races |
|---|---|---|---|---|---|---|---|
| Ages Birth-2 (Served under IDEA, Part C) | 11 | 505 | 1,870 | 1,056 | 16 | 5,394 | 948 |
| Ages 3-5 (Early Childhood) (Served under IDEA Part B) | 24 | 601 | 1,962 | 1,800 | 12 | 5,578 | 607 |
| Ages 5 (school age) through 21 (Served under IDEA Part B) | 498 | 6,011 | 43,069 | 27,480 | 228 | 76,458 | 9,715 |

*Special Education Enrollment Numbers by Race/Ethnicity and Age Group Served under Individuals with Disabilities Act (IDEA) – West Virginia*

| Age Group | American Indian or Alaska Native | Asian | Black or African American | Hispanic/ Latino | Native Hawaiian or Other Pacific Islander | White | Two or More Races |
|---|---|---|---|---|---|---|---|
| **Ages Birth-2 (Served under IDEA, Part C)** | X | 25 | 114 | 54 | X | 3,267 | 180 |
| **Ages 3-5 (Early Childhood) (Served under IDEA Part B)** | X | 14 | 104 | 53 | X | 2,820 | 98 |
| **Ages 5 (School Age) through 21 (Served under IDEA Part B)** | 47 | 98 | 1,959 | 767 | 17 | 38,277 | 1,588 |

X: Data suppressed due to small size.

## Student Enrollment Reflection Questions

- Based on the number of students by school locale, where are the majority of your students located?
- Looking at the enrollment distribution by race percentages, how diverse is your student population?
- How does the percentage of students qualifying as ELs in your jurisdiction compare to the overall percentage of ELs throughout the United States?
- How does the percentage of students qualifying for Free or Reduced-Price Lunch (FRPL) in your jurisdiction compare to the overall percentage of students qualifying for FRPL throughout the United States?

*Graduation Information[b, c]*

| Demographic | United States | Kentucky | Tennessee | Virginia | West Virginia |
|---|---|---|---|---|---|
| Total ACGR for all Students | 87% | 91% | 90% | 89% | 92% |
| Percent Economically Disadvantaged (2019-2020)[d] | 81% | 88% | 84% | 83% | 87% |
| Percent English Learners (2019-2020)[e] | 71% | 74% | 69% | 63% | >=95% |
| Percent Students with Disabilities (2019-2020)[f] | 71% | 78% | 75% | 68% | 84% |
| Homeless Enrolled (2019-2020) | – | 85% | 78% | 62% | 82% |
| Foster Care (2019-2020) | – | – | 60% | 54% | – |
| Private High School Graduates (2018-2019) | 340,610 | 5,420 | 8,340 | 7,560 | 840 |

– Not available.

*ACGR by Race/Ethnicity % (2019-2020)[g,h]*

| Jurisdiction | White | Black | Hispanic | Asian/ Pacific Islander | American Indian/ Alaska Native | Two or More Races |
|---|---|---|---|---|---|---|
| Kentucky | 93% | 83% | 84% | 94% | 90% | 89% |
| Tennessee | 94% | 84% | 93% | 95% | 91% | – |
| Virginia | 93% | 86% | 75% | 95% | 88% | 92% |
| West Virginia | 92% | 86% | 93% | >=95% | >=80% | 88% |

[b] Numbers are the public high school 4-year adjusted cohort graduation rate (ACGR), by selected student characteristics for 2019-2020.

[c] The time when students are identified as having certain characteristics varies by state. Depending on the state, a student may be included in a category if the relevant characteristic is reported in 9th-grade data, if the characteristic is reported in 12-grade data, or if it is reported at any point during the student's high school years.

[d] Students who met the state criteria for classification as economically disadvantaged.

[e] Students who meet the definition of English Learners as outlined in the Department of Education ED*Facts* workbook. For more information, see EDFacts Workbook.

[f] Students identified as children with disabilities under the IDEA.

[g] Two or more race data were unavailable for Tennessee.

[h] States either report data for a combined "Asian/Pacific Islander" group or report the "Asian" and "Pacific Islander" groups separately. Total represents either a single value reported by the state for "Asian/Pacific Islander" or an aggregation of separate values reported for "Asian" and "Pacific Islander." "Asian/Pacific Islander" includes the "Filipino" group. Number represents the Total reported Asian/Pacific Islander.

**Graduation Rates Reflection Questions**

- Do you collect data on 5-year graduation cohorts? If so, how does it compare to the 4-year cohort ACGR?
- Which, if any, graduation rate would you prioritize to increase over the next 5 years?

