

# Kentucky Public School Employee Staffing Shortages 

Research Report No. 486

Office Of Education Accountability

# Kentucky Legislative Research Commission 

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# Kentucky Public School Employee Staffing Shortages 

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## Foreword

This study examines classified and certified staffing in Kentucky school districts, as well as indicators of classified and certified staffing shortages during recent years and what districts have done to recruit and retain classified and certified staff. In addition, OEA staff reviewed what Kentucky and other states have done to recruit and retain employees and to address possible shortages.

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## Summary

To operate effectively, schools in Kentucky require both certified and classified staff members to contribute to a safe environment where students can learn. Certified staff include teachers, administrators, instructional coaches, and other roles for which the Education Professional Standards Board (EPSB) issues a certificate. Classified staff positions require no certification. They are found in transportation, operations, food service, instruction, and other areas. In March 2023, the Education Assessment and Accountability Review Subcommittee directed the Office of Education Accountability (OEA) to conduct research on classified and certified staffing shortages in Kentucky school districts. This report reviews indicators, causes, effects, and mitigation efforts related to shortages of teachers and classified staff.

Among other questions, the study seeks to understand

- whether teacher shortages have worsened since 2019;
- indicators and causes of staffing shortages;
- issues related to school funding; and
- efforts to mitigate staffing shortages.


## Summary Of Findings

Teacher shortages occur when the supply of available and qualified teachers cannot meet the demand for teachers with specific subject and grade level certifications or when there are fewer high-quality applicants than open positions. Shortages exist for teachers and classified staff throughout the commonwealth. Teacher shortages have long existed in Kentucky, but their magnitude has increased since 2019, the last time OEA studied them. The number of open teaching positions has increased since 2019. Salary has always been a critical consideration for the teacher workforce, and many districts have raised salaries to remain competitive in recent years. Working conditions have long been known to affect teacher recruitment and retention. Post-pandemic, concerns about student behavior and other job-related stress are major factors in increased turnover. In addition, acute classified staffing shortages exist for custodians, bus drivers, food service workers, and substitutes. Over the last 5 years, local boards have increased pay by up to 19 percent; however, classified staff leaving the workforce appear to be earning as much as 115 percent more in the private sector than in their school jobs.

Some districts-especially those with declining enrollments and those affected by the ending of federal Elementary and Secondary School Emergency Relief (ESSER) funding-may face future financial challenges in funding positions. Raising the minimum teacher salary may also be difficult.

## Data

Data used for this report come primarily from the Kentucky Department of Education (KDE), the Kentucky Center for Statistics (KYSTATS), the Council on Postsecondary Education, and OEA surveys and site visits. Staff analyzed KDE data related to open certified staffing positions from the Kentucky Educator Placement Service (KEPS), professional and classified staffing data, teacher certification data collected by EPSB, and Kentucky Impact Working Conditions Survey responses. Staff also analyzed KYSTATS wage data for individuals who left school district employment.

OEA staff conducted site visits in schools and districts throughout the commonwealth. These visits consisted of semi-structured interviews with superintendents and other central office staff, principals, and teachers and were conducted in a range of school levels and geographic regions. The site visits gave insight into the questions that were developed for the surveys OEA sent to superintendents, principals, and teachers and gave OEA staff some qualitative context for this study. OEA sent surveys to all superintendents, all A1 school principals, and a sample of teachers. ${ }^{\text {a b }}$ The surveys covered superintendents' and principals' perceptions of staffing shortages and recruitment and retention of certified and classified staff.

## Teacher Turnover And Shortages

From school year (SY) 2014 to SY 2023, teacher turnover increased at the school, district, and state levels. In SY 2023, 10.9 percent of teachers statewide did not return to teaching in Kentucky; 16.7 percent did not return to teaching in their districts; and 20.0 percent did not return to teaching in their schools. These figures were the highest of the 10 -year observation period. It is more difficult for principals to recruit and retain quality applicants than in 2019.

## Teacher Certification And Pipeline

Most teachers complete traditional teacher preparation programs, but there has been an increase in the number of teachers pursuing alternative routes to certification and receiving emergency certifications.

Traditional Teacher Preparation Programs. The number of teacher preparation program completers has decreased in every subject area. Physics, chemistry, high school math, exceptional children, and world languages-areas where principals reported difficulty finding applicants-were also areas with relatively few teacher preparation program completers.

