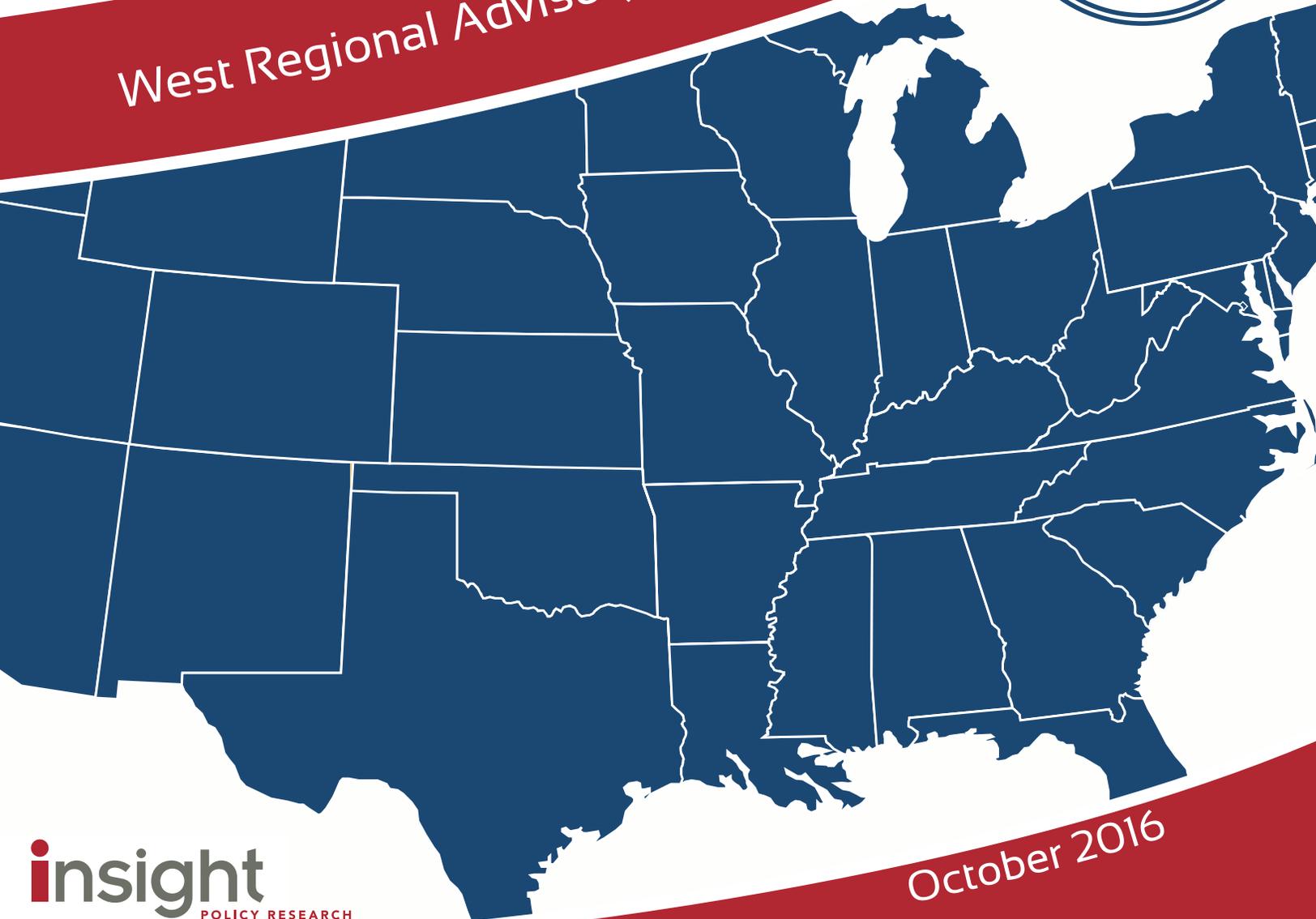


Identifying and Addressing Regional Education Needs

U.S. Department of Education



West Regional Advisory Committee



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The West Region:

A Report Identifying and Addressing the Region's Educational Needs

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Executive Summary

This report summarizes the activities and results of the West Regional Advisory Committee (RAC), 1 of 10 RACs established under the Educational Technical Assistance Act of 2002 (20 U.S.C. § 9601 et seq.). The RACs were formed to identify the region’s most critical educational needs and develop recommendations for technical assistance to meet those needs. The technical assistance provided to state education agencies (SEAs) aims to build capacity for supporting local education agencies (LEAs or districts) and schools, especially low-performing districts and schools; improving educational outcomes for all students; closing achievement gaps; and improving the quality of instruction. The report represents the work of the West RAC, which includes Arizona, California, Nevada, and Utah.

Committee members convened three times and reached out to their respective constituencies between July 19, 2016, and August 31, 2016. Members of the West RAC represented a variety of stakeholders from LEAs, SEAs, businesses, regional service agencies, and higher education. The members collaborated, communicated, and shared resources using Communities360^o, an interactive online platform hosted within the larger GRADS360^o system housed within the secure U.S. Department of Education environment. Table A provides a list of committee members and their affiliations. A stakeholder from Arizona and a stakeholder from California initially elected to participate on the RAC but withdrew from the committee during the course of the work in August.

Table A. West RAC members

Member Name	Affiliation	State Represented
Blair Blackwell	Chevron Corporation	California
Steve Canavero	Nevada Department of Education	Nevada
Brian Ferguson	South Davis Junior High, Davis School District	Utah
Cecilia Johnson	Former Arizona Department of Education	Arizona
Christine Olmstead	Orange County Department of Education	California
Sherrie Reed	University of California, Davis, School of Education	California

Members reviewed a regional profile containing educational statistics and other relevant data to inform their individual assessments of the challenges facing their region. The following snapshot of West region characteristics helps contextualize the state and regional needs identified by the RAC:

- ▶ In total, the region serves 8,492,360 students in K–12 public and private schools, with nearly two-thirds of those students concentrated in California.
- ▶ In every state, with the exception of Nevada, the majority of districts (but not the majority of students) are in rural communities. Still, the region has higher percentages of city districts than the national average.
- ▶ The per-pupil expenditures in each state fall short of the national average.
- ▶ In Arizona, California, and Nevada the percentages of persons living in poverty are at or higher than the national average. The percentage of students in these states who participate in their free and reduced-price lunch programs is also higher than the national average.

- ▶ Public school students in the region are diverse. With the exception of Utah, the percentage of White students in the West region is much lower than the national average. The percentage of Hispanic students exceeds the national average in every state in the region except Utah.
- ▶ With the exception of Utah, the region’s high school graduation rates are lower than the national average. Students in Arizona, California, and Nevada also tend to score lower than their peers nationwide on the National Assessment of Educational Progress 4th-grade reading assessments and on the ACT.

See appendix A for detailed tables on the educational characteristics of the region.

Members also collaborated to develop a plan for soliciting information on the region’s educational needs. Members engaged stakeholders and disseminated information by administering an online survey, conducting individual phone and face-to-face interviews, and using social media (e.g., Twitter) to publicize the survey. Members focused their efforts on distributing the survey to the widest possible group of stakeholders.

As a result of the committee’s outreach efforts, a total of 809 individuals responded to the survey. An additional 93 individuals provided feedback through personal phone calls, small meetings, or focus groups. Of the respondents, 359 represented individuals at the school level (e.g., parents, librarians, principals), 214 represented individuals at the local district or regional levels (e.g., superintendents, school board members), 173 represented teachers, 96 represented individuals from within the community (e.g., higher education, business, other community members), and 53 represented state-level individuals (e.g., education agency or other state or local government staff, state board of education members). Seven respondents did not provide their role or described roles without sufficient detail to be included in the analysis.

Each committee member prepared a report containing a needs assessment and specific recommendations for future technical assistance based on his or her assessment of the region’s unique educational environment, the survey results, and the results of other data collection efforts.

Committee members in the West region identified and prioritized the following five needs. They are listed in ranked average order of priority as listed by RAC members:

- ▶ equitable access to educational opportunities and resources;
- ▶ adequate funding and resources for local needs;
- ▶ college and career readiness;
- ▶ preparation, recruitment, and retention of excellent educators; and
- ▶ improved access to early childhood education.

Committee members also developed 76 individual recommendations for technical assistance to better address the educational needs, which are summarized in five broad categories of recommendations here and described in table 3 in chapter 2:

- ▶ **Professional development, training, and technical assistance.** There were 22 recommendations related to providing professional development, training, and technical assistance to early childhood educators, teachers, school leaders, SEAs, and higher education instructors. These

recommendations cover a wide variety of topic areas, including teaching methodologies for special populations, leadership and management training, budgeting, decision-making techniques, strategies for retaining high-quality teachers and administrators, family engagement, school culture and climate, equitable distribution of resources, change management, alternative pathways, accountability planning, Next Generation Science Standards, college counseling, postsecondary opportunities, building capacity of LEAs, libraries as centers for parents, and early childhood education.

- ▶ **Research, evidence, and data.** There are 10 recommendations related to collecting and disseminating research, evidence, and data. These include collecting and publishing state data on the number of teacher librarians, district comparative funding, and information on existing leadership training for principals; gathering and publishing research on best practices in peer-to-peer management; and reviewing, evaluating, and recommending evidence-based promising practices in high-quality early childhood education, including programs and budgets. Three of the recommendations specified use of a “clearinghouse” of information for states and districts in the following areas: resource distribution; budgeting; teacher recruitment, retention and quality; research; best practices; grants; and partnerships.
- ▶ **Dissemination of best practices and effective models.** There are nine recommendations focused on dissemination of effective models related to implementation of the following programs or initiatives: Next Generation Science Standards; 100Kin10, a national network focused on expanding science, technology, engineering, and mathematics (STEM) opportunities; aligning SEA systems; providing incentives for teacher recruitment; providing “soft policy” support to districts with changing federal funding; aligning state and federal funds to expand early childhood education; establishing quality indicators of early childhood programs; providing career counseling; and Common Core State Standards implementation.
- ▶ **Collaboration and networks.** Four recommendations focus on facilitating collaboration and networks among leaders, expert practitioners, and collaborative groups in the West RAC region. Such collaboration would enable districts to rethink resource distribution, promote authentic dialogue among disparate parties, and improve teacher retention.
- ▶ **Coordination with other agencies.** Two recommendations focus on coordinating with other agencies, including the American Association of School Librarians and the Office of Civil rights, to develop LEA and SEA education plans for professionally staffed libraries, to advocate for equitable student outcomes, and to help carry out the intentions of NCLB and ESSA.

See appendix B for each committee member’s individual needs assessment and recommendations for addressing those needs.

Chapter 1. Introduction

This report represents the regional needs assessment of the RAC for the West region, which includes Arizona, California, Nevada, and Utah. The RAC members used statistical data from the West regional profile (appendix A); conducted data collection and outreach activities to obtain input from various constituencies; and met three times between July 16, 2016, and August 18, 2016, to assess regional needs and how to address those needs.

A. Legislative Background

The RACs are authorized by the Educational Technical Assistance Act of 2002 (20 U.S.C. § 9601 et seq.). Section 203 of Title II of the Education Sciences Reform Act of 2002 (P.L. 107–279) directs the Secretary of the U.S. Department of Education to establish not less than 20 comprehensive centers to provide technical assistance to state, local, and regional educational agencies and to schools. The technical assistance is to be directed toward implementing the Every Student Succeeds Act (ESSA) and achieving goals through the use of evidence based teaching methods and assessment tools for use by teachers and administrators in the following areas:

- ▶ core academic subjects of mathematics, science, and reading or language arts;
- ▶ English language acquisition;
- ▶ education technology;
- ▶ communication among education experts, school officials, teachers, parents, and librarians;
- ▶ information that can be used to improve academic achievement; close achievement gaps; and encourage and sustain improvement for schools, educators, parents, and policymakers within the region in which the center is located; and
- ▶ teacher and school leader in-service and preservice training models that illustrate best practices in the use of technology in different content areas.

