

STATE BOARD FOR COMMUNITY COLLEGES AND OCCUPATIONAL EDUCATION

September 10, 2024

TOPIC: Bachelor of Applied Science in Education, with endorsement in Technology Education for Morgan Community College (MCC)

PRESENTED BY: Dr. Curt Freed, President for Morgan Community College

RELATIONSHIP TO THE STRATEGIC PLAN:

Transform the student experience; create education without barriers through Transformational partnerships; and refine our value proposition through accessibility, affordability, quality accountability, resource development, and operational excellence.

EXPLANATION:

Pursuant to CCCS's role and mission (§23-60-201, C.R.S.), CCCS may offer technical, career, and workforce development Bachelor of Applied Science (BAS) degree programs. Authority for the Colorado Community College System to offer BAS degrees was made possible by SB14-004 (Community College Four-year Programs), signed by the Governor on February 27, 2014.

Morgan Community College (MCC) is seeking approval to offer a Bachelor of Applied Science in Education, with endorsement in Technology Education. This proposed program will be delivered through the MCC flexible hybrid delivery method, Rural College Consortium and Colorado Online Consortium. The legislative criteria for approval of a BAS degree are set forth below, with a summary of the supporting data demonstrating that the criteria have been met.

EXECUTIVE SUMMARY:

The Colorado Community College System (CCCS) continues to make strides in creating a suite of Bachelor of Applied Science (BAS) degrees to support the statewide student population. The BAS in Education will provide an avenue to help resolve one of the most challenging workforce needs in rural areas- secondary educators in Career and Technical Education (CTE). This program will not only provide a seamless pathway to becoming a CTE Educator, but it will also then subsequently provide a pipeline of students exposed to career and technical fields, which also have large workforce deficits.

This program is built on a Grow Your Own model that encourages students to remain in their home community and continue working while pursuing additional education. Historically, students completing an AAS in any technical field, did not have the opportunity to continue their education as typically AAS degrees lack a seamless transfer to 4-year institutions in the state. This new BAS in Education, with endorsement

in Technology Education will provide a necessary pathway for CCCS students interested in pursuing a bachelor's degree in education.

By developing a BAS Degree in Education at community colleges, there will be greater opportunities to build a pipeline of diverse educators committed to rural communities. Through this program, there will be strengthened partnerships among postsecondary and the K-12 system across several regions. The project will allow individuals to remain in their communities while transitioning from various levels of the educational arena. Pathways can lead from classroom aide to paraprofessional to teacher. The ability to transition along multiple pathways will enhance economic mobility and strengthen the industry of education. Individuals who are interested in a career in teaching will have a streamlined program which allows them to remain in their home community.

COST EFFECTIVENESS:

This program will use a model found effective for the Colorado Community College System. Courses will be offered through MCC's regular flexible hybrid remote courses method, Rural College Consortium, and/or Colorado Online Consortium. There is no additional cost for facilities or space, just staffing. MCC already has faculty and instructors who are prepared to teach these courses and as the program grows, tuition revenues will support the addition of faculty as needed.

The BAS in Education, Technology Education pathway at MCC will stack with the Associates of Applied Science in any career and technical field. The first 60 credits of the 121 credits required to complete the BAS come directly from the AAS degree requirements.

Tuition for the 3000- and 4000-level courses in the BAS will be charged at a differential tuition rate aligned with CCCS online tuition rate (before applying the Colorado Opportunity Fund, or "COF"). This rate of tuition supports the necessary expenses of offering courses in a variety of formats including hybrid and online and remains cost-effective for students. Even with the higher tuition rate, the BAS in Education will be a more affordable option for students compared to degree programs available at Colorado 4-year universities.

Current CTE teachers in the secondary system are often not eligible for the same level of salaries as other teachers with a bachelor's degree in education, since they often lack traditional teacher certification. This BAS degree will provide them with a seamless, cost-effective path to obtaining a degree that will place them on the same salary scale as other teachers. A marketing campaign targeting such individuals will be developed and launched.

WORKFORCE DEMAND:

The results of the Colorado Department of Education's 2023-2024 Educator Shortage Survey (<https://www.cde.state.co.us/educatortalent/edshortage-surveyresults>), reveal a statewide need for educators. Highlights of the survey include:

- Local Education Agencies (LEAs) reported 6,911 (12.41%) open teaching positions from among the 55,686 teaching positions in the state. This is a count

of all open positions that are available to be filled by educators switching districts and/or schools, newly trained educators completing preparation programs, out-of-state educators relocating to Colorado and others holding qualifying credentials.

- Of the total vacant teaching positions, 635 (9.81%) remained unfilled for the entire school year and 1,756 (25.41%) were filled through a shortage mechanism. This is an increase over the 2022-2023 school year that had 722 (8.71%) remained unfilled for the entire school year and 1,486 (17.92%) were filled through a shortage mechanism. A shortage mechanism refers to hiring an individual to teach a subject different than the one in which they are certified; who received authorization to teach through an alternative method; who is retired or who is a long-term substitute.
- Among the 22,951 paraprofessional positions in the state, 3,468 were vacant and 66 (1.91%) positions were filled through a shortage mechanism such as a retiree or long-term substitute.
- Rural and small rural districts report the most usage of shortage mechanisms to fill openings. In small rural districts, industrial arts and business are among the areas with the highest percentage of positions unfilled or filled through a shortage mechanism among elementary and secondary areas.
- According to Colorado LMI Gateway, employment of career and technical education teachers at the secondary level is projected to grow 5 percent from 2020-2030.

The Colorado Department of Education's 2023-2024 Educator Shortage Survey report is included in the State Board packet.

STUDENT DEMAND ASSESSMENT:

MCC has a pipeline of students interested in a career in education as evident by the number of students declaring the Associate of Arts in Elementary Education and Associate of Art in Early Childhood Education. In Fall 2023, there were approximately 14 students declaring these degrees as their primary program.

MCC also has a large percentage of CTE students comprising approximately 46% of Fall 2024 enrollment. Graduates from any of the CTE programs are potential students for the BAS in Education with a Technology endorsement. A targeted informational campaign will be developed to inform students of this career option.

A recent survey was sent to 1467 CTE, EDU and ECE students. The response rate was 12.75%. Students were asked- "*If MCC were to offer a Bachelor of Applied Science in Education that gives you credit for work already completed at MCC and that would lead to a career in teaching career and technical education in the secondary school system, how likely is it that you would enroll?*" 27.92% of the respondents said they would very likely or somewhat likely enroll.

ACCREDITATION AND LICENSING REQUIREMENTS:

The curriculum has been developed in alignment with the Colorado Department of Education's *Educator Preparation Technology Endorsement Standards Matrix*. There was collaboration among the education discipline across CCCS to review and develop these courses. In Fall 2023, there was a Colorado Department of Education (CDE)

peer review of the courses conducted to ensure alignment with the matrix. MCC has worked closely with staff at CDE to develop a curriculum that meets the required standards.

To be granted authorization to offer a licensure preparation program, the college must first be approved by CCCS to offer the BAS. Once approval is achieved, the approval letter shall be submitted to the CDHE for review and consideration to be recognized as an institution of higher education authorized to be a licensure preparation program.

Morgan Community College is fully accredited through the Higher Learning Commission (HLC). A substantive change will be submitted to the HLC, for approval to offer this program.

PROJECTED BUDGET, INCLUDING ESTIMATED REVENUES AND EXPENSES ASSOCIATED WITH THE PROGRAM:

The Financial Tool Analysis is included in the Board packet.

Financial Analysis Methodology

The financial analysis for the BAS in Education with an endorsement in Technology Education will come from MCC in a hybrid and hyflex model with the option of utilizing online classes as needed. The Summary Financial Analysis includes total enrollments across the first four years of the degree. Specific planning of course delivery will be strategic based on ability to deliver and expertise within MCC faculty. To expand access and flexibility for students, there are a few online courses offered throughout the degree, including two courses that overlap with the BAS in Business in the later part of year three.

Due to an increase in enrollment, it is anticipated that an additional faculty position will be added to the department in year three. Another strategy to address the increase in enrollment is to utilize more online offerings through the Colorado Online Consortium as needed.

A simplified model was used for the financial statements:

- The pay rates for faculty and instructors reflected an average amount of classes taught, erring on the side of caution.
- Year 0 does not have expenses as all course design and curriculum was created in 2023 to align with CDE standards.
- MCC already offers most of the classes in the beginning years of the program which could accelerate the timeline of classes being offered.

PROJECTED FACILITY AND EQUIPMENT COSTS, INCLUDING ESTIMATED LICENSING AND MAINTENANCE COSTS, IF APPLICABLE:

This is not applicable. There are no new facility or equipment costs associated with this program.