Alternative Certificates. As of 2023, there are nine alternative certification options in Kentucky. Option 6 was the most common type of alternative certificate, accounting for

[^0]78.7 percent of alternative certificates between school years 2020 and 2023. ${ }^{\mathrm{c}}$ There were nearly twice as many Option 6 alternative certificates in SY $2023(3,101)$ as in SY $2020(1,608)$.

Option 9, the most recently created pathway to an alternative certificate, allows school districts to partner with a college or university to develop a program for teaching candidates to attain an initial teacher certification and a bachelor's degree while working at a school or district in a nonteaching classified position. As of September 20, 2023, there were 20 partnerships between universities and local districts to create approved Option 9 programs.

Emergency Certificates. The number of emergency certificates doubled between school years 2020 and 2023, but they constituted less than 1 percent of certificates in that period.

## Quality And Supply Of Teacher Applicants

Lack of qualified candidates in general and in particular subjects was considered the greatest barrier to teacher recruitment by both principals and superintendents. On the 2023 OEA survey, nearly all superintendents ( 93.5 percent) and most principals ( 75.5 percent) reported that a lack of qualified candidates in general was an extreme or moderate barrier to teacher recruitment, and 75.6 percent of principals reported that a lack of qualified candidates in particular subjects was an extreme or moderate barrier. In 2023, more than 50 percent of principals reported no available applicants or no satisfactory applicants for physics (81.7 percent), chemistry ( 73.6 percent), high school math ( 68.7 percent), world languages ( 58.3 percent), earth science ( 55.8 percent), middle school science ( 55.3 percent), biology ( 53.1 percent), and information technology ( 52.2 percent).

Comparison to answers to the same questions in OEA's 2019 study shows that the percentage of unavailable or unacceptable applicants increased from 2019 to 2023 in every subject area. The greatest increases were biology ( 17.1 percentage points), earth science ( 16.7 percentage points), middle school math ( 16.1 percentage points), and middle school science ( 15.3 percentage points).

In 2023, less than one-third of principals reported generally enough or an abundance of satisfactory applicants in every subject, except for elementary education ( 34.6 percent). Less than 10 percent of principals reported generally enough or an abundance of satisfactory applicants for chemistry, physics, biology, earth science, math, information technology, middle school science, world languages, and middle school math.

The 2019 and 2023 OEA surveys asked principals about teacher applicants compared to the past 5 years. More than 70 percent of principals reported fewer or considerably fewer applicants in 2023 compared to 5 years earlier for all subjects except physical education. More than 90 percent of principals reported fewer or considerably fewer applicants in chemistry ( 97.0 percent), biology ( 94.0 percent), physics ( 92.2 percent), earth science ( 91.7 percent), and high school math ( 91.4 percent).

[^1]The percentage of principals reporting fewer or considerably fewer applicants compared to 5 years earlier increased in every subject area from 2019 to 2023. The greatest increases were in high school social studies ( 40.6 percentage points), high school English ( 37.8 percentage points), and middle school social studies ( 35.7 percentage points).

Open Positions. The Kentucky Educator Placement Service website lists available certified positions in Kentucky schools, including teaching positions. Analysis of KEPS data revealed 277 open teacher positions for the start of SY 2023, an increase of 260 percent over the 77 positions that were posted and remained open at the start of SY 2019; however, it is difficult to use the information on the KEPS website to determine unfilled positions versus open positions. KEPS currently provides no information to explain the process of position postings or the differences between an unfilled position and an open position. OEA makes the following recommendation.

## Recommendation 2.1

## The Kentucky Department of Education should develop a method of determining the number of teacher vacancies at any given time.

## Possible Underlying Causes Of Teacher Shortages

In looking at the causes of teacher shortages, many superintendents and principals cited lower pay, benefits, and quality of life for teachers. Teacher turnover was also linked to working conditions as measured by the Kentucky Impact Survey.

Teacher Salary And Benefits Seen As Insufficient. Over half of principals and approximately three-fourths of superintendents reported that insufficient salary and benefits, compared to the private industry, were a barrier to teacher recruitment and retention.

Teacher Salaries. Between 2014 and 2023, districts increased starting salaries between 3 percent and 22 percent. In 2023, the lowest teacher starting salary in a district was $\$ 34,004$ and the highest was $\$ 45,772$.