*Student Academic Information*

To compare students nationally, we have provided results from the fourth and eighth grade math and reading National Assessment of Educational Progress (NAEP) results. NAEP—a congressionally mandated large-scale assessment administered by the National Center for Education Statistics (NCES)—consists of print and digital assessments in various subject areas. Three of these subjects—mathematics, reading, and science—are assessed most frequently and reported at the state and select district level, usually for grades 4 and 8. The Nation's Report Card provides results on student performance based on gender, race/ethnicity, public or nonpublic school, teacher experience, and hundreds of other factors.

NAEP assessment results are reported as average scores on a 0-500 scale (reading, mathematics at grades 4 and 8, U.S. history, and geography) or on a 0-300 scale (mathematics at grade 12, science, writing, technology and engineering literacy, and civics). These scale scores, derived from student responses to assessment questions, summarize the overall level of performance attained by that student. Scale scores for individual students are not reported, but summary statistics describing scale scores for groups of students (demographic, gender, race/ethnicity, etc.) are reported. More information about NAEP can be found at https://nces.ed.gov/nationsreportcard/.

*Academic Achievement: NAEP (2022) National and State Averages*

| Jurisdiction | 4th Grade Math | 4th Grade Reading | 8th Grade Math | 8th Grade Reading |
|---|---|---|---|---|
| United States | 235 | 216 | 273 | 259 |
| Kentucky | 234 | 217 | 269 | 258 |
| Tennessee | 236 | 214 | 272 | 258 |
| Virginia | 236 | 214 | 279 | 260 |
| West Virginia | 226 | 205 | 260 | 249 |

**Student Academic Factors Reflection Questions**
- How did students in your jurisdiction compare to the national average of students on the NAEP results?
- Given the national average NAEP score, what goal(s) would you set for your students to achieve on the next NAEP administration? For example, would you like the results to stay stable or would you want to see a 3-point increase on 4th grade math? What do you need to achieve this goal?

## Non-Academic Information

Non-academic factors for students include suspension and expulsion rates. Additionally, the most recently reported data regarding students who have carried firearms to schools and have experienced bullying (both on school property and electronically) have been included.

Percentage of Students Suspended or Expelled from Public Elementary and Secondary Schools by Gender and Ethnicity (2017–2018)[i]

*Percent who Received Out-of-School Suspension*

| Demographic | United States | Kentucky | Tennessee | Virginia | West Virginia |
|---|---|---|---|---|---|
| Total | 5.0% | 5.5% | 6.4% | 5.7% | 7.0% |
| Male | 6.8% | 7.5% | 8.7% | 7.9% | 9.9% |
| Female | 3.0% | 3.3% | 4.1% | 3.4% | 3.9% |
| White | 3.4% | 4.4% | 3.3% | 3.6% | 6.5% |
| Black | 12.3% | 14.8% | 17.4% | 12.9% | 15.3% |
| Hispanic | 4.0% | 4.3% | 4.4% | 3.9% | 5.4% |
| Asian | 1.0% | 1.1% | 1.5% | 0.9% | 1.7% |
| Pacific Islander | 4.9% | 4.4% | 3.8% | 3.5% | 5.6% |
| American Indian/Alaska Native | 6.9% | 4.3% | 6.6% | 5.0% | 6.1% |
| Two or More Races | 5.5% | 7.3% | 5.9% | 5.2% | 8.7% |

*Percent Expelled[k]*

| Demographic | United States | Kentucky | Tennessee | Virginia | West Virginia |
|---|---|---|---|---|---|
| Total | 0.2% | 0.1% | 0.9% | 0.1% | 0.2% |
| Male | 0.3% | 0.2% | 1.3% | 0.1% | 0.3% |
| Female | 0.1% | 0.1% | 0.5% | 0.0% | 0.1% |
| White | 0.2% | 0.1% | 0.5% | 0.1% | 0.2% |
| Black | 0.5% | 0.4% | 2.5% | 0.1% | 0.2% |
| Hispanic | 0.2% | 0.1% | 0.5% | 0.1% | 0.6% |
| Asian | 0.0% | 0.0% | 0.2% | 0.0% | 0.0% |
| Pacific Islander | 0.1% | 0.1% | 0.5% | 0.1% | 0.0% |
| American Indian/Alaska Native | 0.3% | 0.1% | 1.1% | 0.0% | 0.8% |
| Two or More Races | 0.2% | 0.2% | 0.7% | 0.1% | 0.4% |

[i] Data by race/ethnicity excludes students with disabilities served only under Section 504 of the Rehabilitation Act of 1973 (i.e., those not receiving services under IDEA).

[j] An out-of-school suspension is an instance in which a student is temporarily removed from his or her regular school (either in person or virtual) for disciplinary purposes for at least half a day (but less than the remainder of

the school year) to another setting (e.g., home or behavior center). Out-of-school suspensions include removals with or without the continuation of educational services.