BUDGET IMPACT ASSESSMENT (OF THE PROPOSED PROGRAM ON EXISTING PROGRAMS IN TERMS OF FINANCES, ENROLLMENT, AND STAFFING):

This degree will not have a negative impact on any existing programs in terms of finances, enrollment or staffing. It has the potential of increasing enrollment in education courses, which the college already offers. It may also attract students into the existing CTE programs who desire a career of teaching CTE courses at the secondary level. The degree program creates a new pathway that has previously not been available.

FACULTY AND STAFFING NEEDS ANALYSIS:

Morgan Community College currently employs a fulltime faculty in the EDU discipline and multiple parttime faculty to help teach the required courses. MCC is prepared to hire another fulltime faculty as warranted by student enrollment.

Also, the plan is to collaborate with our Rural College Consortium partners to offer courses through the consortium.

ANALYSIS OF STUDENT SUPPORT SERVICES, INCLUDING LIBRARY RESOURCES:

All support services integral to the success of students will be available to students enrolled in this BAS degree. Students will be provided an academic advisor as well as the support of the program coordinator. MCC has a tutoring center and library available to all students.

Additionally, MCC and Colorado Online have robust online student support services including an Online Writing Center, Online Math Tutoring, 24/7 tutoring in a variety of subjects through TutorMe, and a 24/7 technology helpdesk through CCCS. Additionally, a series of databases are available for students through centralized library services to provide Education students with the necessary resources.

PROGRAM COURSE LIST:

Program Name: BAS Technology Education (7-12)

Degree Requirements

Technology Education Coursework 30 credits							
	Credit Hours	Course Numbers	Course Title	Lecture	Lab	Practicum	Internship
Technology Education Coursework	30	Varied	Varied	Varied	Varied	Varied	
*Credit for prior learning may apply							
BAS General Education Courses 30 credits							
	Credit Hours	Course Numbers	Course Title	Lecture	Lab	Practicum	Internship
Composition & Writing	3	Select one: ENG 1031 OR ENG 1021	ENG 1031 Technical Writing I: CO1 OR ENG 1021 English Composition I: CO1				
Social Sciences	6	PSY 2441 AND any GT-SS1, SS2. or SS3	PSY 2441: Child Development: SS3 AND any GT-SS1, SS2. or SS3				

Communication	3	Select one: COM 1105, 1150, 1250	COM 1105: Career Communication OR COM 1150: Public Speaking OR COM 1250 Interpersonal Communication SS3				
Arts & Humanities	6	SPA 1015 AND any GT- AH1 or AH2	SPA 1015: Spanish for the Professional I AND GT- AH1 or AH2				
History	3	Any GT-HI1	Any GT-HI1 (Preferred: HIS 1245: US History Post 1945)				
Math	2	MAT 1100 OR MAT 1140	MAT 1100: Skilled Trades & Industrial Math OR MAT 1140 Career Math				
Natural and Physical Science	4	Any GT-SC1	Any GT-SC1 (Preferred: Conceptual Physics w/ Lab: SC1)	45	15		
Computer Information Systems	3	CIS 1018	Intro to PC Applications				
BAS Required Courses 61 credits							
	Credit Hours	Course Numbers	Course Title	Lecture	Lab	Practicum	Internship
Teacher Preparation Core	3	EDU 2211	Introduction to Education	45			
	3	EDU 2341	Multicultural Education	45			
	3	EDU 2611	Teaching, Technology, and Learning	45			
	3	EDU 2401	Teaching Exceptional Learners	45		15	
	3	EDU 2331	English Language Learners	45			
	3	EDU 3201	Classroom Management	45		15	
	3	EDU 3301	Differentiated Instruction	45		15	
	4	EDU 3001	Applied Teaching Methods	45		30	
Additional Coursework	3	MAN 3070	Operations Management	45			
	3	MAN 4030	Organizational Leadership	45			
Students must take Praxis 5051 to apply to residency year							
Semester 1- Residency							
	3	EDU 4101	Applied Curriculum Design	45			
	3	EDU 4501	Assessment Strategies for Technology Education	45			
	9	EDU 4611	Residency Teaching I	15			360
Semester 2- Residency Year							
	3	EDU 4401	STEAM for Tech Ed	45			
	12	EDU 4621	Residency Teaching II	15			900

Program Total Credits: 121

Colorado Online @ NEW Program Financial Analysis

BAS Education

Analysis Summary

	Five Year Totals	Year 0 FY25	Year 1 FY26	Year 2 FY27	Year 3 FY28	Year 4 FY29	Year 5 FY30
<i>Student Full Time Equivalents (SFTE) ¹</i>	109.1		7.6	14.6	22.0	30.0	34.9
Revenues							
Resident Tuition			39,711	78,361	121,984	171,328	205,257
Non-Resident Tuition ²							
Online Tuition Differential			-	-	2,774	3,428	4,237
Adjusted COF/FFS			106,467	210,088	327,042	459,333	550,298
Gaming			4,729	9,059	13,692	18,670	21,716
Fees: High Cost			-	-	-	-	-
Fees: Program			-	-	-	-	-
Wildcard Earnings			-	-	-	-	-
Grants			-	-	-	-	-
Miscellaneous Revenue			-	-	-	-	-
Estimated Total Revenues	2,348,174	0	150,907	297,508	465,492	652,759	781,508
Expenses							
Admin Salaries			-	-	-	-	-
Admin Benefits			-	-	-	-	-
Faculty Salaries			-	-	49,451	120,391	124,003
Faculty Benefits			-	-	19,978	49,240	51,337
Adjunct Wages			-	-	2,323	2,393	2,539
Adjunct Benefits			-	-	637	668	734
Classified Salaries			-	-	-	-	-
Classified Benefits			-	-	-	-	-
Hourly Wages (Curriculum Development)			-	-	-	-	-
Hourly Benefits			-	-	-	-	-
Colorado Online Fee 16.2%			-	-	20,211	28,310	33,938
Operating			-	3,000	3,090	3,183	3,377
Travel			-	2,000	2,060	2,122	2,251
Capital			-	-	-	-	-
Grant Expenses			-	-	-	-	-
Estimated Total Expenses	535,863	0	5,000	8,110	98,005	206,570	218,178
Estimated Net Operating Income (DE Only)	1,812,311	0	145,907	289,398	367,487	446,189	563,330
Estimated Net Operating Income (DE & 50% IDC)	1,544,380	0	143,407	285,343	318,484	342,904	454,242
Cumulative Return on Investment		0	143,407	428,750	747,234	1,090,138	1,544,380

Will Expenses (row 34) be funded from the campus budget?

Y

If no, please provide the funding plan for the years before it will be funded from the campus budget.

1. This analysis is a pro forma financial statement, not an approved budget. 2. This analysis should be reviewed by division leadership (Budget assistance available upon request) during the budget development process and revised with appropriate amounts within the context of the campus budget request. 3. Budget Services provides this financial analysis based on the program structure/anticipated enrollment inputs provided by the instructional team. We have not evaluated the enrollment assumptions. 4. Assumption is that all tuition is resident; please work with Budget Services if this is not the case.

COLORADO'S EDUCATOR SHORTAGE

Survey Results for the 2023-2024 School Year



Background on the Educator Shortage Survey

In response to Colorado House Bill 17-1003, *Concerning a Strategic Action Plan to Address Teacher Shortages in Colorado*, the Colorado Department of Education (CDE) and Colorado Department of Higher Education (CDHE) collaboratively collected data to analyze the state's educator shortage problem and developed a corresponding action plan regarding identified shortages. As a part of that plan, CDE created the Educator Shortage Survey, which is an annual statewide survey¹ for all local education agencies (LEAs), that is, school districts and Boards of Cooperative Educational Services (BOCES) that employ educators.²

The purpose of the survey is to gather facts about the number of vacant educator positions and the ways those vacancies were filled, if they were filled at all. The survey includes questions regarding the number of vacant teaching positions by subject area, the number of vacant special services provider (SSP) positions by type, and beginning in 2019-2020, the number of vacant school leadership (i.e., principal and assistant principal) and paraprofessional positions. These shortage data allow CDE to identify educator shortage areas in Colorado and to report to the Colorado Legislature to inform decisions regarding support for recruiting and retaining educators.

Results are reported here according to varying levels of detail. This summary includes state shortage information for the following groups: (1) all teachers (including by subject area), SSPs (including by SSP type), principals/assistant principals and paraprofessionals; (2) all teachers, SSPs, principals/assistant principals and paraprofessionals separated by rural designation; and (3) all teachers by teaching subject area and rural designation. In addition, information regarding trends in the recruitment strategies used is included. For more detail about the frequency with which specific shortage mechanisms (hiring long-term substitutes, retired educators, alternative licensure program candidates and emergency authorization candidates) and recruiting strategies were used and for LEA-level data, [please see the data dashboard here](#).