Teachers Who Leave Do Not Earn Higher Salaries. Superintendents report that teachers are leaving the teaching profession for better pay, and OEA staff analyzed wage data for individual teachers who left for the private sector. Using data from KYSTATS, OEA found that 65 percent of teachers who left the teaching profession in 2019 were earning approximately $\$ 5,000$ less in the private sector in 2022. ${ }^{\text {d }}$

Lack Of Respect And Student Behavior. On their OEA survey, principals reported that lack of respect for teachers from society ( 45.7 percent), from parents ( 38.1 percent), and from the local community ( 24.4 percent) was as a barrier to teacher recruitment. Student behavior was considered a barrier to teacher recruitment and retention by approximately one-third of principals and one-fourth of superintendents.

[^2]
## Efforts To Reduce Teacher Shortages

There have been many efforts to mitigate teacher shortages at the federal, state, and local levels. These include adding new teacher pathways, developing supports for new teachers, using innovative recruitment strategies, increasing pay for teachers, and providing scholarships for aspiring teachers.

Teacher Recruitment Strategies. Most superintendents reported attending career fairs, working with local universities, and using recruiting platforms such as Indeed, ZipRecruiter, and LinkedIn. In addition, districts used their webpages and social media platforms, and they advertised in local newspapers. Several superintendents reported that their districts" "grow-your-own" strategies are helping. A few districts reported increasing their rank change pay and allowing teachers to change their rank twice per year (October and February) instead of once. Other districts reimburse teachers for tuition and taking the Praxis II exam, offer relocation stipends, and provide signing bonuses. One district offered a $\$ 10,000$ stipend for high school math teachers, and another offered free tuition to children of employees who reside in another district.

Retaining Suboptimal Staff. The OEA survey asked superintendents to estimate how many certified staff members their district retained for SY 2023 who otherwise would have been terminated or nonrenewed in prior years due to poor performance. A total of 79 districts reported retaining such staff, in 307 positions.

Scholarships For Teachers. The Kentucky Higher Education Assistance Authority (KHEAA) wholly or partially administers 16 state-funded teacher grant or scholarship programs and reports annually on teacher scholarships. The programs include:

- Teacher Scholarship Program
- Early Childhood Development Scholarship
- Federal Teacher Education Assistance for College and Higher Education grant program
- Federal Perkins Loan Teacher Cancellation Program

Work Ready Kentucky Scholarship Program. The Work Ready Kentucky Scholarship Program was established by KRS 164.787 and is administered by KHEAA. The scholarship offers Kentucky students free tuition for up to 60 hours of credit toward an associate's degree in Kentucky's high-demand workforce sectors-including health care, advanced manufacturing, transportation/logistics, business services/IT, and construction-for students who do not already have an associate's degree or higher. Despite a teacher shortage, students looking to pursue teaching do not qualify for the Kentucky Work Ready Scholarship Program. OEA makes the following recommendation.

## Recommendation 2.2

The General Assembly may consider including pre-education programs that lead to teacher certification in the eligible programs of study for the Work Ready Kentucky Scholarship Program established in KRS 164.787.

## Classified Staffing Shortages

Classified staff comprise approximately 46 percent of the workforce in local school districts. In Kentucky, classified staff work in positions that do not require a teaching certificate. Some classified staff may be required to hold certain degrees (for example, a school nurse, electrician, or finance officer), while others may not require a high school diploma (such as food service workers, custodians, and school bus monitors). In 2023, the four classified job classifications with the most staff were in the areas of instruction, transportation, food service, and operations. Among classified staff, approximately 30 percent worked in an instructional role, 19 percent were in transportation, 15 percent were in food service staff, and 10 percent were in operations. School districts in Kentucky and around the nation are having difficulty employing certain classified staff. ${ }^{1}$

## Data Related To Classified Staff Shortages

There were fewer classified staff in SY 2023 than in SY 2019. Certain areas experienced more marked declines in staffing than others. Some areas added classified staff.

Fewer Classified Staff In SY 2023 Than In SY 2019. There were 817 fewer classified staff in SY 2023 than in SY 2019. Staffing increased in some classified job classifications and decreased in others. The areas where the number of positions declined include transportation, operations (custodians and groundkeepers), and food service. In SY 2023, there were

- 1,255 fewer transportation staff (a 12.9 percent decrease),
- 356 fewer operations staff (a 7.3 percent decrease),
- 262 fewer food service staff (a 3.7 percent decrease), and
- 100 fewer clerical staff (a 2.4 percent decrease).

Increases In Some Classified Staff Between SY 2019 And SY 2023. Although there were 817 fewer total classified staff in SY 2023 than in SY 2019, some staffing areas showed growth during that period. In SY 2023, there were

- 284 more health staff (a 22.2 percent increase),
- 241 more management staff (a 21.9 percent increase), and
- 191 more instructional staff (a 1.8 percent increase).