B. Regional Background Information

A variety of educational data sources informed the development of the West regional profile, which provides a descriptive snapshot of the educational landscape in the region. The RAC members used these data to inform their individual assessments of the region’s most pressing needs. The regional profiles include sections on demographics; SEA capacity; educational resources; teacher preparation, qualifications, and certification; and student educational attainment. Summaries of the data presented in each section of the profiles appear below, unless otherwise noted in a text citation. See appendix A for the descriptive tables and charts that represent this regional profile.

The four states in the West region (Arizona, California, Nevada, and Utah) serve 8,492,360 diverse students in 17,660 K–12 public and private schools, representing close to 17 percent of the nation’s public and private school enrollment. Seventy four percent of the region’s students reside in California, by far the largest state in the region. Consistent with nationwide trends, the majority (77 percent) of the region’s K–12 schools are public. The West region accounts for approximately 28 percent of the nation’s charter schools. In addition to serving students in K–12, all the states in the region, with the exception of

Utah, have state preschool programs. However, they serve lower percentages of children ages 3 and 4 than the national average (17 percent) (Barnett et al. 2016).

One-third to nearly one-half of the districts in the West region are in rural communities. Although these percentages fall slightly below the national average (53 percent) in Arizona, California, and Utah, the majority of districts (48, 25, and 34 percent, respectively) are in rural communities. In Nevada, 33 percent of districts are in rural communities, while 44 percent are in towns. In spite of the high percentages of rural districts in these states, the region has a particularly high percentage of city districts, with every state surpassing the national average (6 percent). Without a doubt, the region's varied geography poses challenges in equitably distributing resources and recruiting and retaining effective educators.

Poverty is a challenge across the region, particularly in Arizona, California, and Nevada, where the percentages of persons living in poverty are at or higher than the national average (15 percent). Those states also have high proportions of students living in poverty, as indicated by more than 53 percent of students' participating in the free or reduced-price lunch program in each state. Overall, per-pupil expenditures in each state in the West region fall short of the national average, by \$1,403 in California to \$4,115 in Utah. The economic condition in many districts and counties across the West region has important implications for student performance, equitable distribution of teachers, and equitable distribution of resources to serve all students.

In addition to their socioeconomic diversity, the region's students represent diverse racial-ethnic backgrounds. Three of the states in the region (Arizona, California, and Nevada) have significantly higher proportions of Hispanic students than the national average. More than half (53 percent) of students in California are Hispanic. Fifty-three percent of students in California, 44 percent in Arizona, and 40 percent in Nevada are Hispanic; only Utah has a greater percentage of White students (76 percent) than the national average (50 percent). Three out of four states in the region exceed the national average in proportions of Pacific Islander students (California, Nevada, and Utah) and American Indian/Alaska Native students (Arizona, Nevada, and Utah). Spanish is the second most common language spoken at home in the region. In California, nearly a third (29 percent) of students speak Spanish at home. Twenty-three percent of public school students in California participate in programs for English learners, the highest percentage in the region and significantly higher than the national average of 9 percent. Across the region, there is a need to ensure English language learners have access to high-quality learning instruction and other educational resources.

Academic achievement and attainment gaps are issues in the West region. In all states but Utah, the percentage of students achieving proficient or above in 4th-grade reading on the National Assessment of Education Progress is less than the national average. In these same three states, a higher proportion of students score at "basic," the lowest level, than the national average. Once students get to high school, the trend continues. In every state but Utah, ACT scores are below the national average. Regional data for high school graduation rates also highlight inequitable outcomes: Black students in all states and Hispanic students in all states, with the exception of California, graduate at rates lower than the national average. With the exception of Utah, rates of high school graduation in the region are lower than the national average.

Teacher supply is an issue in every state, particularly in California and Nevada, where between 2010 and 2014, teacher supply dropped by 36 and 24 percent, respectively (Barth, Dillon, Hull, and Holland Higgins 2016). All states in the region have teacher shortages in academic and subject matter areas, ranging from 6 areas in Utah to 34 areas in Nevada (Cross 2016). All the states in the West region have teacher preparation programs to address shortages of highly qualified teachers by area of certification,

licensure, subject, or specialty. Across the West region, most teachers are trained in traditional teacher preparation programs, with program completers ranging from 75 percent in Nevada to 94 percent Utah. All states in the region have programs based in institutes of higher education. Nevada has the highest percentage (24 percent) of graduates of these programs, far exceeding the national average (7 percent). In spite of these efforts to prepare educators in both traditional and alternative programs, challenges in access to high-quality educators complicate the region's efforts to improve student learning.

C. Challenges Affecting Regional Needs

RAC members' data collection efforts identified several challenges affecting the West region's education needs. Differences in specific state contexts resulted in varying approaches to addressing the challenges. The challenges affecting the region are summarized briefly below:

- ▶ **Limited funding.** RAC members identified limited funding as the second highest priority need. In every state in the West region, per-pupil funding is below the national average. The region's relatively high rates of students in low-income families and English language learners, particularly in Arizona, California, and Nevada, strain already scarce resources. Limited financial resources challenge the region's efforts to recruit and retain effective teachers, provide equitable learning opportunities that prepare all students for college and careers, and expand access to high-quality early childhood education.
- ▶ **Rural geography.** Although RAC members did not expressly identify rural geography as a priority need, geography creates additional challenges to improving achievement and closing achievement gaps. One-third to nearly one-half of the districts in the West region are in rural communities. In both Arizona and California, a plurality (48 and 35 percent, respectively) of districts are rural. The percentages of rural districts are only slightly lower in Utah and Nevada (34 and 33 percent, respectively). These districts can face particular challenges in recruiting and retaining effective educators and implementing important learning opportunities or supports, particularly those requiring access to new technology, at scale.
- ▶ **Teacher supply.** Across the region, there are challenges in ensuring an adequate supply of teachers. RAC members in California, Nevada, and Utah specifically indicated that teacher shortages are confounding efforts to improve education in their states. Although every state in the region is experiencing teacher shortages in subject areas such as STEM and special education, Nevada, in particular, faces serious teacher shortages. Between 2010 and 2014, the supply of teachers in Nevada dropped by 24 percent. In 2015–2016, Nevada had statewide teacher shortages in 34 academic disciplines or subjects; nearly two-thirds of the newly licensed teachers in Nevada are from other states. Expanded capacity to prepare, recruit, and retain high-quality educators is critical to improving teaching and learning in the region.

D. Data Collection and Outreach Strategies

A main priority of each RAC was to solicit input from numerous constituencies, including teachers, principals, SEA and LEA administrators, governors, institutions of higher education/community colleges, postsecondary technical programs, school boards, parents, education professional organizations, teachers unions, local government, youth organizations, community-based organizations, chambers of commerce, and business leaders. RAC members received briefs, PowerPoint presentations, and other materials that described the purpose of the Comprehensive Center program and how technical

assistance builds the capacity of SEAs and LEAs. Members disseminated materials and the survey link to their educational organizations and their professional networks.

RAC members conducted needs sensing and data collection between July 19, 2016, and August 31, 2016. Methods included disseminating a link to an online survey through email, posting the link on social media sites, making personal phone calls, and conducting individual interviews. The online survey asked respondents to identify their state and affiliation and allowed them to identify needs and make recommendations through open-ended responses in comment boxes.

RAC members had access to a Community of Practice website to help facilitate interactions and align data collection activities. The website was used to gather stakeholder feedback through a link to the online survey and to support coordination of needs-sensing activities through an online discussion forum and a workspace for storing additional outreach materials such as regional background and demographic information, needs-sensing notes, and meeting minutes. RAC members held two meetings internally to review the data collected and discuss the needs and the strategies to address those needs.

A total of 809 individuals took the online survey. An additional 93 individuals provided feedback through personal phone calls, small meetings, or focus groups. Table 1 illustrates responses received through the survey and other data collection efforts in each of the states.

Table 1. Members of the public submitting comments by state

State	Number of individuals providing feedback	Percent
Arizona	236	26
California	358	40
Nevada	189	21
Utah	119	13
Total West region	902	100

Note: Some percentages may not total 100 because of rounding.

Table 2 shows the number of responses received from each stakeholder group.

Table 2. Members of the public submitting comments by stakeholder group

Role	Number of individuals providing feedback	Percent
State level	53	6
SEA staff	39	4
Other, state level	14	2
Local district or regional level	214	24
Superintendent or director of schools	106	12
School board member	49	5
LEA or central office	48	5
Other, local or regional level	11	1
School level	359	40
Principal or other school administrator	96	11
Librarian	135	15
Curriculum specialist or instructional coach	20	2
Parent/grandparent/guardian	79	9
Students	14	2
Other, school level	15	2
Classroom level	173	19
Teacher	173	19
Community level	96	11
Higher education	28	3
Community member	38	4
Business	11	1
Other, community level	19	2
Other or missing	7	1
Total	902	100

Note: Some percentages may not total 100 because of rounding.

Chapter 2. Educational Needs and Recommendations for Addressing the Needs

RAC members used information from the regional profile, input from constituencies, and committee members' individual expertise to identify the region's most pressing educational need areas and to make recommendations accordingly. Each committee member chose his or her top five needs and recommended one or more potential strategy to address those needs (see appendix B). Overall, individual members of the West RAC identified the following five needs:

- ▶ **Equitable access to educational opportunities and resources.** Equity emerged as a top priority for the West RAC region, listed eight times across the five committee members' individual needs sensing/assessment reports. Stakeholders from business, school and district leaders, and higher education leaders identified the following equity-related needs: equitable distribution of teachers and leaders, closing the achievement and opportunity gaps, addressing disproportionate access to high-quality education and resources, and support for the lowest performing schools.
- ▶ **Additional funding and resources for local needs.** Maximizing federal and local funding and creating organizational efficiencies is a priority need that was identified by teachers, business, higher education faculty, principals, and SEA leaders and was listed three times in five committee members' individual needs sensing/assessment reports. The identified needs around funding were specific to higher per-pupil funding; higher teacher pay; maximizing available funding to better serve students; creating organizational efficiencies; identifying additional resources, such as grants and partnerships; and learning how to develop and prioritize budgets.
- ▶ **College and career readiness.** Stakeholders representing businesses, nonprofits, higher education, and district and school leaders rated this need as a priority; school leaders ranked this as the highest priority. Related areas identified by stakeholders included meeting Common Core State Standards; measuring readiness, providing career and technical education; providing funding for career counselors, librarians, and other resources supporting college and career readiness; addressing existing resource inequities; and recruiting and retaining teachers. Stakeholders also indicated that a high-quality school library program addresses college and career readiness priorities by encouraging classroom teachers to integrate literature and information skills into the curriculum and offering resources and support for developing these skills. Stakeholders also identified a need to support educators in providing more STEM instruction in the classroom.
- ▶ **Preparation, recruitment, and retention of excellent educators.** The need to prepare, recruit, and retain excellent teachers was identified by parents, businesses, community leaders, researchers, higher education faculty, and school and district leaders. Stakeholders noted several specific factors contributing to this need including teacher shortages, achievement gaps, lack of support for teachers, negative perception of the profession, high workloads, and low pay. Teachers expressed a need for principals and district leaders to support and value their professional employees (such as teachers) to help address issues of teacher morale, positive culture, and trust, which affect recruitment and retention. They also identified a need for school leaders to better manage the pace of change driven by states, districts, and schools.
- ▶ **Improved access to early childhood education.** Stakeholders from business, nonprofits, and SEAs focused on the need to increase access to and improve early childhood education. There is

a need for all students to have access to high-quality preschool and a need for alignment of federal and state programs for children under age 5 years and birth through kindergarten programs. Stakeholders note that addressing these needs would close an opportunity gap and help ensure college and career readiness for all students and equitable outcomes.