When analyzing the data by rural designation,³ non-rural school districts had the most open positions, likely since these districts employ a larger number of educators than those in rural and small rural areas. Additionally, when analyzing results by teaching subject area, some teaching areas, including elementary education, had comparatively high numbers of open positions, likely because there are more elementary teacher positions than exist in some other subject areas, such as physical education. To better understand the educator shortages in Colorado, the proportion of positions filled by a shortage mechanism or left unfilled to the total number of available positions in that subject area or region is reported, in addition to the total count of available positions⁴.

Statewide Shortage Survey Results

Across the state, LEAs reported having teacher, SSP, principal/assistant principal and paraprofessional positions to hire for the 2023-2024 school year. More specifically, LEAs reported having to hire for:

- 6,911 (12.41%) teaching positions from among the 55,686 teaching positions in the state. This is a count of all open positions that are available to be filled by educators switching districts and/or schools, newly trained

¹ Starting with the 2018-2019 school year, the survey is required by statute per Senate Bill 19-003 and to meet Federal requirements per 34 CFR 682.201(q), 34 CFR 674. 53(c), and 34 CFR 686.12. It was first administered in 2017-2018 as a voluntary survey. Data from the first-year survey are not comparable because of the vast differences in representativeness.

² Front Range BOCES, Mount Evans BOCES, and Ute Pass BOCES did not complete the Educator Shortage Survey for 2023-2024 because they are not required to submit data for the collection in which the survey is embedded. Other LEAs included are the Colorado School for the Deaf and Blind, Charter School Institute, Division of Youth Services, and Approved Facility Schools.

³ A Colorado school district is determined to be rural based on the size of the district, the distance from the nearest large urban/urbanized area, and a student enrollment of approximately 6,500 students or fewer. Small rural districts are those districts meeting these same criteria and having a student population of fewer than 1,000 students.

⁴ The number of all existing positions was calculated using the full-time equivalent (FTE) reported by each district and BOCES as a part of the annual Human Resources snapshot along with the number of unfilled positions reported in the survey. Percentage calculations for positions without a unique teaching subject (e.g., culturally and linguistically diverse educators) are not available because FTE data are not reported in the Human Resources snapshot.

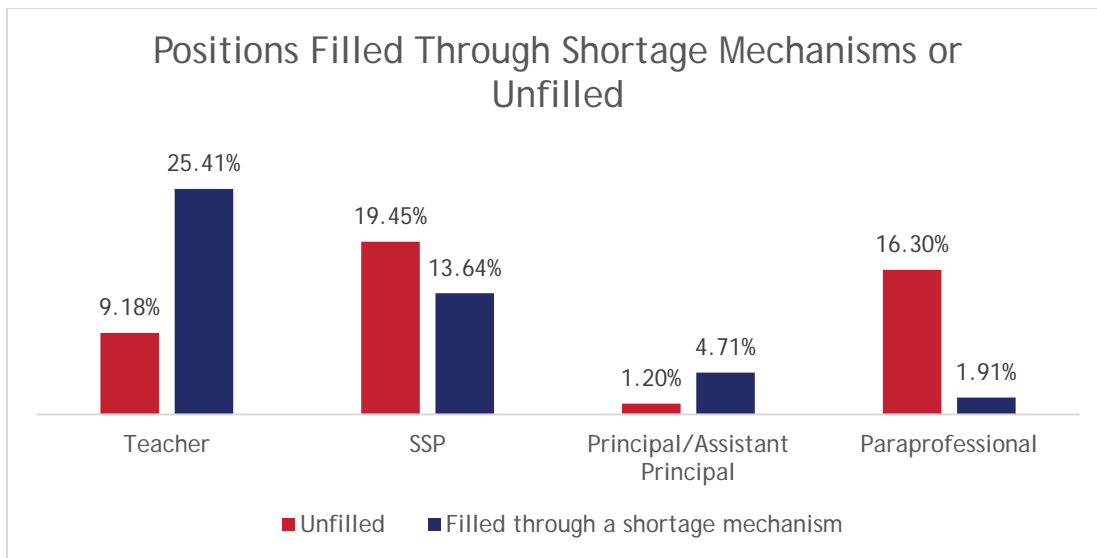


educators completing preparation programs, out-of-state educators relocating to Colorado and others holding qualifying credentials.

- 1,186 (15.43%) SSP positions from among the 7,685 SSP positions in the state.
- 499 (13.17%) principal/assistant principal positions from among the 3,739 principal and assistant principal positions in the state.
- 3,468 (15.11%) paraprofessional positions from among the 22,951 paraprofessional positions in the state.

Of the total teaching positions to hire, 635 (9.18%) remained unfilled for the entire school year and 1,756 (25.41%) were filled through a shortage mechanism. Of the total SSP positions to hire, 231 (19.45%) remained unfilled for the entire school year and 162 (13.64%) were filled through a shortage mechanism. Of the total principal/assistant principal positions to hire, 6 (1.20%) remained unfilled for the entire school year and 24 (4.71%) were filled through a shortage mechanism. Of the total paraprofessional positions to hire, 565 (16.30%) remained unfilled for the entire school year and 66 (1.91%) were filled through a shortage mechanism. Positions to hire that were filled, but not filled by a shortage mechanism, are presumed to have been filled through traditional hiring mechanisms.

This series of graphs shows the percentage of all existing open positions that were filled in the 2023-2024 school year through a shortage mechanism and that remained unfilled for each educator group as well as for each teaching subject area⁵ and SSP type.⁶

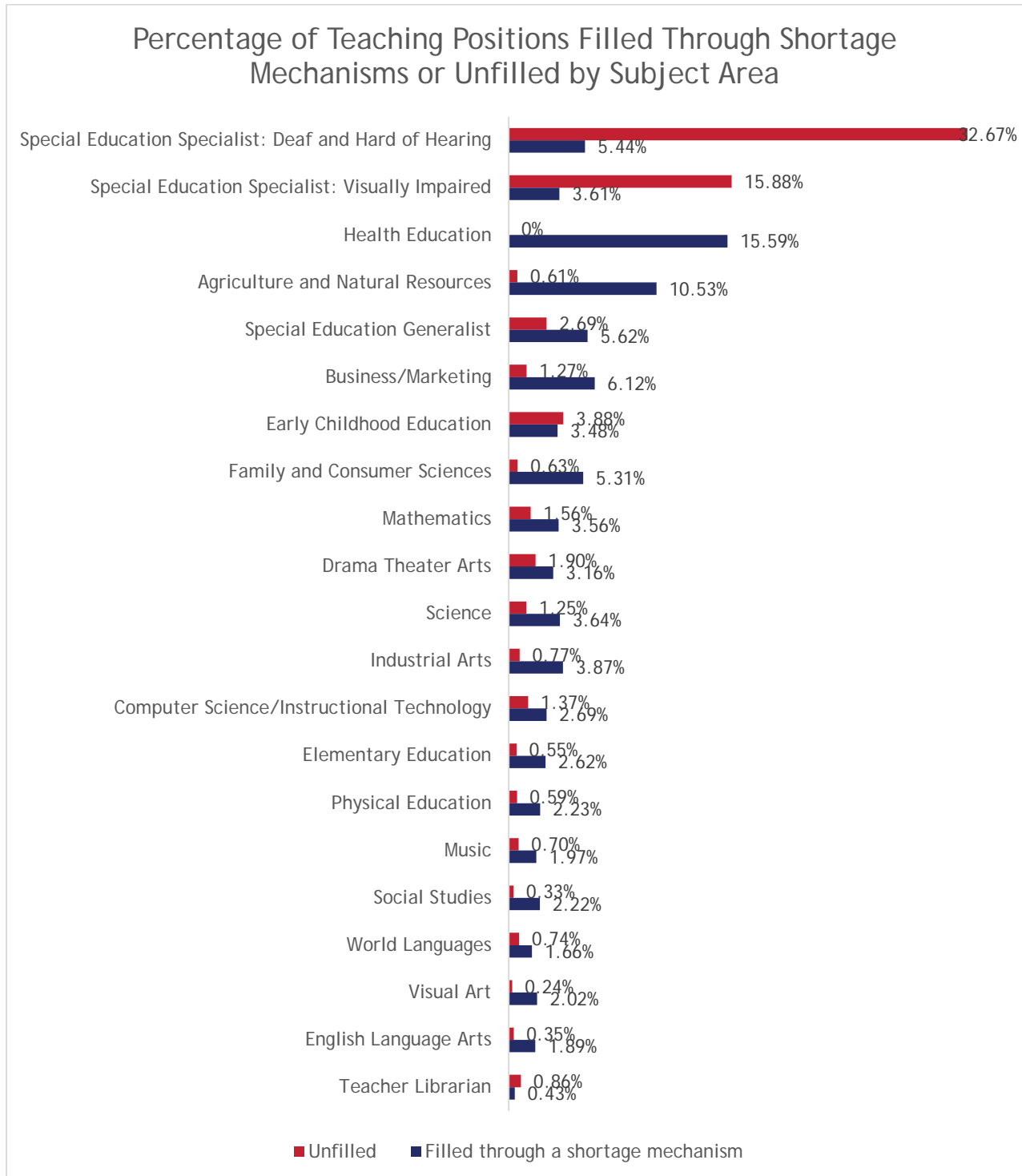


⁵ Based on the feedback from the 2018-2019 survey, two subject areas, Health Education and Industrial Arts, were added to the survey starting with the 2019-2020 administration of the survey. For teaching positions not aligned to a unique subject area reported in the Human Resources Collection (e.g., culturally and linguistically diverse education), [please see additional tables here](#).