[k] Expulsions are actions taken by a local education agency to remove a student from his or her regular school (either in person or virtual) for disciplinary purposes, with or without the continuation of education services, for the remainder of the school year or longer, in accordance with local education agency policy. Expulsions also include removals resulting from violations of the Gun Free Schools Act that are modified to less than 365 days.

*Firearms (2019-2020)*

| Jurisdiction | Total Number of Students Who Brought Firearms to or Possessed Firearms at School | Number of Students Who did this per 100,000 Students, Enrolled |
|---|---|---|
| United States | 2,431 | 4.8 |
| Kentucky | 44 | 6.4 |
| Tennessee | 86 | 8.5 |
| Virginia | 57 | 4.4 |
| West Virginia | 13 | 5.3 |

*Bullying (2017)*

| Jurisdiction | Percentage of Public School Students Bullied on School Property[l] | Percentage of Public School Students Electronically Bullied[m] |
|---|---|---|
| United States | 19.0% | 14.9% |
| Kentucky | 21.2% | 18.2% |
| Tennessee | 20.3% | 15.6% |
| Virginia | 15.7% | 12.6% |
| West Virginia | 23.7% | 19.3% |

[l] Bullying was defined for respondents as "when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again." "On school property" was not defined for survey respondents.

[m] Includes "being bullied through e-mail, chat rooms, instant messaging, websites, or texting" for 2011 through 2015, and "being bullied through texting, Instagram, Facebook, or other social media" for 2017.

| **Student Non-Academic Factors Reflection Questions** |
|---|
| • What policies are in place to address recent issues of school violence? |
| • How does your state compare to the national average? Is this a number you would like to change? What other information do you need to make an informed decision about this issue? |

*Teacher Information*

| Jurisdiction | Total Number of Public School Teachers (Fall 2019) | Pupil/Teacher Ratio (Fall 2020) | Teachers in Private Schools |
|---|---|---|---|
| Kentucky | 42,223 | 16.4 | 7,160 |
| Tennessee | 64,784 | 15.7 | 11,550 |
| Virginia | 87,147 | 14.9 | 13,120 |
| West Virginia | 18,854 | 14.0 | 1,370 |

*Teacher Qualifications*

The following table includes the highest degree earned and years of full-time teaching experience by state and United States. Data from 2011-2012 was the latest data reported at the national level.

| Jurisdiction | Degree Levels, Percentage - Less than Bachelor's (2011-2012) | Degree Levels, Percentage - Bachelor's (2011-2012) | Degree Levels, Percentage - Master's (2011-2012) | Degree Levels, Percentage - Education Specialist or Doctor's (2011-2012) | Years Fulltime Experience - Less than 3 (2011-2012) | Years Fulltime Experience - 3 to 9 (2011-2012) | Years Fulltime Experience – 10 to 20 (2011-2012) | Years Fulltime Experience - Over 20 (2011-2012) |
|---|---|---|---|---|---|---|---|---|
| United States | 3.8% | 39.9% | 47.7% | 8.7% | 9.0% | 33.3% | 36.4% | 21.3% |
| Kentucky | 5.1% | 17.5% | 57.5% | 20.0% | 10.1% | 32.2% | 38.5% | 19.2% |
| Tennessee | 4.4% | 35.1% | 46.3% | 14.2% | 10.6% | 34.0% | 34.1% | 21.3% |
| Virginia | 3.3%! | 47.5% | 41.6% | 7.6% | 9.1% | 31.5% | 34.2% | 25.2% |
| West Virginia | 3.1% | 46.6% | 43.2% | 7.1% | 12.0% | 31.2% | 30.5% | 26.3% |

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

*Number and Percentage Distribution of Teachers Enrolled in Traditional and Alternative Programs*

| Jurisdiction | Number Enrolled in a Teacher Preparation Program (2019-2020) | Percentage Distribution of Enrollment by Traditional Program (2019-2020) | Percentage Distribution of Enrollment by Alternative Program- (Institute of Higher Education [IHE]) (2019-2020) | Percentage Distribution of Enrollment by Enrolled in an Alternative Program- (Not IHE based) (2019-2020) |
|---|---|---|---|---|
| United States | 590,046 | 69.9% | 8.3% | 21.9% |
| Kentucky | 7,398 | 73.9% | 25.5% | 0.6% |
| Tennessee | 7,939 | 76.7% | 19.8% | 3.5% |
| Virginia | 8,777 | 93.5% | 5.4% | 1.0% |
| West Virginia | 2,932 | 96.3% | 0.0% | 3.7% |

*Number and Percentage Distribution of Teachers Who Completed Traditional and Alternative Programs*

| Jurisdiction | Number Completed a Teacher Preparation Program (2019-2020) | Percentage Distribution of Completers in Traditional Program (2019-2020) | Percentage Distribution of Completers in an Alternative Program-(IHE based) (2019-2020) | Percentage Distribution of Completers in an Alternative Program-(Not IHE based) (2019-2020) |
|---|---|---|---|---|
| United States | 151,138 | 76.8% | 11.4% | 11.8% |
| Kentucky | 2,231 | 78.0% | 21.5% | 0.5% |
| Tennessee | 2,409 | 77.1% | 17.3% | 5.5% |
| Virginia | 2,995 | 90.3% | 6.7% | 3.0% |
| West Virginia | 775 | 95.0% | 0.0% | 5.0% |

**Teacher Information Reflection Questions**

- Given national issues of teacher shortages, where are the priority areas in your state?
- What teacher preparation institutions or alternative programs does your state offer? Are these programs going to fulfill your educator needs in the next 5 years?