The committee members made recommendations in five broad categories to help address the identified needs:

- ▶ provide professional development/training/technical assistance;
- ▶ conduct research, compile evidence, and collect data;
- ▶ disseminate best practices and effective models;
- ▶ support collaboration and network connections; and
- ▶ coordinate with other agencies.

Table 3 provides a high-level summary of the recommendations expressed by each RAC member related to the priority need areas.

Table 3. Summary of needs and recommendations by committee member

Member name	Recommendations
<i>Equitable access to educational opportunities and resources</i>	
Brian Ferguson	<p>Illustrate the role school libraries can play in ensuring equity by</p> <ul style="list-style-type: none"> • leveraging libraries to collect and disseminate research and data on teacher librarians and their role in school improvement • providing state-by-state data regarding the number of elementary and secondary schools (and LEAs) that have full-time, licensed, teacher librarians • coordinating with the American Association of School Librarians to develop an education plan regarding the educational purpose, critical need, and results-based value of professionally staffed library programs
Blair Blackwell Sherrie Reed	<p>Support low-performing schools by</p> <ul style="list-style-type: none"> • providing technical assistance to states in identifying chronically low-performing schools and districts • facilitating collaboration among expert practitioners and thought leaders in the region to share successes and challenges and address needs
Sherrie Reed Blair Blackwell	<p>Provide technical assistance to states in creating and revising accountability plans to include measures other than academic achievement (i.e., measures of social-emotional learning and attendance metrics)</p>
Blair Blackwell Christine Olmstead Steve Canavero Sherrie Reed	<p>Improve teachers' cultural competency and support diverse populations by</p> <ul style="list-style-type: none"> • providing professional development, both in person and using technology, on teaching methodologies for diverse student populations, support for mentors, and co-teaching • identifying and disseminating research and best practices, including strategies for recruiting and retaining high-quality educators, supporting family engagement, and improving school culture and climate • providing examples of how libraries can serve as centers for parents and best practices in resource distribution and budgeting

Member name	Recommendations
<i>Adequate funding and resources for local needs</i>	
Blair Blackwell Steve Canavero Brian Ferguson Christine Olmstead	<p>Offer guidance and support to states in how to more effectively leverage federal funding and streamline procedures for evaluating educational programs and funding</p> <p>Help states use audits and create a plan to develop internal organizational efficiencies, including efforts to plan for ESSA</p> <p>Provide technical assistance to districts in identifying and securing grants and additional federal funding, particularly as new funding opportunities become available under ESSA</p> <p>Provide training to school administrators on developing and setting budget priorities in conjunction with their staff and communities</p> <p>Share state-to-state and district-to-district comparative funding data for the use of any stakeholder</p> <p>Develop and disseminate models of “soft policy” or a guidance memorandum that states may adapt to provide support for districts to change practice related to use of federal funds</p>
<i>College and career readiness</i>	
Blair Blackwell Christine Olmstead	Develop and disseminate a common definition of college and career readiness
Blair Blackwell Christine Olmstead	Provide examples of effective models of implementing the Common Core State Standards and Next Generation Science Standards
Blair Blackwell Sherrie Reed Steve Canavero	<p>Help SEAs develop strategies to assist students in navigating appropriate career and college pathways by</p> <ul style="list-style-type: none"> • promoting and supporting the implementation of career pathways, including better measurement and quality control • providing technical assistance on helping students navigate the choice between traditional college and career technical education, applying for college and financial aid, and the college enrollment processes • developing and implementing professional development on linking learning and postsecondary opportunities • sharing models of career counseling to clarify expectations for the knowledge, skills, and dispositions needed within a given field
Blair Blackwell Sherrie Reed	<p>Support and promote plans to improve teaching and learning in STEM</p> <p>Provide professional development focused on implementing Next Generation Science Standards, as well as understanding and responding to the evolving needs of higher education and business. Leverage train-the-trainer models for professional development</p>
<i>Preparation, recruitment, and retention of excellent educators</i>	
Sherrie Reed	Provide technical assistance on creating alternative pathways into teaching

Member name	Recommendations
Sherrie Reed	Assist with teacher retention by <ul style="list-style-type: none"> • working with states to develop teacher leader networks designed to improve teacher retention in schools • identifying and disseminating research and data on preparation, recruitment, and retention of excellent educators. Key topics should include best practices for professional peer-to-peer management and improving perceptions of the teaching profession
Brian Ferguson	Help states increase teacher buy-in by <ul style="list-style-type: none"> • providing training for principals and district personnel in group decision-making techniques so that teacher professionals are actively involved in decision-making • seeking ongoing feedback from practitioners and other key stakeholders on the work of the comprehensive centers to improve supports and better align them to regional needs in this area
Brian Ferguson Sherrie Reed Blair Blackwell	Encourage best practices for teachers by <ul style="list-style-type: none"> • developing professional peer-to-peer leadership/management trainings and materials based on best practices • collecting and publishing data on the leadership/management training offered to both in-service and preservice educational leaders • collaborating with organizations such as 100Kin10, a network designed to expand STEM opportunities, to identify and disseminate knowledge and bright spots in preparing, recruiting, and retaining excellent STEM educators
Brian Ferguson	Track mandates and monitor teacher burden by <ul style="list-style-type: none"> • collecting data on what, and how many, new mandates and requirements states ask of teachers each year, including which person, department, or agency required the mandate • helping states simplify and clarify new federal and state mandates before they are passed down to districts, schools, and teachers
<i>Improving access to early childhood education</i>	
Sherrie Reed	Provide professional development SEAs can disseminate to early childhood educators, leveraging a train-the-trainer model to expand professional development opportunities
Steve Canavero Sherrie Reed	Disseminate best practices in early childhood education by <ul style="list-style-type: none"> • sharing strategies for states to align with other federal and state programs serving infants, toddlers, and children under age 5 (e.g., Head Start, Individuals with Disabilities Education Act) • sharing best practices and strategies used by states or regions to build high-quality programs from birth through kindergarten, including development of quality indicators • connecting leaders across states in collaborative groups to share successes and challenges • sharing best practices in aligning state and federal funds toward the expansion of early childhood without sacrificing quality

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Appendix A. Region Educational Profile

Demographics

Understanding the demographic makeup of the states in each region helps to establish the context for the educational issues that are most pressing. This section presents tables from the *Digest of Education Statistics*, the U.S. Bureau of Labor Statistics, and American *FactFinder* related to

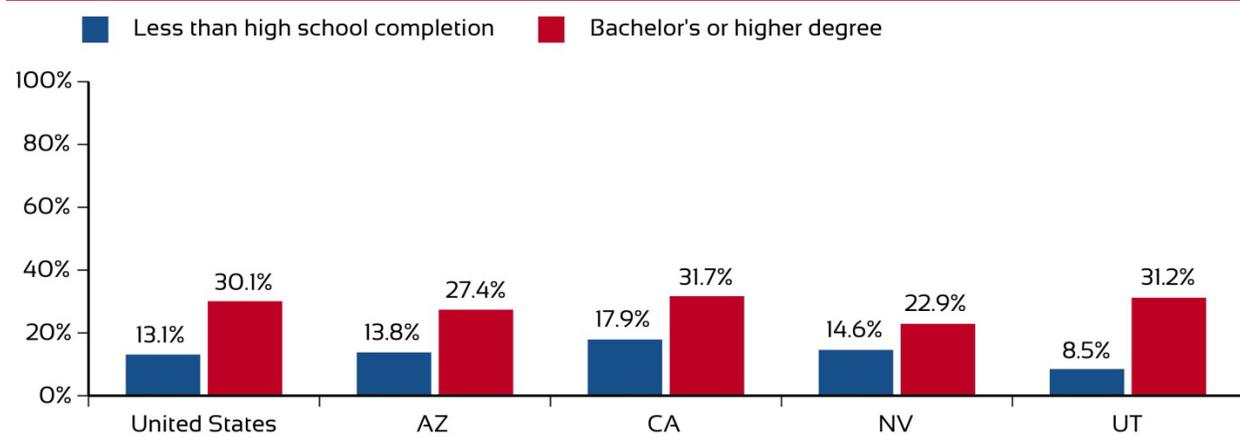
- ▶ the educational attainment of the adult population;
- ▶ the poverty rate, median household income, and unemployment rate;
- ▶ the overall number of students, teachers, and schools, both public and private;
- ▶ the racial/ethnic distribution of students served by public schools;
- ▶ participation in public school services (free or reduced-price lunch program, English language learners, students with disabilities, gifted and talented students, state-sponsored prekindergarten); and
- ▶ the percentage of the population who speak a language other than English at home.

A. Educational Attainment

The highest level of education completed by the adult, working-age population (25- to 64-year olds) is a proxy for human capital—the skills, knowledge, and experience possessed by an individual or population. Higher educational attainment (a bachelor’s degree or higher) is associated with better income and employment. Figure 1 displays the percentage of the adult population with less than a high school diploma in 2014 and the percentage with a bachelor’s degree or higher in 2014.

Additional information about the **educational attainment of young adults** and differences by race/ethnicity can be found in the latest *NCES Condition of Education*.

Figure 1. Educational attainment by state, 2014



Source: 2015 *Digest of Education Statistics*, table 104.80. Retrieved July 5, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_104.80.asp.

B. Economic Indicators

Table 1 displays socioeconomic indicators such as the percentage of persons and percentage of children below the poverty level in 2014. The table also displays the median annual household income in 2014 and the unemployment rate in May 2016.

Table 1. Selected economic indicators, by state

State	Percent of Persons in Poverty, 2014 ^a	Percent of Children Ages 5 to 17 in Poverty, 2014 ^a	Annual Household Income (Median), 2014 ^b	Unemployment Rate, May 2016 ^c
United States	15.1	20.3	\$53,700	4.9
Arizona	17.6	23.3	\$50,100	5.6
California	16.1	21.9	\$61,900	5.2
Nevada	14.7	19.2	\$51,500	6.1
Utah	11.6	13.2	\$60,900	3.8

Source: ^a 2015 Digest of Education Statistics, table 102.40. Retrieved July 5, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_102.40.asp?current=yes.

^b 2015 Digest of Education Statistics, table 102.30. Retrieved July 5, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_102.30.asp?current=yes.

^c Bureau of Labor Statistics Monthly Unemployment Report. Retrieved July 5, 2016, from <http://www.bls.gov/web/laus/laumstrk.htm>.

C. Schools and Students

Tables 2 through 5 contain school and student demographics such as the total number of schools, teachers, and students; the racial/ethnic distribution of students in public schools; the percentage of schools by urbanicity; and the percentage of Title I schools.

Number of schools, teachers, and students. Table 2 displays the number of schools, teachers, and students in fall 2013 for public and private schools.

Table 2. Count of schools, teachers, and students, by sector and state, fall 2013

State	Public			Private		
	Schools ^a	Teachers ^b	Students ^c	Schools ^d	Teachers ^d	Students ^d
United States	94,758	3,113,764	50,044,522	33,620	441,500	5,395,740
Arizona	2,038	48,359	1,102,445	340	4,060	55,070
California	9,962	259,506	6,312,623	3,390	45,710	596,160
Nevada	650	21,921	451,831	140	1,370	21,980
Utah	980	27,247	625,461	160	1,720	23,310

Source: ^a 2015 Digest of Education Statistics, table 216.43. Retrieved July 5, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_216.43.asp?current=yes.

^b 2015 Digest of Education Statistics, table 208.30. Retrieved July 5, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_208.30.asp?current=yes.

^c 2015 Digest of Education Statistics, table 203.40. Retrieved July 5, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_203.40.asp?current=yes.

^d 2015 Digest of Education Statistics, table 205.80. Retrieved July 5, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_205.80.asp?current=yes.