⁶ Principal/assistant principal and paraprofessional data cannot be disaggregated into subgroups.

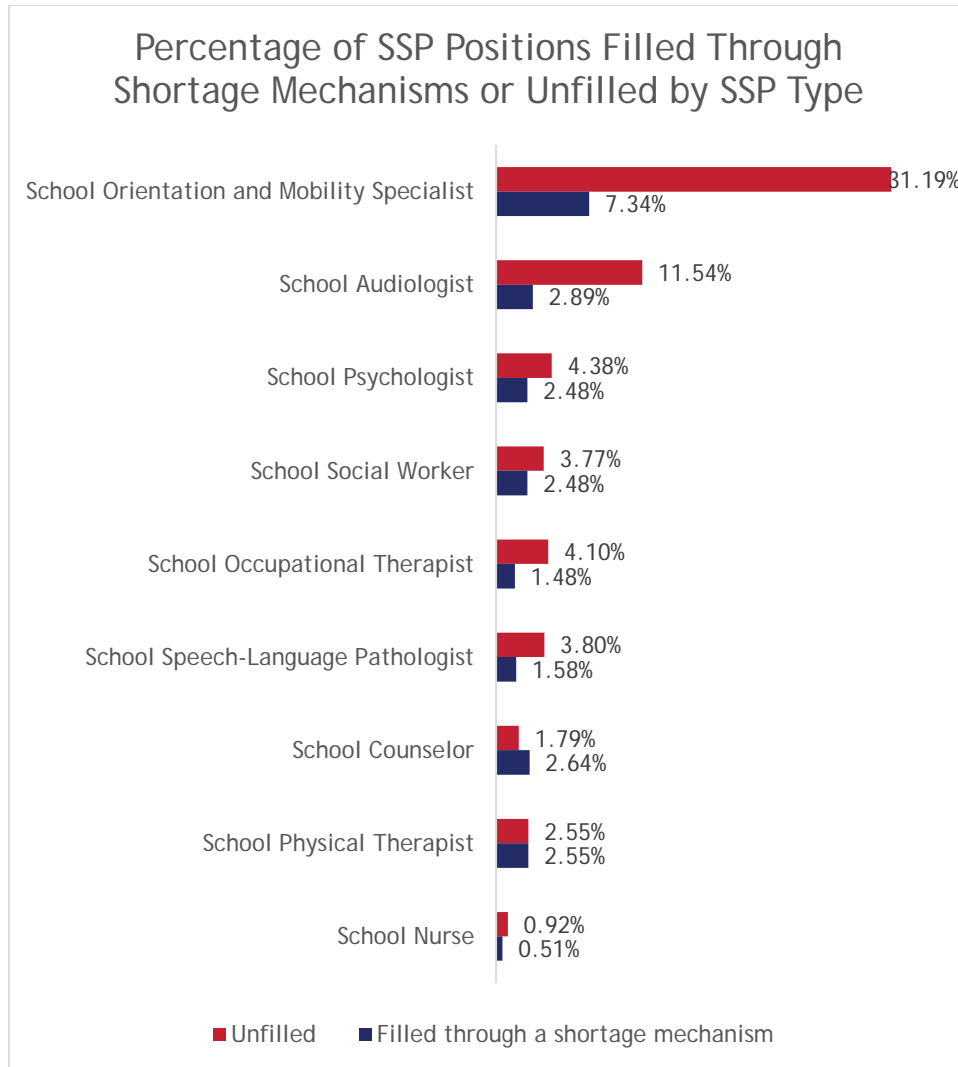


Analysis of the percentage of positions unfilled by subject area revealed a statewide shortage in special education. Three special education subject areas ranked in the top five shortage areas. Although the specialist positions are comparatively fewer, nearly 40% of all Deaf and hard of hearing specialist positions were left unfilled or filled by a shortage mechanism, and nearly 20% of all visually impaired specialist positions were left unfilled or filled by a shortage mechanism. Top core teaching subject shortage areas left unfilled or filled by a shortage mechanism include Special Education Generalist ($n = 486$), Mathematics ($n = 204$), Science ($n = 174$) and Early Childhood Education ($n = 74$).





Shortage areas in the 2023-2024 academic year also included special services providers. Of these categories, School Counselors have the largest number of total positions in Colorado, and the 4.43% of positions left unfilled or filled via a shortage mechanism (seen below) represents the largest category by job count ($n = 116$).



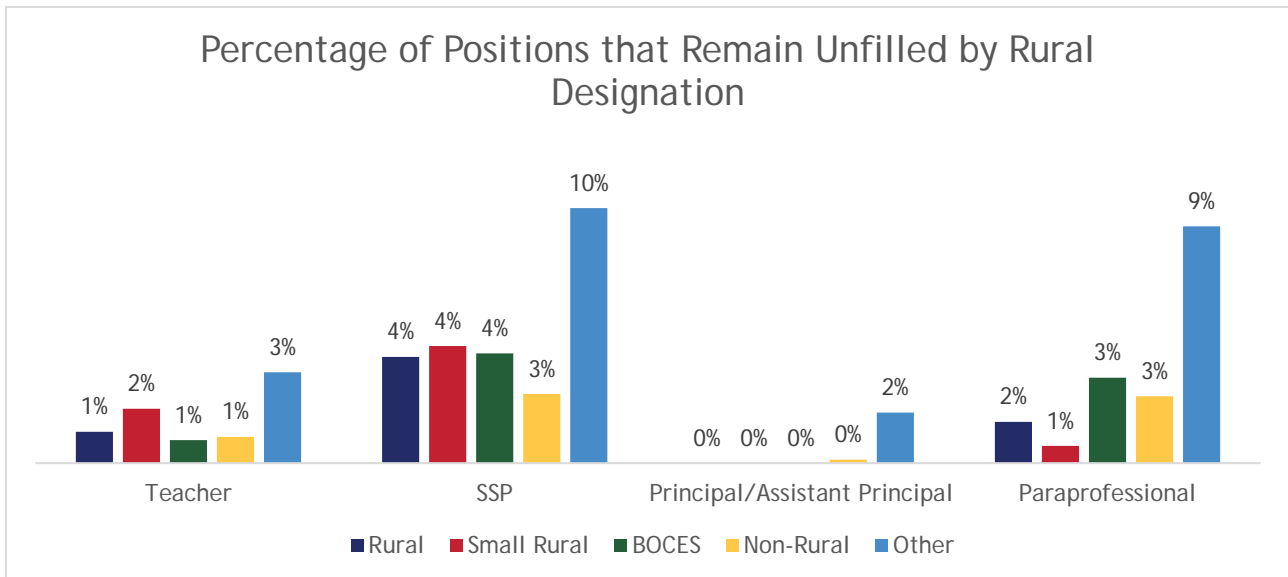
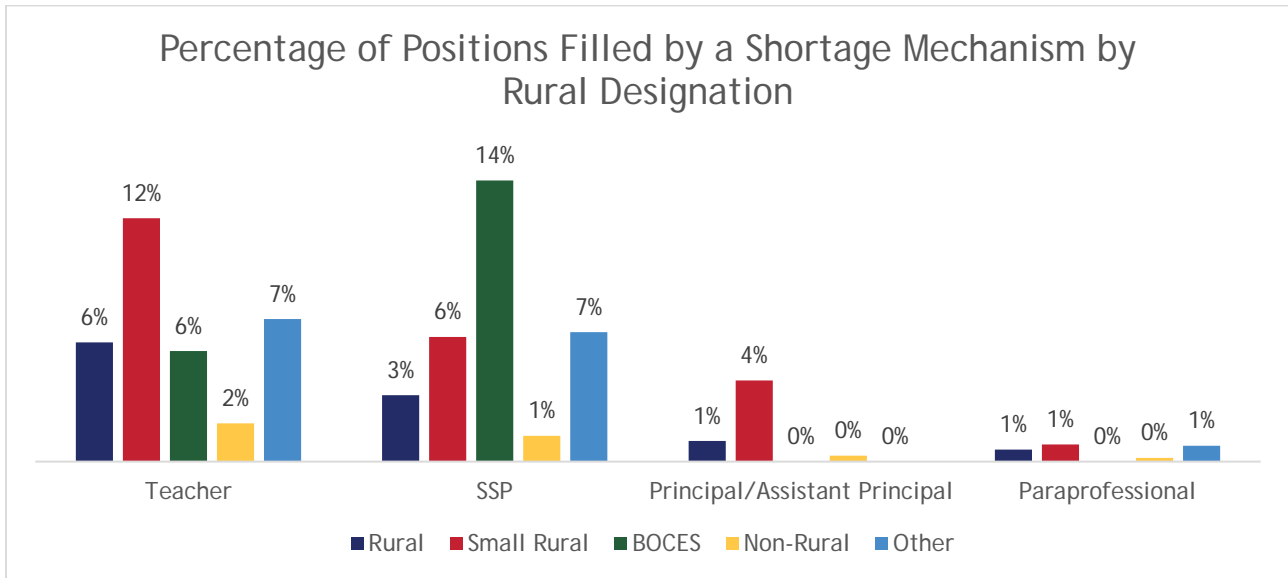
Shortage Survey Results by Rural Designation