*Financial Resources by State*

| Description | Kentucky | Tennessee | Virginia | West Virginia |
|---|---|---|---|---|
| **Revenue sources for public elementary and secondary education – Federal (In thousands) (FY2021)** | $1,343,277 | $1,740,443 | $1,748,237 | $585,850 |
| **Revenue sources for public elementary and secondary education – State (In thousands) (FY2021)** | $4,753,615 | $5,401,015 | $7,836,352 | $2,043,088 |
| **Revenue sources for public elementary and secondary education – Local (In thousands) (FY2021)** | $3,121,948 | $4,904,221 | $9,674,259 | $1,352,348 |
| **Amounts and percentage changes of inflation-adjusted state, local, and federal revenues per pupil (FY2021)** | $13,993 | $12,227 | $15,387 | $15,679 |
| **Percentage change from FY20-21** | 8.1% | 9.1% | 7.5% | 6.7% |
| **Current expenditures for public elementary and secondary education by function, and subfunction – Total (In thousands) (FY2021)** | $7,916,275 | $10,414,835 | $17,342,413 | $3,372,050 |
| **Current expenditures for public elementary and secondary education by function, and subfunction – Instruction (In thousands) (FY2021)** | $4,728,242 | $6,314,946 | $10,578,334 | $1,947,556 |
| **Current expenditures for public elementary and secondary education by function, and subfunction -Support Services (In thousands) (FY2021)** | $2,753,320 | $3,631,218 | $6,215,232 | $1,217,863 |
| **Current expenditures per pupil – Total (In thousands) (FY2021)** | $12,016 | $10,571 | $13,856 | $13,279 |
| **Title I expenditures per pupil – (In thousands) (FY2021)** | $377 | $293 | $202 | $387 |
| **Salaries and wages, and employee benefits for public elementary and secondary education, by function and state or jurisdiction – Total (In thousands) (FY2021)** | $7,916,275 | $104,14,835 | $17,342,413 | $3,372,050 |
| **Salaries and wages, and employee benefits for public elementary and secondary education, by function and state or jurisdiction – Instruction and Instruction-related total (In thousands) (FY2021)** | $5,142,837 | $6,968,783 | $11,941,048 | $2,078,339 |

| Description | Kentucky | Tennessee | Virginia | West Virginia |
|---|---|---|---|---|
| **Salaries and wages, and employee benefits for public elementary and secondary education, by function and state or jurisdiction – Support Services Total (In thousands) (FY2021)** | **$2,338,725** | **$2,977,381** | **$4,852,518** | **$1,087,080** |

### Financial Resources Reflection Questions

- Looking at the subfunction allocations, are expenditures allocated proportionately in the correct places?
- How do educator salaries in your state compare to other professional careers?

# Appendix D. Summary of Stakeholder Input

*Summary of Stakeholder Input*

| Data Source | # of Responses | Time Period | Topics by Category |
|---|---|---|---|
| Public Comments | 47 | August 18, 2023 – October 15, 2023 | • Education funding<br>• Services for students with disabilities<br>• Reading and math skills<br>• Family engagement<br>• Technology and trades training for students<br>• Post-COVID recovery<br>• Professional development for teachers and superintendents<br>• Student and teacher mental health<br>• Teacher recruitment and retention |
| REL Governing Board | 1 | September 15, 2023 – October 10, 2023 | • Teacher recruitment and retention;<br>• Teacher and student access to high-quality instructional resources (HQIRs) and related funding;<br>• Access to educator high-quality professional learning (HQPL), including curriculum based professional learning, and related funding;<br>• Access and funding for instructional coaches to support professional growth within classroom teachers and continuous improvement across local systems;<br>• Systemic supports and technical assistance for implementing a multi-tiered system of supports (MTSS) at the local level;<br>• Student access to evidence-based, standards-aligned, grade-level instruction in reading and writing, mathematics, science, and social studies. |
| CSSO | 1 | September 15, 2023 – October 10, 2023 | • Put kids first<br>• Support the people who show up for our kids everyday<br>• Ensure our schools have the resources to do what we have asked them to do |