Percentage of public school students by race/ethnicity. Table 3 displays the racial/ethnic background of public school students in fall 2013.

Table 3. Percentage distribution of enrollment in public elementary and secondary schools, by race/ethnicity and state, Fall 2013

State	White	Black	Hispanic	Asian	Pacific Islander	American Indian/Alaska Native	Two or More Races
United States	50.3	15.6	24.8	4.8	0.4	1.0	3.0
Arizona	40.7	5.2	44.1	2.8	0.3	4.8	2.2
California	25.0	6.2	53.3	11.1	0.5	0.6	3.3
Nevada	36.0	9.9	40.6	5.6	1.3	1.1	5.6
Utah	76.3	1.3	16.0	1.7	1.5	1.1	2.0

Source: 2015 Digest of Education Statistics, table 203.70. Retrieved July 12, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_203.70.asp.

Percentage of school districts by urban-centric locale. Table 4 displays the percentage of school districts classified by the Census locale codes. The large, midsize, and small city codes were summed to create the total number of city districts. The large, midsize, and small suburban codes were summed to create the total number of suburban districts. The fringe, distant, and remote town codes were summed to create the total number of town districts. The fringe, distant, and remote rural codes were summed to create the total number of rural districts. The percentages of districts within each of the four major locale codes are presented.

Table 4. Percentage distribution of public school districts, by urban-centric locale and state, 2013–14

State	City	Suburban	Town	Rural
United States	5.7	22.9	18.4	53.0
Arizona	17.5	10.8	22.9	48.9
California	15.8	32.7	16.6	34.9
Nevada	22.2	0.0	44.4	33.3
Utah	12.2	24.4	29.3	34.1

Source: National Center for Education Statistics Rural Education in America, table A.1.a.-1. Retrieved July 12, 2016, from <https://nces.ed.gov/surveys/ruraled/tables/a.1.a.-1.asp>.

Percentage of Title I schools. Table 5 presents the total number of schools and the percentage of schools that were eligible for Title I in 2010–11. A Title I eligible school is one in which the percentage of children from low-income families is at least as high as the percentage of children from low-income families served by the local education agency (LEA) as a whole, or because 35 percent or more of the children in the school are from low-income families.

Table 5. Number of schools and percentage by Title I status, 2010–11

State	Number of Operating Schools	Percent Title I
United States	98,817	67.4
Arizona	2,265	77.9
California	10,124	59.5
Nevada	645	58.0
Utah	1,016	28.3

Source: *Number and Types of Public Elementary and Secondary Schools from the Common Core of Data: School Year 2010-11*. Retrieved July 12, 2016, from https://nces.ed.gov/pubs2012/pesschools10/tables/table_02.asp.

D. Participation in Public School Services

Tables 6 and 7 provide information about participation in public school services.

Public school services. Table 6 provides the percentage of students in public schools who were eligible for free or reduced-price lunch, participated in English Language learner programs, were served under the Individuals with Disabilities Act Part B, or participated in programs for gifted and talented students.

Table 6. Percentage of public school students participating in school services

State	Free or Reduced-Price Lunch, 2013-14 ^a	English Language Learners, 2013-14 ^b	Students with Disabilities, 2013-14 ^c	Gifted and Talented, 2006 ^d
United States	52.0	9.3	12.9	6.7
Arizona	53.4	6.7	11.8	6.3
California	58.1	22.7	11.1	8.3
Nevada	53.1	15.5	11.5	1.9
Utah	37.0	5.7	12.1	5.0

Source: ^a *2015 Digest of Education Statistics*, table 204.10. Retrieved July 6, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_204.10.asp?current=yes.

^b *2015 Digest of Education Statistics*, table 204.20. Retrieved July 6, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_204.20.asp?current=yes.

^c *2015 Digest of Education Statistics*, table 204.70. Retrieved July 6, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_204.70.asp?current=yes.

^d *2014 Digest of Education Statistics*, table 204.90. Retrieved July 6, 2016, from http://nces.ed.gov/programs/digest/d14/tables/dt14_204.90.asp?current=yes.

Prekindergarten participation and per student spending. The National Institute for Early Education Research publishes a yearly *State of Preschool* report with **profiles of each state**. The state profiles provide detailed information on access to preschool, quality standards, and resources. Table 7 displays the percentage of 3-year-old and the percentage of 4-year-old population enrolled in prekindergarten and state spending per child enrolled in prekindergarten.

Table 7. State-funded prekindergarten programs, 2015

State	State Spending per Enrolled Child	Percent of 4-Year-Old Population Enrolled in State-Funded Program	Percent of 3-Year-Old Population Enrolled in State-Funded Program
United States	\$4,489	29	5
Arizona	\$3,413	6	3
California	\$4,694	18	8
Nevada	\$2,338	3	1
Utah	N/A	N/A	N/A

Source: National Institute for Early Education Research. Retrieved July 2, 2016, from <http://nieer.org/research/state-preschool-2015-state-profiles>.

E. Other

Table 8 contains linguistic indicators such as the percentage of the population who speak English only at home, the percentage who speak Spanish at home, the percentage who speak another Indo-European language at home, and the percentage who speak an Asian or Pacific Islander language at home.

Table 8. Percentage of population 5 years and older by language spoken at home and by state

State	Language Spoken at Home, Percent of Population 5 and Older				
	English Only	Spanish	Other Indo-European Language	Asian and Pacific Islander Languages	Other Languages
United States	79.1	13.0	3.7	3.3	0.9
Arizona	73.2	20.5	2.0	1.9	2.5
California	56.2	28.7	4.4	9.7	0.9
Nevada	70.3	20.7	2.4	5.7	0.9
Utah	85.4	9.8	1.9	2.1	0.7

Source: U.S. Census Bureau, *American FactFinder*.

State Education Agency Capacity

State Education Agencies (SEAs) are the primary customers of the Comprehensive Centers. Understanding the capacity in the SEA, the number of districts served, and the governance structure of each state provides context. Data in this section come from the *2015 Digest of Education Statistics*, the Education Commission of the States report, *50-State Comparison: K-12 Governance Structures*, and Achieve’s report, *Leadership Turnover: 2015 Year of Significant Change in State Education Leadership*.

Table 9 displays the number of agencies in each state. Table 10 displays the governance model (e.g., who is elected, who is appointed). Table 11 shows changes in education leadership over the past 2 years (2015 and 2016).

Table 9. Number of education agencies in 2013–14, by type and state

State	Total	District/LEA	RESA	State
United States	18,194	13,491	1,522	255
Arizona	684	223	19	10
California	1,172	944	197	4
Nevada	19	18	0	0
Utah	138	41	4	3

Source: *2015 Digest of Education Statistics*, table 214.30. Retrieved July 6, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_214.30.asp?current=yes.

NOTE = Regional Education Service Agency

Table 10. State governance

State	Governance Model	Legislature	Local School Boards
Arizona	Appointed board, elected chief	The legislature has a house education committee and a senate education committee.	227 local boards; members elected.
California	Appointed board, elected chief	The legislature has an assembly education committee, a senate education committee and a joint committee to develop a master plan for education.	985 local boards: members appointed and elected.
Nevada	Elected/Appointed State Board; Governor-appointed Chief	The legislature has an assembly education committee and a senate human resource and facilities committee.	17 local boards; members elected.
Utah	Elected board, board appoints chief	The legislature has a house education committee and a senate education committee.	40 local boards; members elected.

Source: Education Commission of the States. (2013). *50-State Comparison: K-12 Governance Structures*. Retrieved July 12, 2016, from <http://www.ecs.org/k-12-governance-structures/>.

Table 11. State education leadership changes in 2015 or 2016

State	New Governor	New State Board Members	New Chief State School Officer	New State Higher Education Officer
Arizona	Doug Ducey-R, Jan 2015	4/11 voting members	Diane Douglas-R, Jan 2015	N/A
California	N/A	N/A	N/A	N/A
Nevada	N/A	5/7 voting members	Steve Canavero, Aug 2015	N/A
Utah	N/A	7/15 voting members	N/A	N/A

Source: Achieve. (2015). *Leadership Turnover: 2015 Year of Significant Change in State Education Leadership*. Retrieved July 12, 2016, from <http://www.achieve.org/files/LeadershipTurnover2015.pdf>.

Educational Resources

Indicators of educational resources include school finance information such as revenues and expenditures, access to fiber and broadband connectivity, and pupil to teacher ratios. Data for the tables presented in this section come from the *2015 Digest of Education Statistics, American FactFinder*, and *Education Superhighway's 2015 State of the States* report on broadband connectivity in public schools.

Table 12 provides the total revenue for each state by source of funds.

Table 12. Revenues for public elementary and secondary schools, by source, 2012–13

State	Total Revenue (in Thousands)	Percent Revenue From Federal	Percent Revenue From State	Percent Revenue From Local
United States	\$603,686,987	9.3	45.2	45.5
Arizona	\$9,385,733	13.6	42.2	44.1
California	\$66,026,445	11.2	54.3	34.5
Nevada	\$4,140,625	9.7	33.7	56.5
Utah	\$4,860,217	9.2	52.0	38.7

Source: *2015 Digest of Education Statistics*, table 235.20. Retrieved July 6, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_235.20.asp?current=yes.

Table 13 provides the per-pupil expenditures and the percentage of expenditures on instruction, support services (student support, instructional staff, general administration, operations and maintenance, student transportation, and other support services), and other (food services, capital outlay, interest on debt).

Additional data on total current expenditures for elementary and secondary education, by function, subfunction, and state is available through NCES. See http://nces.ed.gov/pubs2015/2015301/tables/table_03.asp.

Table 13. Per-pupil expenditures, 2012-13, by function

State	Per-Pupil Expenditures	Percent Instruction	Percent Support	Percent Other
United States	\$12,020	54.4	31.3	14.3
Arizona	\$8,546	47.8	35.4	16.8
California	\$10,617	52.1	31.2	16.7
Nevada	\$8,997	51.3	34.4	14.4
Utah	\$7,905	51.5	25.1	23.5

Source: a. *2015 Digest of Education Statistics*, table 236.75. Retrieved July 6, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_236.75.asp?current=yes.

Table 14 provides another look at education expenditures. The last column provides an index of state and local education expenditures (excluding capital outlay) to total expenditures (excluding capital outlay, utilities, and intergovernmental expenditures).

Table 14. State expenditures on education, fall 2013

State	Total Enrollment ^a	Total Direct State and Local Expenditures ^{b,c}	State and Local Education Expenditures ^{b,d}	Percent Education to Total Expenditures
United States	50,044,052	\$2,366,783,591	\$796,049,064	33.6
Arizona	1,102,445	\$36,729,090	\$6,905,118	32.9
California	6,312,623	\$328,486,263	\$60,189,672	29.3
Nevada	451,831	\$16,198,542	\$3,622,259	31.8
Utah	625,461	\$18,476,809	\$3,768,028	40.2

Source: ^a 2015 Digest of Education Statistics, table 203.20. Retrieved July 5, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_203.20.asp?current=yes.

^b American FactFinder, United States Census Bureau. Retrieved July 12, 2016, from: <https://www.census.gov/govs/local/>.

^c Total direct expenditures do not include capital outlay, utilities, and intergovernmental expenditures.

^d Total education expenditures do not include capital outlay.

Table 15 displays school district broadband connectivity for each state. The Federal Communications Commission (FCC) set a minimum Internet access goal of 100 Kbps per student. The table provides the percentage of school districts in each state meeting that goal. Districts with access to fiber connections are more likely to meet the minimum connectivity goal. The second column of table 15 presents the percentage of school districts in the state with access to fiber connections. The FCC funds upgrades to fiber networks. The FCC also subsidizes the deployment of wired and wireless networks in schools. Accessing the E-rate budget for Wi-Fi networks is an indicator of whether districts are aware their E-rate budget can be used to upgrade Wi-Fi networks. Lastly, \$3/Mbps is a price target that will enable school districts to meet Internet access goals.