To better understand how geographical setting impacts educator shortages, survey results are presented for the following categories: small rural, rural, non-rural, BOCES and ‘other’⁷. The graphs below display the percentages of existing positions filled through a shortage mechanism or that remained unfilled for teachers, SSPs, principals/assistant principals and paraprofessionals by rural designation. Because the other category is comprised of fewer LEAs and thus fewer educators, it is important to note that any position unfilled or filled through a shortage mechanism in this category had a large impact on the overall shortage percentages in this category.

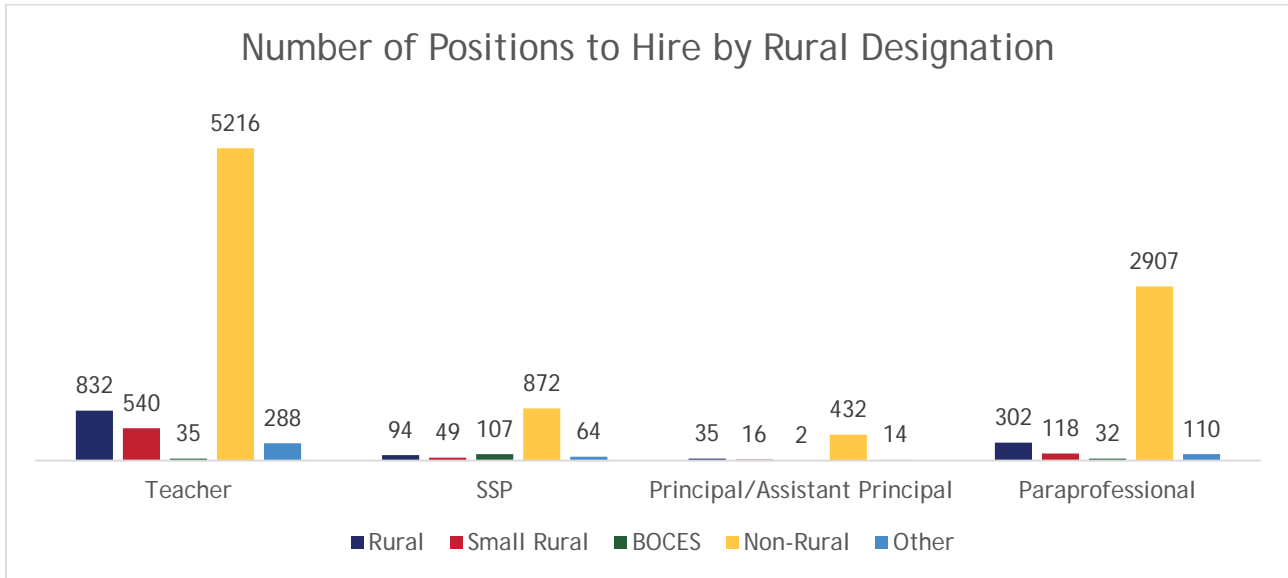
⁷ ‘Other’ is comprised of the Colorado School for the Deaf and Blind, Charter School Institute, Division of Youth Services, and Approved Facility Schools. These LEAs serve students statewide and therefore are considered a separate category.



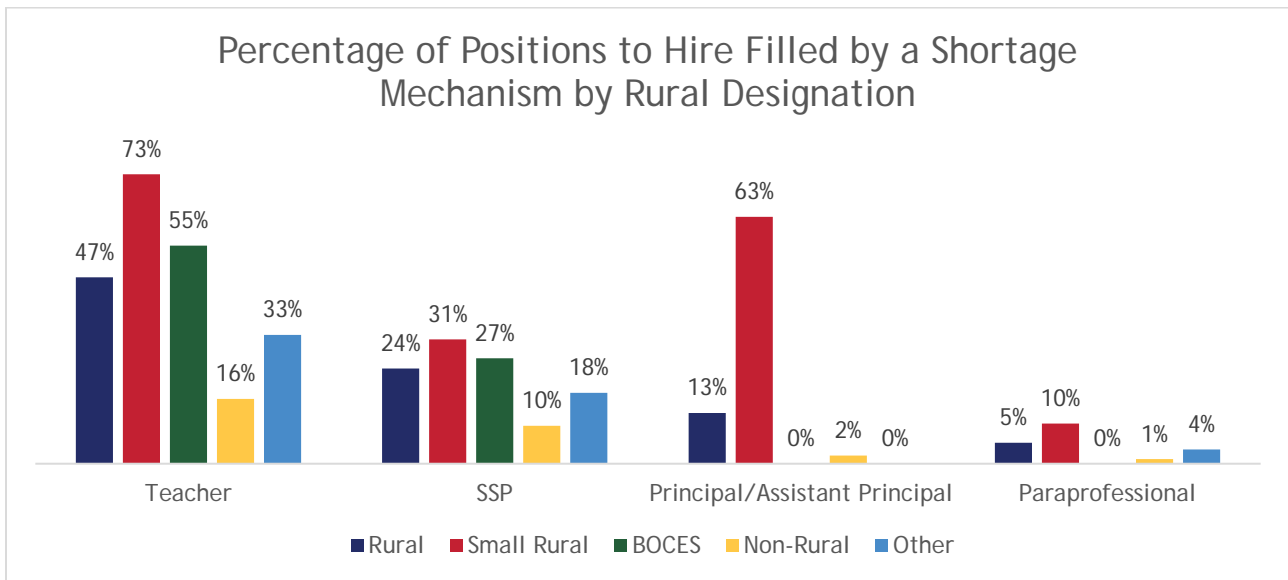
Among small rural, rural and non-rural districts, non-rural districts had the lowest percentage of positions filled through a shortage mechanism for teachers and SSPs. Generally, small rural districts reported the most usage of shortage mechanisms, followed by rural districts, while institutions identified as “Other” held the highest number of unfilled positions for SSPs and paraprofessionals.

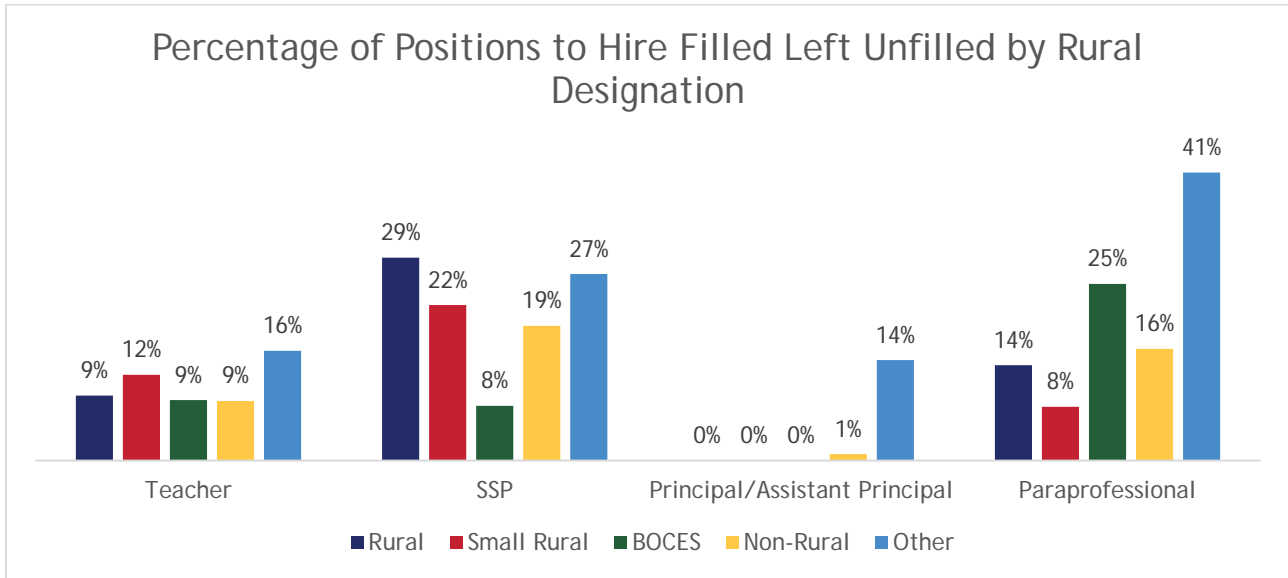


It is important to note that positions in non-rural locations comprised 78% of all positions to hire in Colorado for the 2023-2024 school year ($n = 12,063$), which is consistent with the fact that non-rural districts have more staff overall than rural ($n = 1,262$, 10%) or small rural ($n = 722$, 6%) locations; however, as illustrated in the following charts, hiring mechanisms employed by districts varied drastically by rural designation.



The percentages of positions to hire that were filled through a shortage mechanism were generally higher in rural and small rural areas than in non-rural areas. Nearly three quarters of the teaching positions to hire and more than 60% of principal and assistant principal positions to hire in small rural districts were filled through a shortage mechanism.

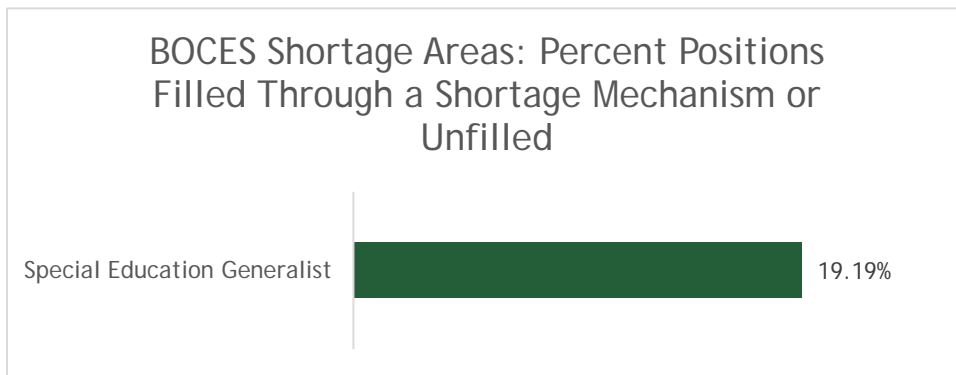




Shortage Survey Results by Teaching Subject Area and Rural Designation

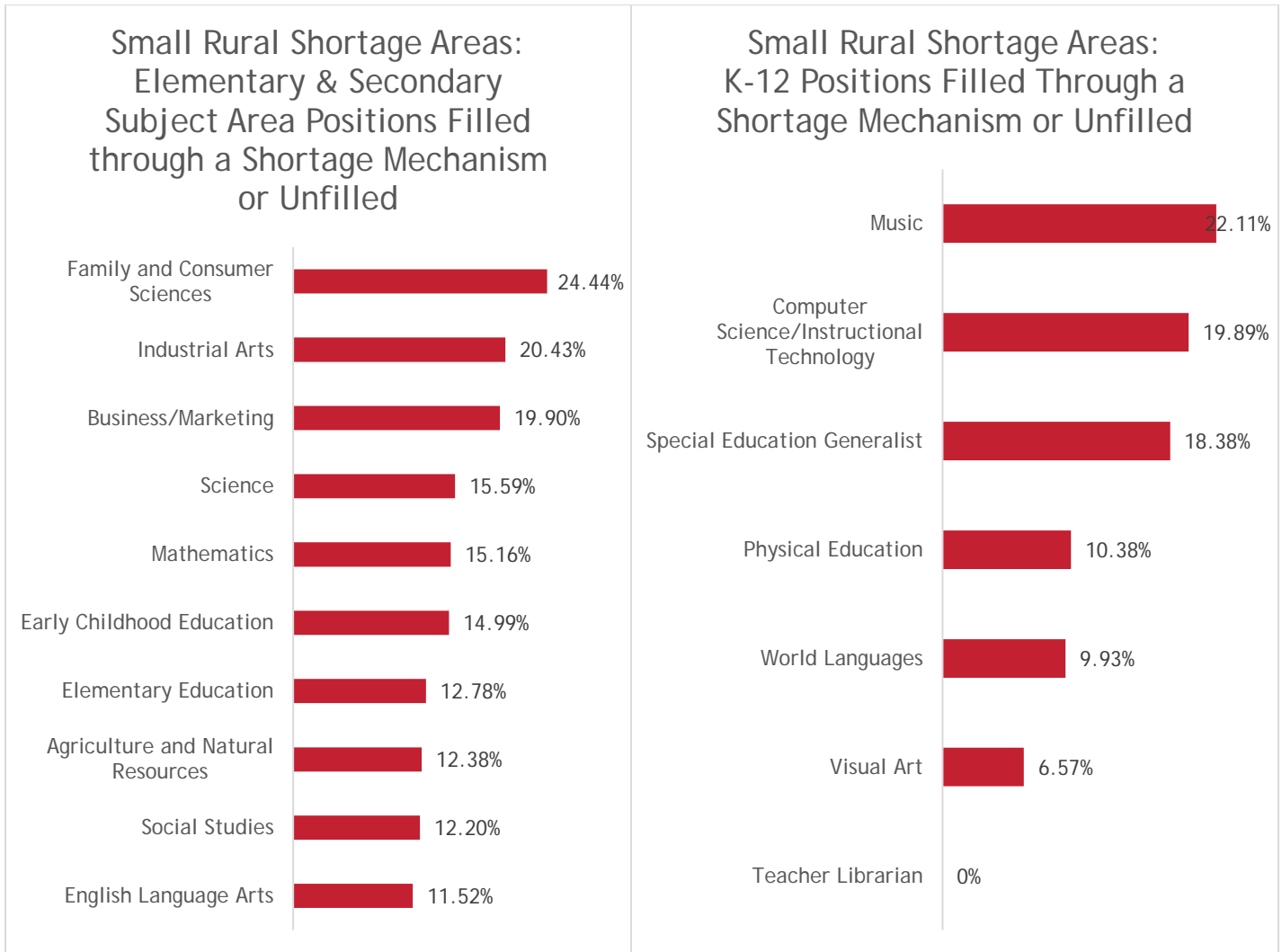
To understand how shortages vary by subject areas, shortages in elementary and secondary subject areas and kindergarten through twelfth grade (K-12) subject areas are presented for each rural designation: small rural, rural, non-rural, BOCES, and other. Because unfilled positions and positions filled through a shortage mechanism are both indicators of a shortage, the data are combined to determine the percentage of all teaching positions that remained unfilled or filled through a shortage mechanism for each subject area. Note that this is the percentage of all existing teaching positions for each subject area within the LEAs, not the percentage of positions to hire, that were filled through a shortage mechanism or remained unfilled. For teaching positions not aligned to a unique subject area (e.g., culturally and linguistically diverse educators), [please see the data dashboard here](#).

BOCES data are presented first due to their unique role in employing teachers. In addition to operating alternative or online schools and programs when needed by their member districts, BOCES also operate as Special Education Administrative Units. This means that a BOCES may be responsible for hiring special education teachers for its member districts. In most cases, BOCES engage in this role for small rural districts. As a result, shortage data for small rural districts and BOCES must be considered together. Due to the unique role BOCES have in employing teachers, shortage information is only displayed for subject areas for which BOCES reported employing teachers.