Additional information and maps of district fiber connectivity are available through the Federal Communications Commission website (<https://www.fcc.gov/reports-research/maps/e-rate-fiber-map/>).

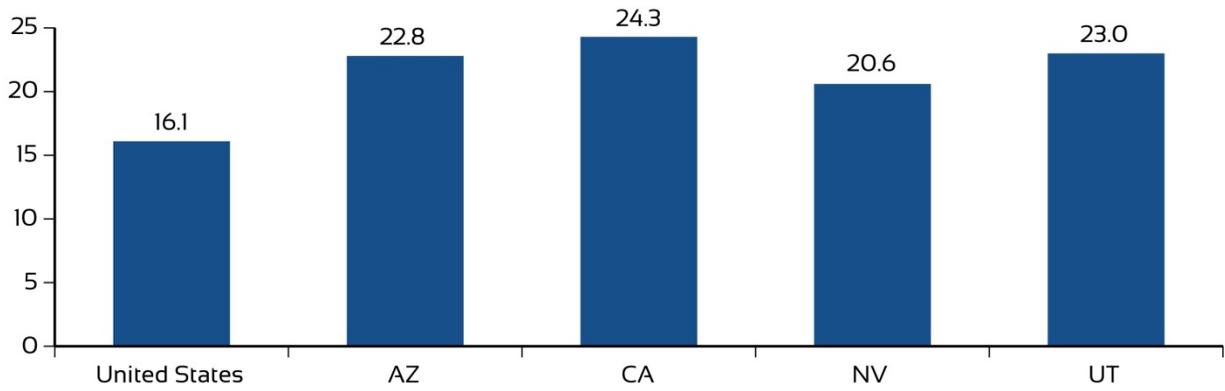
Table 15. School district broadband connectivity, 2015

State	Percent of School Districts			
	Meeting the Minimum 100 Kbps per Student Goal	That Have Fiber Connections To Meet Bandwidth Goals	That Accessed Their E-Rate Budget for Wi-Fi Networks	Meeting the \$3/Mbps Internet Access Affordability Target
Arizona	63	93	72	6
California	76	95	39	20
Nevada	47	94	59	35
Utah	89	100	49	N/A

Source: Education Superhighway. (2015.) 2015 State of the States. Retrieved July 12, 2016, from http://stateofthestates.educationsuperhighway.org/assets/sos/full_report-55ba0a64dcae0611b15ba9960429d323e2eadbac5a67a0b369bedbb8cf15dddb.pdf.

Another educational resource is teachers. Figure 2 presents the pupil-to-teacher ratio.

Figure 2. Pupil-to-teacher ratio, fall 2013



Source: 2015 Digest of Education Statistics, table 208.40. Retrieved July 6, 2016, from http://nces.ed.gov/programs/digest/d15/tables/dt15_208.40.asp?current=yes.

Teacher Preparation, Qualifications, and Certification

Tables 16 through 20 display data on teacher preparation programs, the percentage of teachers who completed their training in a different state from where they are teaching, and ways teacher preparation programs are addressing shortages of highly qualified teachers.

All the data come from the Title II Reports National Teacher Preparation Data file.

Table 16. Number of completers of teacher preparation programs in 2013–14, by program type and state

State	Total Enrollment	Total Completers	Completers by Program Type		
			Traditional	Alternative, IHE-Based	Alternative, not IHE-Based
United States	465,540	180,745	149,369	13,011	18,365
Arizona	37,564	5,651	5,309	296	46
California	18,984	10,414	8,793	1,361	260
Nevada	3,109	768	577	191	N/A
Utah	7,207	2,452	2,306	39	107

Source: 2015 All States Report Data File, Title II Reports: National Teacher Preparation Data. Retrieved July 12, 2016 from <https://title2.ed.gov/Public/DataTools/2015/AllStates.xls>.

NOTE: IHE = institute of higher learning

Table 17. Percentage of completers of teacher preparation programs in 2013–14, by program type and state

State	Total Completers	Program Type		
		Percent Traditional	Percent Alternative, IHE-Based	Percent Alternative, not IHE-Based
United States	180,745	82.6	7.2	10.2
Arizona	5,651	93.9	5.2	0.8
California	10,414	84.4	13.1	2.5
Nevada	768	75.1	24.9	0.0
Utah	2,452	94.0	1.6	4.4

Source: 2015 All States Report Data File, Title II Reports: National Teacher Preparation Data. Retrieved July 12, 2016, from <https://title2.ed.gov/Public/DataTools/2015/AllStates.xls>.

Table 18. Number and percentage of newly licensed teachers who received their credential from a teacher preparation program in a different state

State	Total Number Receiving Initial Credential in the State in 2013-14	Total Number Who Completed Their Teacher Preparation Program in Another State	Percent Who Trained Out of State
United States	254,272	56,718	22
Arizona	6,545	1,827	28
California	14,349	3,519	25
Nevada	1,948	1,304	67
Utah	2,329	215	9

Source: 2015 All States Report Data File, Title II Reports: National Teacher Preparation Data. Retrieved July 12, 2016 from https://title2.ed.gov/Public/Report/DataFiles/DataFiles.aspx?p=5_01.

Table 19. Do teacher preparation programs address shortages of highly qualified teachers by area of certification or licensure, subject, or specialty

State	Area of Certification or Licensure	Subject	Specialty
Arizona	Yes	Yes	Yes
California	Yes	Yes	Yes
Nevada	Yes	Yes	Yes
Utah	Yes	Yes	Yes

Source: 2015 All States Report Data File, Title II Reports: National Teacher Preparation Data. Retrieved July 12, 2016 from https://title2.ed.gov/Public/Report/DataFiles/DataFiles.aspx?p=5_01.

Table 20. Description of ways teacher preparation programs are addressing shortages of highly qualified teachers

State	Description of the Extent to Which Teacher Preparation Programs Are Addressing Shortages of Highly Qualified Teachers
Arizona	In December 2007, the Arizona State Board of Education increased the graduation requirements in math (4 credits) and science (3 credits) for high school students effective in 2012. This increase in graduation requirements has led to increased demand for math and science teachers in an already identified shortage area. Strategies for addressing shortage areas include: focused recruiting to increase the pipeline of math, science and special education teachers to certification; increased collaboration with the colleges of math and sciences to streamline the teacher education process for secondary education majors; content emphasis in math or general science for elementary education majors, dual certification for elementary/special education candidates and secondary/special education majors; and targeting recruitment of elementary education majors for post-bac special education programs using the alternative pathways to certification.
California	Detailed responses by each program sponsor to annual goals for shortage areas such as mathematics, science, and special education are included in Appendix B: Institutional and Program Reports Card – Section II: Annual Goals.
Nevada	<p>Pursuant to Nevada law, local school district boards of trustees designate "critical labor shortage areas" on an annual basis. Traditional and alternative route programs are designed to support the preparation of teacher candidates based on these designations. Currently, these areas include elementary, special education and secondary mathematics, science, and English.</p> <p>New legislative initiatives passed during the 2015 session (SB511 and SB474) provide statewide general funds to traditional and alternative preparation programs and students pursuing initial teaching licensure in high need areas.</p>
Utah	The Utah State Office of Education and the Utah Council of Education Deans were concerned about non-HQ teachers and agreed to propose to the Utah Board of Education to eliminate the use of the Level 1 - Conditional license. This license was the only way a teacher candidate was able to be licensed in an NCLB subject area without being considered Highly Qualified in that subject. The Board approved this change to state rule as of October 2010. As of 1/1/2011 the conditional license was no longer be available to candidates so all licensure candidates in an NCLB subject area must be HQ in that subject in order to be recommended for licensure.

Source: 2015 All States Report Data File, Title II Reports: National Teacher Preparation Data. Retrieved July 12, 2016, from https://title2.ed.gov/Public/Report/DataFiles/DataFiles.aspx?p=5_01.

Note: In June 2016, the Utah Board of Education approved a new rule that allows districts to hire teachers who have completed a bachelor’s degree or higher (in any field), pass the specified Praxis exam or another Board-approved content knowledge assessment, and meet other requirements. See <http://www.schools.utah.gov/law/Administrative-Rules/USBE/2016/JuneAgenda/R277511R1.aspx>

Student Educational Attainment

Indicators of student educational attainment include:

- ▶ Fourth grade literacy;
- ▶ Advanced Placement participation and performance;
- ▶ performance on college readiness assessments (ACT and SAT);
- ▶ averaged freshman graduation rates; and
- ▶ college completion rates.

A. Fourth Grade Literacy

Research has shown that students who are not reading well by third grade have a higher probability of dropping out of high school. Each state uses different assessments of reading and literacy. Table 21 presents results from the 2015 4th grade National Assessment of Educational Progress (NAEP) reading assessment.

Table 21. Percentage at each achievement level on the 2015 4th grade NAEP reading assessment, 2015

State	Achievement Level				
	Below Basic	Basic	Proficient	Advanced	At or Above Proficient
United States	32	33	27	8	35
Arizona	38	32	23	7	30
California	41	31	22	6	28
Nevada	39	32	23	6	29
Utah	26	34	31	10	40

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. *The Nation's Report Card*. Retrieved July 12, 2016, from: www.nationsreportcard.gov/reading_math_2015/#reading/state/acl?grade=4.

B. Advanced Placement Participation and Performance

Participation in Advanced Placement (AP) courses and performance on AP exams are predictors of college enrollment and performance. By taking AP courses, students are exposed to college-level course material while in high school. There are currently more than 30 AP courses. At the end of the school year, students in AP courses have the opportunity to take the associated AP exam. The exams are scored on a scale of 1 to 5. Many colleges and universities grant college credit, depending on the score. Each college has discretion for awarding credit based on AP exam performance, but generally a student must earn at least a 3 to receive college-level credit. Table 22 provides the number of students who took an AP course in 2015, the number of exams taken, the average exam score, and the percentage of exams scored 3 or higher. There are more exams taken than students taking AP courses because individual students may take more than one AP course in a given year. The College Board provides detailed reports for each state, available [here](#).

Table 22. AP participation and exam performance, 2015

State	Number of Students Taking AP Course	Total Number of Exams Taken	Average Exam Score (1 to 5 Scale)	Percent of Exams Scored 3 or Higher
United States	2,416,329	4,343,547	2.82	57
Arizona	35,121	63,103	2.80	57
California	370,016	700,449	2.87	58
Nevada	17,423	31,449	2.58	49
Utah	25,035	39,247	3.06	67

Source: *College Board State Summary Reports*. Retrieved July 12, 2016, from <https://research.collegeboard.org/programs/ap/data/participation/Ap-2015>.

C. Meeting College Readiness Benchmarks

The two primary college readiness assessments in the United States are the ACT® and the SAT. Both tests have historically been taken by high school students planning on attending college. The test taken is largely a function of the state where a student attends high school. Recently, several states began providing all students the opportunity to take college readiness assessments. In 2015, 13 states had 100-percent participation of graduates in the ACT assessment: Alabama, Colorado, Illinois, Kentucky, Louisiana, Michigan, Mississippi, Montana, North Carolina, North Dakota, Tennessee, Utah, and Wyoming. Because not all students participate in the ACT® and/or SAT assessments, it is not appropriate to make comparisons between states. When larger percentages of students in a state participate in the assessment, the average score is generally lower because students from all ability levels are tested. In states with lower participation rates, the students tested are often more likely to be higher achieving.

The ACT® consists of four subject area tests (English, Mathematics, Reading, and Science), which are often combined for a composite score. ACT® sets benchmarks for each subject-area test. The ACT® benchmarks are the scores associated with a 50-percent chance of earning a B or higher in corresponding first-year college courses. The ACT® benchmarks are 18 in English, 22 in both Mathematics and Reading, and 23 in Science.