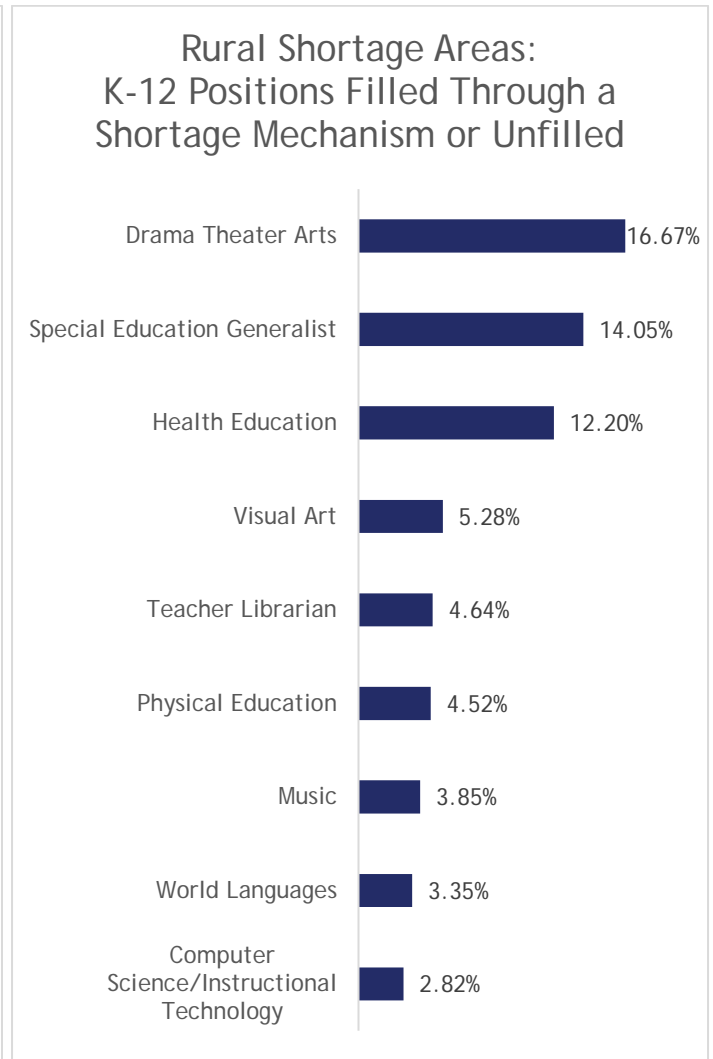
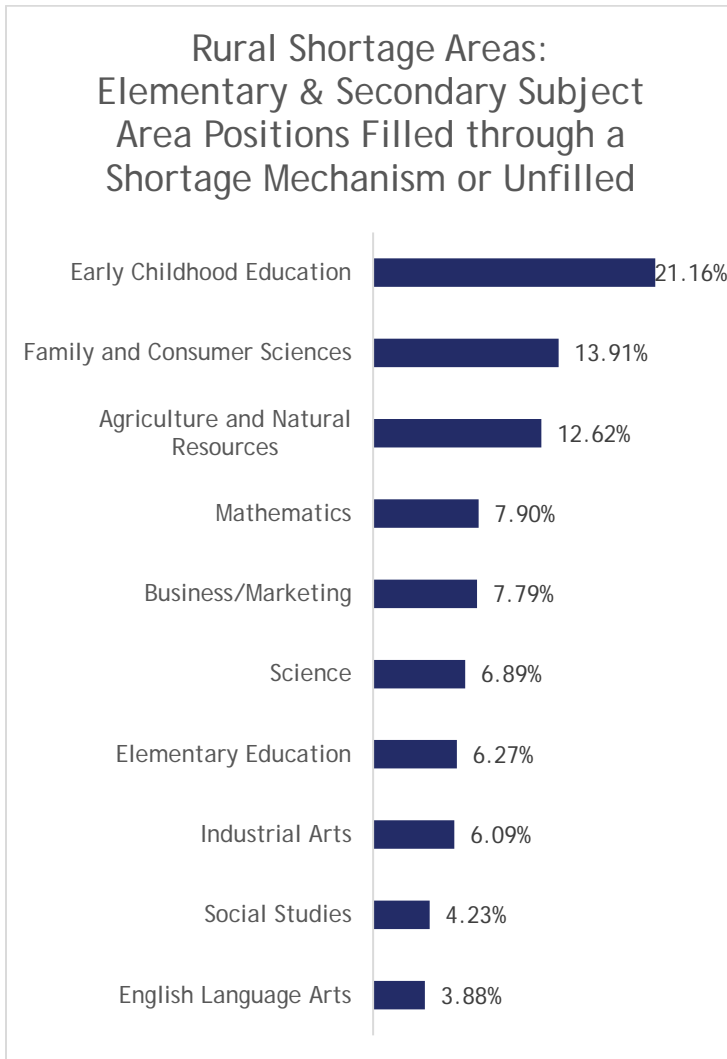
In small rural districts, family and consumer sciences, industrial arts, and business/marketing subject areas had the highest percentage of positions unfilled or filled through a shortage mechanism among elementary and secondary subject areas.



Among K-12 subject areas, Music and Computer Science/Instructional Technology had the highest percentage of positions unfilled or filled through a shortage mechanism in small rural districts. There were fewer than five FTE positions for Health Education, Computer Science/Instructional Technology, Drama Theater Arts, Special Education Specialist: Visually Impaired, or Special Education Specialist: Deaf and Hard of Hearing, so these proportions were not reported.

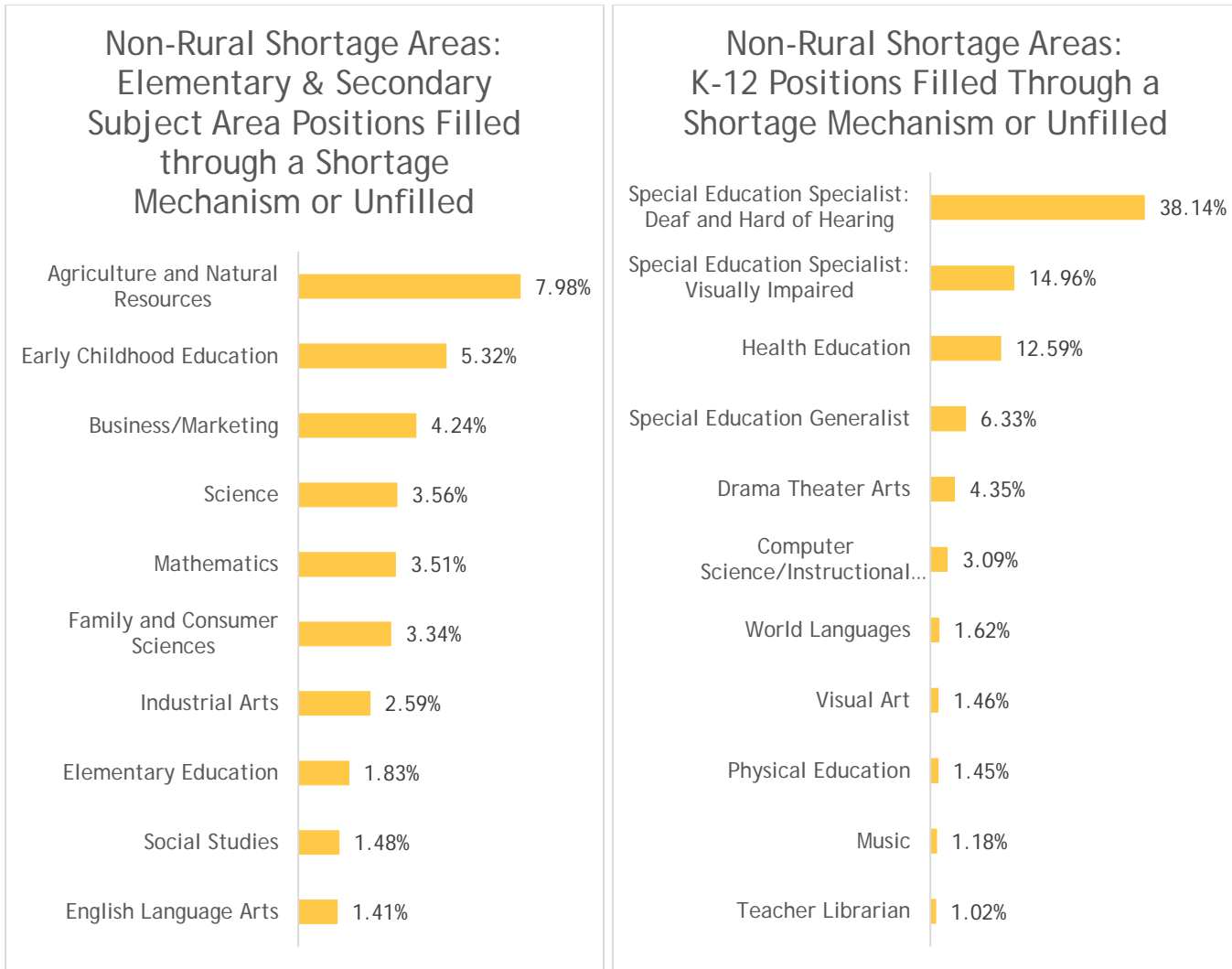


As illustrated in the charts below, shortages in rural districts are more severe than those in small rural districts. Early Childhood Education ranked first among the elementary and secondary shortage areas, followed by Family and Consumer Sciences.