The SAT consists of three subject area tests (Critical Reading, Mathematics, and Writing). The College Board sets a benchmark for the SAT composite score associated with a 65 percent probability of obtaining a first-year GPA of a B-minus or higher. The SAT college readiness benchmark is a 1550 composite score. The College Board produces detailed program results for each state. The state reports provide additional details and breakdowns by student subgroup. See more at <https://www.collegeboard.org/release/2015-program-results>.

Table 23. ACT® and SAT participation and mean scores, 2015

State	Percent of Graduates Taking ACT® ^a	Average ACT® Composite Score (Benchmark 21.25) ^a	Percent of Graduates Taking SAT ^b	Average SAT Composite Score (Benchmark 1550) ^b
United States	51 to 60	21.0	N/A	1,490
Arizona	51 to 60	19.9	31 to 40	1,552
California	21 to 30	22.5	51 to 60	1,492
Nevada	31 to 40	21.0	41 to 50	1,458
Utah	91 to 100	20.2	0 to 10	1,708

Source: ^a *The Condition of College and Career Readiness 2015*. Retrieved July 12, 2016, from <http://www.act.org/content/act/en/research/condition-of-college-and-career-readiness-report-2015.html?page=0&chapter=9>.
^b *The College Board Program Results, SAT State Profile Reports*. Retrieved July 15, 2016, from <https://www.collegeboard.org/release/2015-program-results>.

Table 24. Percentage of ACT® and SAT test takers meeting college readiness benchmarks, 2015

State	Seniors Taking ACT® ^a	Met ACT® College Readiness Benchmark				Seniors Taking SAT ^b	Met SAT College Readiness Benchmark ^b
		English ^a	Reading ^a	Mathematics ^a	Science ^a		
United States	59	64	46	42	38	N/A	42
Arizona	56	54	38	38	31	34	49
California	30	72	54	56	46	60	41
Nevada	40	64	46	44	37	50	36
Utah	100	59	44	34	34	5	70

Source: ^a *The Condition of College and Career Readiness 2015*. Retrieved July, 2, 2016, from <http://www.act.org/content/act/en/research/condition-of-college-and-career-readiness-report-2015.html?page=0&chapter=9>.
^b *The College Board Program Results, State Reports*. Retrieved July 15, 2016, from <https://www.collegeboard.org/release/2015-program-results>.

D. Public High School Graduation Rates

The adjusted cohort graduation rate (known as ACGR) measures the percentage of public school students who attain a regular high school diploma within 4 years of starting 9th grade for the first time.

Table 25. Adjusted cohort graduation rate for public high school students overall and by race/ethnicity, 2013–14

State	All	White	Black	Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
United States	82	87	73	76	89	70
Arizona	76	82	71	70	83	63
California	81	88	68	77	92	71
Nevada	70	77	54	65	83	52
Utah	84	87	69	73	85	66

Source: *2015 Digest of Education Statistics*, table 219.46. Retrieved July 5, 2016, from https://nces.ed.gov/programs/digest/d15/tables/dt15_219.46.asp?current=yes.

E. College Completion Rates

One way that secondary schools measure their performance is by the transition of high school graduates into post-secondary education or the labor force. One source of longitudinal data on postsecondary enrollment and completion is the National Student Clearinghouse (NSC). Following are data from a new report that shows 6-year outcomes for students aged 20 or younger at time of first entry. A detailed report and data tables are available for download from NSC (see <https://nscresearchcenter.org/signaturereport10-statesupplement/>).

Table 26 shows 6-year completion rates for students aged 20 or younger who were first-time degree-seeking students who started their postsecondary studies in fall 2009. The states refer to the state where a student entered an institution of higher education, not the state where a student graduated from high school.

Table 26. Overall 6-year completion rates for students aged 20 or younger who were first time degree-seeking students in postsecondary institutions in fall 2009, by institution type

State	4-Year Public	4-Year Private Nonprofit	2-Year Public
United States	64.97	76.02	40.72
Arizona	69.12	*	N/A
California	70.68	79.61	32.53
Nevada	37.39	N/A	*
Utah	40.22	51.31	*

Source: Shapiro, D., Dundar, A., Wakhungu, P., Yuan, X., and Harrell, A. (2015, February). *Completing College: A State-Level View of Student Attainment Rates* (Signature Report No. 8a). Herndon, VA: National Student Clearinghouse Research Center.

* Fewer than three institutions

Appendix B. Needs and Recommendations from Committee Members

Individual Needs Assessment

Name: Blair Blackwell

Affiliation: Manager of Education and Corporate Programs, Chevron Corporation

NOTE ON RECOMMENDATIONS FOR TECHNICAL ASSISTANCE: In providing recommendations on strategies for Technical Assistance, I have generally included a list of possible focus areas to address the identified need as suggested over the course of my discussions with a variety of education stakeholders. Given the limited resources of the Comprehensive Centers, it is recognized that not all of these suggestions could be simultaneously implemented. In considering priorities, Comprehensive Centers should first spend time giving thought to what focus areas provide the greatest opportunity to unlock a thorny issue which could then cascade benefits to the greatest number of challenges. They should also consider how they can support communities of practice/learning collaboratives around issues. Given that they will not be able to do everything themselves, they should seek to draw attention to the most compelling bright spots in each priority need area.

Priority Need 1. Next Generation Science Standards/Science and Engineering

Educators need greater assistance to include science and engineering in the classroom with resources to support standards implementation and instructional leadership.

Justification: While this was not called out specifically in the survey, the importance of ensuring greater inclusion of science and engineering regularly came up in stakeholder discussions. Too many schools are stuck in an outdated model which focuses first on reading, writing and arithmetic and leaves science as an afterthought and often gives engineering no thought. Yet science and engineering instruction play an integral role in college and career readiness, as well as preparing students to be more literate citizens, who are able to problem solve, and think critically. Additionally, from the perspective of preparing all students to succeed, project based science and engineering learning can effectively engage students who might otherwise be left behind. Workforce trends point to the necessity of its inclusion, and it is a key priority for business in our states. With the development of the Next Generation Science Standards, the next funding round for Comprehensive Centers is the right time to provide additional support to this priority need.

Recommended Strategy for Technical Assistance

- ▶ Help to identify and disseminate examples of effective models of NGSS implementation
- ▶ Involve professional organizations like NSTA/CSTA who have been out front on the standards.
- ▶ Help the state identify ways in which implementation pieces fit together and can be best rolled out (i.e. help SEA figure out their role in, for instance, coordinating PD for standards. How they partner and with whom. How they can reach the goal of teachers having the resources they need).
- ▶ Develop webinars to train districts in how to develop STEM plans, utilize resources provided by Achieve and/or the State (i.e. EQuIP rubric), and how to identify and utilize quality instructional materials. One stakeholder noted that Webinars have been a real strength area for the Comprehensive Center.

- ▶ Help to show how engineering can be integrated into the classroom at all levels (including elementary) and how all students can truly become more engaged through the inclusion of science and engineering

Priority Need 2. Recruit, retain and prepare excellent teachers

Justification: Survey responses from community leaders, parents and business overwhelmingly noted the importance of supporting and developing teachers, and this point was also regularly raised in discussions with education experts. Responses noted the imperative to address the teacher shortage in California and included several comments calling out the importance of helping to recognize and elevate the teaching profession. Providing thoughtful and targeted assistance in this area would help to propel progress in other priority areas noted in the survey—for instance, improving instructional leadership, furthering innovative and effective use of technology and digital learning and supporting low performing schools. By focusing on teachers and pockets of bright spots, the opportunities for improvement and innovation are much greater.

Recommended Strategy for Technical Assistance

- ▶ WestEd (which has run the Comprehensive Centers) is a partner of 100Kin10. The next Comprehensive Center should consider how to build upon the knowledge currently being generated within the 100Kin10 network. The Comprehensive Centers could play a powerful dissemination role in the West region for this national work. For instance, consider the work that 100Kin10 is encouraging around finding positive deviance or bright spots in the teaching space and how the Comprehensive Center might help to identify these bright spots across the region and work in collaboration with SEAs and districts to build upon these.
- ▶ Provide consulting on how to think about strategic decisions around deployment of teachers as too often those with the least experience end up in the most difficult areas and too many teachers are being transferred forcing Districts to plug holes. A more strategic approach will both assist in greater teacher success and retention and help to address issues of equity. This would include recruiting more diverse teachers so that students see teachers who look like them. (see also this suggestion in priority need area #4)
- ▶ Focus on teacher induction system to equip beginning teachers to be leaders. Help SEAs identify, consider and weigh alternative options to the current induction system to provide greater support to new teachers.
- ▶ As teacher professional development too often takes place in an ad hoc manner with the idea of permanent professional development missing. Comprehensive Centers could help SEAs and LEAs think about how to design and support a better professional development structure for both teachers and administrators. Consider, for instance, past models such as the California Schools Leadership Academy.

Priority Need 3. Helping state and local education agencies think strategically about how to maximize funding opportunities, particularly those resulting from ESSA.

In California, if feasible, this priority area might include not just a focus on ESSA funding opportunities but also on support to districts to be more effective in their implementation of LCFF.

Justification: From requests to increase teacher pay to more per pupil funding to helping demystify and channel funding streams coming from ESSA, respondents regularly requested that greater emphasis be placed on the question of funding. Keeping in mind what Comprehensive Centers might be able to actually do in this realm, I would suggest support by the Comprehensive Centers to help districts take advantage of those funding opportunities as well as, in California, how to be strategic in decision making given the new locally controlled funding model.

Recommended Strategy for Technical Assistance

- ▶ Comprehensive Centers should position themselves to broadly help districts with the funding opportunities coming from ESSA. Create an online searchable list of grant opportunities and eligible partners that can be used across the region.
- ▶ In California, Comprehensive Centers can help districts connect these opportunities with LCAP.
- ▶ In California, student, teacher and parent surveys aligned with LCFF needs. West-Ed is the designer of one of the key climate related surveys that schools and districts in CA administer. The Comprehensive Center should update the surveys to align with the needs of LCFF. Specifically, while the existing surveys may be sufficient to monitor school climate, they could use some sprucing up in areas like parental involvement/engagement and around the implementation of standards. There are accountability related standards that could build upon surveys if there were better surveys. West-Ed is well positioned to help on this front.
- ▶ Train administrators in how to more effectively budget, consider trade-offs, etc.

Priority Need 4. Ensuring equity. All students must have the opportunity to succeed

Justification: The importance of closing the achievement gap and ensuring all students have equal access to high quality education was a resounding theme, especially amongst the parent, community and business stakeholder group. One example cited was that as focus increased on incorporating technology into classrooms, connectivity remains an issue for many students, who are no longer connected once they go home. Tackling questions of equity and addressing the achievement gap must be factored into all aspects of education policy and planning. Comprehensive Centers may be able to provide some training on how state and local education agencies might be able to incorporate that into their planning, and/or they might be provide training, advocacy or support on some targeted initiatives such as recommendations below.

Recommended Strategy for Technical Assistance

- ▶ Help SEAs define equity gaps, and identify schools with equity gaps. Provide examples of practices that have resulted in closing or reducing equity gaps. Identify similar schools that could work together to address equity issues. For instance, CA is about the start to identify hundreds of districts and thousands of schools as being in need of support/assistance and major reforms. The state has done almost nothing to prepare for this need. Having been involved in the school support programs of the past, the Comprehensive Center would be well positioned to contribute ideas, networking, or resource guides.
- ▶ Libraries – school and community. Support and promote public libraries as centers for parents and other adults to help their children access quality education. Consider how to increase family engagement and train districts in bright spots of this practice from around the region.