Among K-12 subject areas, special education generalist and visual art had the highest shortage rates, followed by physical education. This demonstrates an increase in special education generalist shortages in rural areas when compared with the 2022-2023 rural shortages.

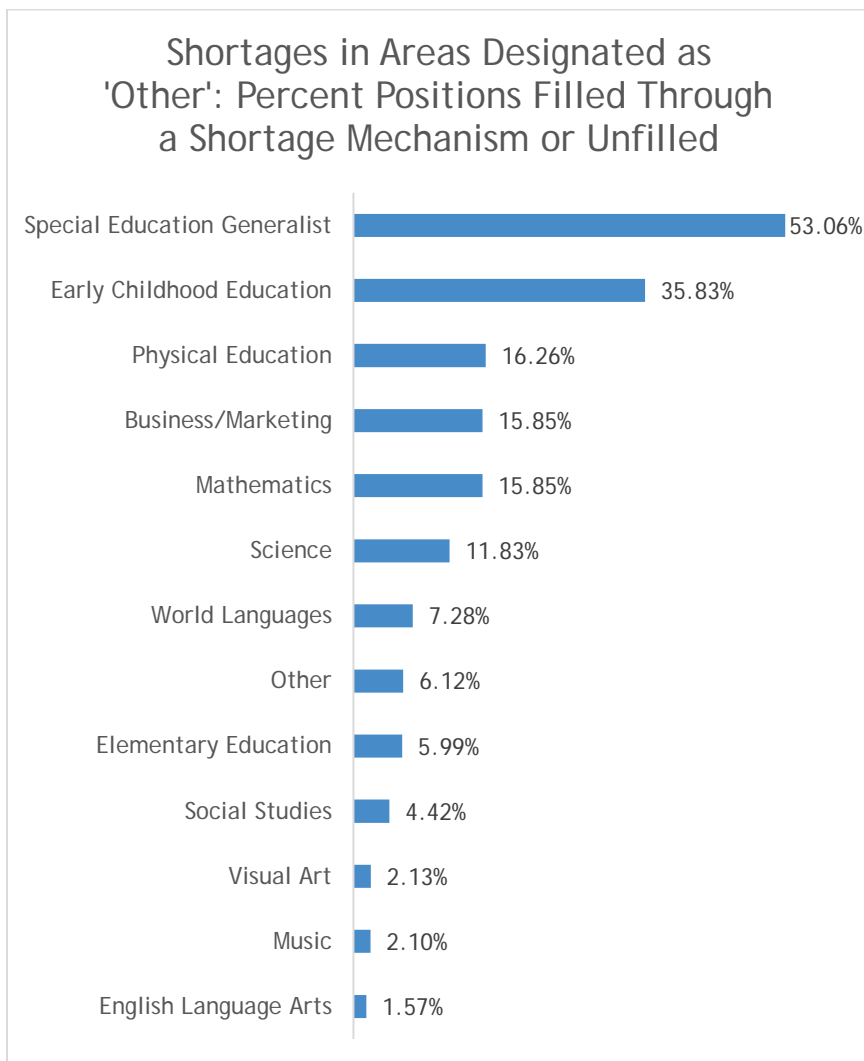
In non-rural districts, early childhood education and business/marketing remain the subjects with the highest percentage of positions unfilled or filled through a shortage mechanism among elementary and secondary subject areas.



For K-12 subject areas in non-rural districts, special education specialist for the visually impaired, special education specialist for the deaf and hard of hearing and health educators had the highest percentages of unfilled positions or positions filled through a shortage mechanism. This is also consistent with the previous two year’s shortage areas in non-rural areas, although the proportions are all higher.

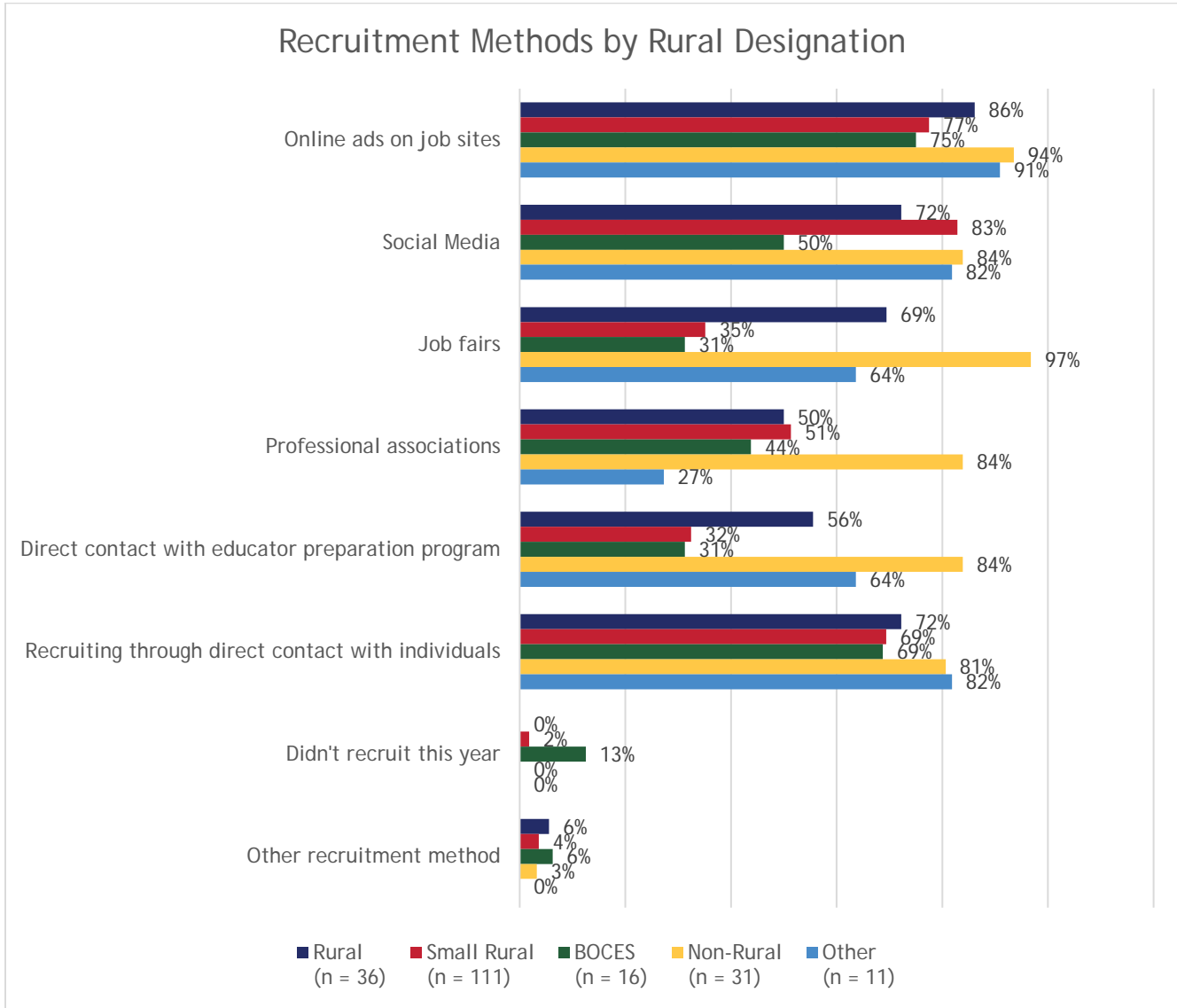


Shortage areas in the 'other' category are reported together due to the smaller number of shortage areas. In the 'other' category, comprised of the Colorado School for the Deaf and Blind, Charter School Institute, Division of Youth Services, and Approved Facility Schools, special education generalists and early childhood educators had the highest percentage of positions unfilled or filled through a shortage mechanism.



Recruitment Methods

Most LEAs reported recruiting through online ads and job sites, followed by job fair recruitment. Very few districts reported that they did not do any type of recruitment. Of those that indicated an alternative to the provided options, most cited word-of-mouth and direct recruitment of retired educators. For more information on recruitment methods, please see [data dashboard here](#).



WHERE CAN I LEARN MORE?

- For additional information about Colorado’s teacher shortage, see the [Educator Shortage](#) website.
- For questions about the survey and/or to provide feedback, contact the Research and Impact Office at EdTalentResearch@cde.state.co.us.
- [View all CDE fact sheets: www.cde.state.co.us/communications/factsheetsandfaqs](http://www.cde.state.co.us/communications/factsheetsandfaqs)