- ▶ Provide consulting on how to think about strategic decisions around deployment of teachers as too often those with the least experience end up in the most difficult areas and too many teachers are being transferred forcing districts to plug holes. A more strategic approach will both assist in greater teacher success and retention and help to address issues of equity. This would include recruiting more diverse teachers so students see teachers who look like them. (See also this suggestion in priority area 2).
- ▶ Compile resources on teaching methodologies for diverse student populations to achieve highest outcomes, and help SEAs disseminate this information to educators.
- ▶ Help districts consider how schools could provide more college and career counseling services (including counseling to students around opportunities to gain technical certifications, associates degrees, etc.)

Priority Need 5. Preparing Students to Be College and Career Ready

Justification: College and career readiness and common core state standards have been an ongoing focus area for the Comprehensive Centers for many years. There is still much work to be done in this area, particularly in highlighting best practice examples and disseminating lessons learned. Comprehensive Centers should continue to look for ways to play a constructive role in supporting state and local education agencies in this area.

Recommended Strategy for Technical Assistance

- ▶ Build on work done to date on Common Core State Standards and help to identify and disseminate examples of effective models of CCSS and NGSS implementation. Noted that past webinars by Comprehensive Center on CCSS were a real strength.
- ▶ Involve professional organizations who have been out front on the standards.
- ▶ College and career readiness (CCR) analysis. West-Ed has a lot of knowledge of the CCR work that has been done over the last 3 years. This is still a work in progress, and will likely have real challenges showing that the new measures are valid and reliable. In particular, it would be good if West-Ed could help the state on better measurement of career pathways and ideas for quality control in this area.
- ▶ Review and provide support to Career Pathways Trust implementation.
- ▶ Help education agencies consider how to provide more college and career counseling services (including counseling to students around opportunities to gain technical certifications, associates degrees, etc.).

Individual Needs Assessment

Name: Brian Ferguson

Affiliation: Library Media Teacher, South Davis Junior High, Davis School District (Utah)

Priority Need 1. More full-time licensed teacher librarians in schools

Governors, legislators, SEAs, LEAs, and principals need to be educated on the importance and value of hiring full-time, licensed, teacher librarians in every school. No other single hire in a school provides as much “bang for the buck” in terms of increasing student reading levels, which increases both student engagement and test scores.

Justification: The number one survey result, by nearly every stakeholder group in the West region, was the need to prepare students to be college and career ready. The second was the need to ensure equity. A quality school library program encourages classroom teachers to integrate literature and information skills into the curriculum and offers collaborative support for teachers to help students find a variety of quality resources, conduct meaningful research, and document and present their findings. In a recent meeting with teacher librarians, the President of the Utah Senate said “I need to learn these skills!”

Rather than increasing support for school libraries, many cash-strapped schools and districts have actually been eliminating licensed teacher librarian positions. As a result, many colleges have had to develop remedial library research skill programs to prepare incoming freshmen for college-level work. These cuts have had a disproportionate negative effect on children at risk because, too often, the school library is their primary, or only, source of book and computer access and the teacher librarian is the friend that encourages them to read and provides them with appropriate and interesting books.

An important study examined the relationship of National Center for Education Statistics (NCES) nationwide data for states on school librarian positions and National Assessment of Education Progress (NAEP) reading scores for grade 4. The analysis found that between 2004 and 2009, states that gained school librarian positions experienced larger increases and no decreases in reading scores, while states that lost librarians experienced smaller increases or decreases in reading scores. These findings held—and were often more dramatic—across subgroups including race/ethnicity, poverty, and English language learner status. (See *School Library Journal*, http://www.slj.com/2011/09/industry-news/something-to-shout-about-new-research-shows-that-more-librarians-means-higher-reading-scores/#_).

The National Council of Teachers of English (NCTE) the National Center for Literacy Education (NCLE), and the National Council for the Social Studies all support strong school library programs. (See “School Libraries Work” a compendium of research published by Scholastic) In the survey data, even non-librarian teachers were asking for stronger support for libraries. Every school needs a strong library learning center at the heart of the school that equips students with the skills they need to succeed in an information society.

It is disheartening to hear principals, and other education leaders, make poorly informed comments such as “Why do we need libraries when everything is on the Internet?”

Recommended Strategy for Technical Assistance: The Comprehensive Centers should help SEAs and LEAs make better, research-based, staffing, funding, and program decisions regarding the critical importance of libraries in education.

Understanding and promoting the critical importance and value of full-time, licensed, teacher librarians in each school can directly benefit the work of at least four of the seven Comprehensive Content Centers: 1. College and Career Readiness and Success, 2. Enhancing Early Learning Outcomes, 3. Innovations in Learning, and 4. School Turnaround.

- ▶ Comprehensive Centers should contact and coordinate with researcher Keith Curry Lance regarding his latest findings regarding the importance of libraries and teacher librarians to student and school success. He can also provide specifics regarding what successful teacher librarians do within the school.
- ▶ Comprehensive Centers should collect and publish state by state data, by school district, regarding the number of elementary and secondary schools (and LEAs) that have full-time, licensed, teacher librarians. (For example, Utah currently only has 3 (out of 41) districts that have licensed teacher librarians in every school, while 13 districts have NO licensed teacher librarians at all). Base year data should be established and then updated annually to determine whether states are making progress or falling behind.
- ▶ Comprehensive Centers should coordinate with the American Association of School Librarians (AASL) to develop an education plan for SEAs, LEAs, and other policy makers regarding the educational purpose, critical need, and results-based value of a professionally staffed library program in each school.
- ▶ Every discussion of school improvement strategies with any stake holder should include the research data about the importance and value of fulltime, licensed, teacher librarians.

Priority Need 2. Better School and District-Level Leadership Training

Principals and District level personnel need better training in how to appropriately, effectively, and professionally work with and manage other educational professionals.

Justification: Every person I spoke to formally or informally during this process mentioned the increasingly critical shortage of quality teachers. Three of my interviews, however, felt that the greater problem was perhaps not so much attracting candidates to the profession as retaining them. Specifically, there is a great turnover among teachers in their first five years.

Low teacher moral is an increasing problem in our schools. There are, of course, ongoing issues with inadequate funding, low teacher pay, increasing class sizes, etc. but one of my interview subjects, who has several decades of experience, really opened my eyes when he said, “We have lost a sense of professional community in our schools.” His point was that there is a significant difference between a “collaboration model” or a top-down, imposed, “PLC,” and the type of school where professionals work together, solve problems, and help each other because they like each other and, seeing areas needing improvement, work together. It is a question of professional autonomy and trust in our professionals to do their jobs.

Building schools of this type requires leadership skills that are increasingly rare. As my interview subject said, “Principals used to be trusted to lead their building and they, in turn, would trust their teachers to

lead their classrooms.” Management style is one area where the corporate business model is especially ineffective and inefficient when applied to the field of education. Education is not a hierarchy. Teachers and principals and school district personnel are essentially peers. They received the same degrees, in the same fields, at the same universities. It is not uncommon for a teacher to have greater knowledge, education, and experience than his or her immediate supervisor.

Such professionals do not respond well to being talked down to and told what to do. Politicians, School Board members, and the general public are putting increasing pressure on teachers while, at the same time, showing less respect for them as highly educated professionals. Educational leaders, especially those at the school and district level, need to improve their skills at supporting, valuing, and defending their professional employees so they can focus on their primary job – teaching the students.

Recommended Strategy for Technical Assistance: The Comprehensive Centers, especially the Content Center on Great Teachers and Leaders should:

- ▶ Gather research on best practices for professional peer-to-peer management.
- ▶ Collect and publish data from the states on what, if any, leadership/management components exist in current educational leadership training programs for preservice educational leaders from the colleges/universities.
- ▶ Collect and publish data from the states on what, if any, leadership/management skills related support and training exists for in-service principals and supervisors.
- ▶ Create LEA and school-focused, best practice-based, professional peer-to-peer leadership/management trainings and materials.
- ▶ Train and promote best-practice, peer-to-peer leadership/management techniques to the SEAs and LEAs.

Priority Need 3. The public schools need more and better funding

This need cannot be escaped. The problem is long-term and systemic. It is not enough for the only the unions to lobby, negotiate, and be politically active. All stake holders in public education, from the SEAs to the parents, need to share the responsibility to help secure adequate resources for the public schools.

Justification: The ongoing critical need for more and better resources hampers every other effort we make to improve schools and help students. Many, many, of the teacher survey comments mentioned this area of ongoing need. Not only do we not pay our teachers commensurate with their education level and contribution to society, but we do not provide adequate resources for them to do their jobs.

A budget is a moral document. It reflects our true values. The various states cannot expect excellence in education with the budgets they provide. Nor can they expect to attract the best and brightest of our college students to select a career in education with its dismal financial rewards.

Recommended Strategy for Technical Assistance Training

- ▶ The Comprehensive Centers should serve as information sources to states and districts regarding grants and potential partnerships.

- ▶ The Centers should provide state to state and district to district comparative funding data for the use of any stakeholder.
- ▶ The Centers should NOT facilitate SEAs in efforts to de-professionalize teaching.
- ▶ The Centers should train administrators how to develop and set budget priorities in conjunction with their staff and communities.

Priority Need 4. Better managed pace of change

Our teachers are being overwhelmed by constant changes in, and additions to, standards, curriculum, testing requirements, data collection requirements, and legislative mandates. They need more time to adjust to and assimilate those changes that will benefit their students and they need to be shielded from programs and ideas that waste time.

Justification: In the survey responses and in the interviews there was a strong sentiment that could be summarized as “JUST LET THE TEACHERS TEACH.” No program or training or technique or approach or idea, no matter how ingenious, can possibly improve student learning in the classroom if the teacher is unable, or unwilling, or does not have the time or the resources, to implement it.

Recommended Strategy for Technical Assistance

- ▶ The Comprehensive Centers should ask SEAs and LEAs to keep track of and report on what, and how many, new mandates and requirements they ask of their teachers each year (perhaps by grade level). The data should include which person, department, or agency required the mandate.
- ▶ The Centers should train SEAs and LEAs and principals in group decision making techniques so that teacher professionals feel like they are actively involved in the professional decisions that they are expected to implement.
- ▶ The Centers should help the SEAs simplify and clarify new mandates that come from the Federal and State governments before they are passed down to the LEAs and the teachers.

Priority Need 5. Support teaching and learning in the classroom

Everyone from the Department of Education, through the Comprehensive Centers to the SEAs and LEAs, and down to the schools, needs to remember that their primary purpose is to support teaching and learning in the classroom.

Justification: The simple fact is that nearly 100% of classroom teachers do not know what a Comprehensive Center is or what they do. Even at the district level, while most may have heard of the Regional Labs, they would not likely claim that the Regional Lab has, in any way, helped them to do their job.

There is a real danger when even well-meaning people in a hierarchy lose touch with those below them. At the very least, their efforts to improve the situation for all are ineffective because they are myopic. Increased communication is the best solution to this problem. We are stronger together.

Recommended Strategy for Technical Assistance

- ▶ The Comprehensive Centers should reexamine, and perhaps rewrite, their various missions to ensure that their work with SEAs is actually making a difference for teachers and students.
- ▶ The Centers should regularly ask the SEAs and LEAs they support for feedback and constructive criticism of their mission, goals, and activities.
- ▶ Each Center should find some mechanism to, at least quarterly; ground it by talking with actual teachers and visiting real classrooms.

Individual Needs Assessment

Name: Christine Olmstead

Affiliation: Assistant Superintendent, Orange County Department of Education, California

Priority Need 1. Preparing Students to Be College and Career Ready

Justification: Highest ranked priority by district/site leaders.

Recommended Strategy for Technical Assistance: Provide information on existing definitions of college and career readiness and their measures from other states. Convene stakeholders in the region to create a common, regional definition of College and Career Ready (specifically more work around defining career ready).

Assist SEAs in understanding the evolving/changing needs of higher education and business. Share this information broadly with school staff so they can adapt/adjust instruction to meet needs.

Priority Need 2. Ensuring equity, including addressing issues of disproportionality

Justification: Second highest ranked priority by district/site leaders.

Recommended Strategy for Technical Assistance: Provide a repository for sharing strategies for retaining high quality administrators and teachers, family engagement, and school culture and climate.

Priority Need 3. Supporting lowest performing schools and closing achievement gaps

Justification: Third highest ranked priority by district/site leaders.

Recommended Strategy for Technical Assistance: Provide a repository of strategies and training opportunities for retaining high quality administrators and teachers, family engagement, and school culture and climate.

Priority Need 4. Developing and ensuring equitable distribution of highly effective teachers and leaders

Justification: Fourth highest ranked priority by district/site leaders.

Recommended Strategy for Technical Assistance: Identify professional development opportunities. Help SEAs partner with higher education institutions to create teacher mentor programs. Share or conduct research on teacher mentors or co-teachers.

Priority Need 5. Funding Resources

Justification: Fifth highest ranked priority by district/site leaders.

Recommended Strategy for Technical Assistance: Training on how to maximize federal funding streams without supplanting. Training on professional learning practices that focus on strategies for ensuring the equitable distribution of resources that are sustainable.

Individual Needs Assessment

Name: Sherrie Reed

Affiliation: Project & Research Director for The Partnership for Research on College & Career Readiness, University of California, Davis

Priority Need 1. Teacher Recruitment and Retention

Justification: Teacher recruitment and retention was the most often referenced education need from education researchers, education non-profit executives, and faculty members of higher education (as well as other stakeholders with whom I spoke). According to at least one stakeholder, there is a predicted teacher shortage of nearly 30% in California in the next five years. This shortage is particularly evidenced in the areas of mathematics, hard sciences, and special education (including paraprofessionals). Issues with recruitment involve low pay, lack of positive image of the profession, and limited pathways for entry into the profession. Issues with retention include inability for districts to retain quality teachers (competition from other districts), low pay/compensation, and unmanageable workloads (no preparation or grading time) and inequitable opportunities to earn additional salary/stipends within districts.

Recommended Strategy for Technical Assistance: In general, few recommendations for addressing this priority need were provided by the stakeholders. By far, the most cited recommendation was improving teacher pay, which is out of the purview of technical assistance provided by the Comprehensive Assistance Centers. A couple of stakeholders suggested that the CACs could provide technical assistance to SEAs and institutes in higher education around creating alternative pathways into the profession. For example, one stakeholder suggested that a federal or state program be developed where retiring professionals enter the teaching field for a set number of years and the service credit increases public retirement benefits, much like a Teach for America program at the other end of a career path. Another stakeholder suggested developing teacher leader networks in schools with the mission to improve teacher retention. This may be an area in which the CACs could provide technical assistance and professional development. Another stakeholder recommended that the CACs could address this priority need through a “comprehensive campaign to improve the perception of the teaching profession and the ability to earn a livable wage.”

Priority Need 2. Ensuring Equity

Justification: Most of the stakeholders ranked ensuring equity as one of their top 3 educational priorities, but most did not elaborate beyond a statement of need in this area. The choice of language used by stakeholders when speaking about this issue included the “opportunity gap,” “achievement gap,” and “equity”. In related comments, several stakeholders mentioned the need to close the achievement gap and many others noted the need for equitable distribution of teachers and resources to improve student outcomes. A well-documented gap in student outcomes continues to persist at all levels of education. On average, students of color and low-income students achieve lower scores on standardized assessments, graduate high school at lower rates, enroll and persist in college at lower rates and earn college degrees at lower rates than their more affluent White and Asian peers. Research suggests that unequal distribution of resources and teacher quality may be partly to blame for these persistent gaps.

Recommended Strategy for Technical Assistance: Stakeholders recommendations to address this priority need ranged from increasing funding and improving policy to dissemination of best practices, facilitating collaboration, and providing high quality professional development. In the area of increased funding, one stakeholder recommended that the CACs work with SEAs to develop systems to deliver federal funds through block grants. From a policy perspective, another stakeholder suggested that CACs work with the Office of Civil Rights to advocate for equitable student outcomes and carry out the intentions of NCLB and ESSA. Another suggested that CACs provide technical assistance to SEAs on the creation and/or revision of new accountability plans; to include measures other than standardized test scores (i.e. measures of social-emotional learning and attendance metrics). A few stakeholders recommended that CACs serve as clearinghouses for research and best practices. Many of the recommendations included offering professional development to teachers, but did not provide specifics about the type or means of professional development.

One interesting recommendation, with some specific implementation ideas, surfaced across several stakeholders that have collaborated across district and non-profits in previous work. These stakeholders have a vision of CACs as facilitators of collaboration, connecting expert practitioners with each other, bringing together thought leaders to build a collaborative coalition, and facilitating authentic dialogue between disparate parties. One concrete example is that CACs review and evaluate practices in the field, document promising practices and then connect practitioners with needs (i.e. offering high quality preschool to low-income families) with those who have the experience and expertise in the area. This particular stakeholder said this is akin to a moderated Linked-in for educators. One stakeholder envisioned CACs drawing attention to compelling things happening in schools and investing the resources to have SEA and LEA leaders observe the compelling work onsite. This stakeholder eloquently suggested, “make regional networks the value, not the regional center.”

Priority Need 3. College and Career Readiness

Justification: Related to Priority Need 2, many stakeholders cited college and career readiness of students as a high priority need. The adoption of Common Core State Standards and state-level equivalents, as well as the passage of Every Student Succeeds Act has brought increased attention to the need to ensure all students are prepared for the demands of college and career. Stakeholders often elaborated on this need and related it to those addressed above. At least one stakeholder suggested that ensuring college and career readiness starts with clearly defining what this means and how it will be measured. Another emphasized the need to focus on career readiness, not just college readiness, which includes enhancing Career Technical Education opportunities for high school students. Some suggested that to ensure college and career readiness, funding and resource inequities must first be addressed. Still others linked the need to recruit and retain quality teachers as a necessary element in ensuring college and career readiness.

Recommended Strategy for Technical Assistance: Very few recommendations specific to this need were provided by stakeholders. More general recommendations around facilitating collaboration and providing high quality professional development, as described above, may also apply to this priority need. In three instances, the need for professional development for teachers around the Next Generation Science Standards did emerge. Some stakeholders referenced a train-the-trainer model for professional development.

One stakeholder had specific recommendations around a narrow aspect of college readiness: college application. She stated that CACs could provide technical assistance to schools about budget practices

that would allow for the hiring of more college counselors to assist students in navigating the choice between traditional college and career technical education, applying for college and financial aid, and college enrollment processes.

Priority Need 4. Equitable Distribution of Quality Teachers and Resources

Justification: This identified need is related to Priority Need #1, Priority Need #2, and Priority Need #3, already discussed. However, it is named by stakeholders numerous times as a need separate from the other two. Research and policy briefs regularly document that quality teachers and resources are concentrated in schools that enroll more affluent students, leaving schools that serve high proportions of low-income students under-resourced. The lack of resources is believed to exacerbate performance gaps. Many claim that more funding and additional resources will help to close documented achievement and attainment gaps; however, there is no apparent agreement on what level of funding will adequately provide for student needs. Nonetheless, the stakeholders in this group see the inequity in resource distribution as an area of need in education.

Recommended Strategy for Technical Assistance: While stakeholders claim this area as high need, they do not offer many recommendations useful for CACs. The recommendations include policy changes and funding changes, not technical assistance. I can imagine that technical assistance provided to SEAs to serve this need may include acting as a clearinghouse of information and best practices in the areas of resource distribution, budgeting, and teacher recruitment, retention and quality. I also think that CACs could connect leaders across states in collaborative groups to share successes and challenges in this arena and reimagine resource distribution.

Priority Need 5. Access to Early Childhood Education

Justification: Building on the priority needs already addressed, several stakeholders stated that there is a need to ensure that all students have access to high quality preschool. Meeting this need may close an opportunity gap and help ensure college and career readiness for all students and equitable outcomes.

Recommended Strategy for Technical Assistance: No specific recommendations were provided for this particular need. Though, I am certain some of the strategies addressed in prior sections may also apply here. Technical assistance for SEAs might include reviewing and recommending state budget adjustments that allow for publicly funded preschool options, providing research evidence and best practices on the implementation of large-scale high quality early childhood education. Again, I think CACs could connect leaders across states in collaborative groups to share successes and challenges in this arena. Providing professional development to early childhood educators that they could carry back to practitioners on the ground, in a train-the-trainer model, may be a way for CACs to impact this need area.

Individual Needs Assessment

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Priority Need 1. Preparing Students to Be College and Career Ready

Justification: Selected by 10 (20%) of SEA and Government stakeholders and identified over 15 times in open-ended responses. Particular emphasis on the nuances related to a definition of “career” ready in conversations with policy makers and district/site leaders.

Recommended Strategy for Technical Assistance: Help create a common definition of College and Career Ready (specifically more work around defining career ready).

Professional development is needed for educators and guidance counselors to learn about and respond to the evolving/changing needs industry to enhance their ability to link learning experiences to post-secondary opportunities.

Model career counseling (Elem/MS/HS) that provides counselors, students and families with clarity of expectations for the knowledge, skills, and dispositions needed within a field of interest – including academic courses and real-world experiences to develop “employability skills”.

Priority Need 2. Improving access to early childhood education

Justification: Selected by 6 (12%) of SEA & Government stakeholders and identified over 14 times in open-ended responses.

Recommended Strategy for Technical Assistance: Provide strategies for states to align with other federal and state programs serving infants, toddlers, and children under age 5 (e.g., Head Start, IDEA).

Disseminate best practices in identification of “quality” indicators for early childhood programs and ability of state or regions to build quality programs birth through Kindergarten. Best practices in aligning state and federal funds toward the expansion of early childhood without sacrificing quality.

Priority Need 3. Ensuring equity, including addressing issues of disproportionality

Justification: Selected by 6 (12%) of SEA & Government stakeholders and identified over 14 times in open-ended responses. Identified through conversations with stakeholders as a persistent and pernicious aspect of k-12 improvement.

Recommended Strategy for Technical Assistance: Provide research, training, and support to the SEAs so they can continue to build their personal capacity in order to guide and support the LEAs in these areas.

Assist states to utilize the technology available to provide professional development which reaches the classroom level and compensate for SEA’s thinly staffed. Share best practices among states to address these needs - align SEA systems to meet the needs of the districts. Strategies and training for retaining high quality administrators and teachers, family engagement, and school culture and climate.

Priority Need 4. Developing and ensuring equitable distribution of highly effective teachers and leaders

Justification: Selected by 5 (10%) of SEA & Government stakeholders and identified over 30 times in open-ended responses. State leaders in NV identify the teacher shortage and disproportionate impact of vacancies serving our most vulnerable students as the most significant near-term challenge for the state.

Recommended Strategy for Technical Assistance: Research and disseminate best practice on providing incentives for effective teachers to teach in low performing/high poverty schools – specifically in using existing title funding and communicating how these funds may be used as incentives.

Identify promising methods of supporting schools and other entities to bring talent to the market.

Help states link educational equity to teacher assignments and learning for all students (will need research support on this).

Priority Need 5. Maximize federal funding streams and creating organizational efficiencies

Justification. Selected by 4 (8%) of SEA & Government stakeholders and identified over 18 times in open-ended responses. Ongoing focus for many stakeholders during ESSA conversations.

Recommended Strategy for Technical Assistance: Conduct an external SEA fiscal audit and help the State create a plan to develop internal organizational efficiencies and provide guidance on ESSA implantation and State planning.

Provide models of “soft policy” or guidance memorandum that states may adapt to provide support for districts to change practice related to use of federal funds.

Provide guidance and support on how SEA may transition federal funding to statewide priorities while ensuring districts are held harmless. Guidance and support to SEAs to provide changes in policies/statutes for secondary education, contracted days (with students and for PD); streamline procedures for evaluating educational programs and funding.