Although there was an increase in classified instructional staff, superintendents stated that approximately 800 instructional aide positions were open at the beginning of SY 2023.

Classified Staff Retained Who Would Have Been Terminated In Previous Years. In response to an OEA survey, 70 superintendents stated that shortages led them to retain classified staff who in previous years would have been terminated due to poor performance.

## Issues Affecting Classified Staff Shortages

One reason districts have trouble hiring and retaining classified staff is that some of the jobs require less than 8 hours per day and are needed only when school is in session. Superintendents also cited pay, geography, and qualifications as barriers to recruitment and retention.

Salaries For Classified Staff Members. On the OEA survey, most superintendents reported that salaries that are insufficient compared to those in private industry make it difficult to recruit and retain classified staff. From SY 2019 to SY 2023, average salaries for classified staff increased 12 percent to 18 percent depending on the job classification. Using data from KYSTATS, OEA examined the 2022 wages of classified employees who left their school district employment in 2021. OEA compared that to average wages for classified staff in 2022 and found that wages for those who left were

- 115 percent higher for transportation workers,
- 96 percent higher for food service workers,
- 31 percent higher for secretarial/clerical workers, and
- 30 percent higher for operations workers.

Geographic Differences. Of the superintendents who responded to the OEA survey, the percentage reporting geographic location as a barrier to recruiting classified staff was more than 30 percentage points higher in rural districts than in metropolitan districts. ${ }^{\mathrm{e}}$ In 2023, classified staff earned approximately $\$ 9,000$ less in rural districts than in metropolitan districts. ${ }^{2}$

Districts Outsourcing Classified Jobs. In 2023, to help alleviate staffing shortages, 29 districts outsourced some or all of their custodial staff. Some districts also outsourced mechanics and bus monitors. This may not be a successful long-term solution, as some superintendents who had previously outsourced staff stated that it did not help.

Qualifications Of Instructional Aides. According to the Every Student Succeeds Act, any instructional aide without an associate's degree or higher who works in a Title I school must have a high school diploma or a GED and pass an exam that demonstrates competency. ${ }^{\mathrm{f}}$ Because of this federal requirement, KDE requires instructional assistants in Title I schools to pass the Kentucky Paraeducator Assessment (KPA) if they do not have an associate's degree or 2 years of study at an institution of higher education. Federal law allows for an alternative form of assessment or demonstration of knowledge, which would help, but KDE accepts only the KPA. Superintendents have noted the KPA as a barrier to recruiting instructional aides. Because of this and other issues related to regulations, OEA makes the following recommendation.

## Recommendation 3.3

The Kentucky Board of Education should promulgate administrative regulations that govern the qualifications and minimum requirements of instructional aides in accordance with KRS 161.044, which refers to them as teachers' aides. Kentucky Department of Education staff should also evaluate other assessment options for instructional aides in Title 1 schools, in addition to the Kentucky Paraeducator Assessment.

[^3]
## Other Issues Impacting Staffing

In addition to staffing shortages, some local school districts are also experiencing a loss in funding from the Support Education Excellence in Kentucky (SEEK) program and the federal Elementary and Secondary School Emergency Relief funds.

## Federal Funding

All districts must spend ESSER funds by September 30, 2024. According to interviews and the superintendent survey, superintendents and local boards are currently budgeting for the loss of the boost in revenues that they experienced with ESSER.

ESSER Positions. Approximately 2,379 certified staffing positions and 1,511 classified positions were funded using ESSER funds during SY 2023. Only half of these positions were newly created. On the OEA survey, superintendents stated that they were keeping only 20 percent of all newly created certified and classified positions when federal funding lapses.

## State Funding

Kentucky schools get most of their funding through the SEEK formula. Many school districts will see a decline in SEEK revenues due to declines in their adjusted average daily attendance (AADA). AADA is affected by school enrollment and the attendance of pupils. School districts have seen a decrease in attendance rates and an increase in chronic absenteeism since 2020. Superintendents reported the following potential mitigation strategies to cope with the loss of SEEK money:

- Cutting staff
- Reducing spending
- Using contingency funds
- Using ESSER funds
- Raising taxes
- Not raising salaries

Loss Of Average Daily Attendance. Due to the pandemic and related issues, districts were not required to track average daily attendance for students in school years 2021 and 2022. Districts were required to calculate average daily attendance in SY 2023 to provide accurate attendance data for calculating 2024 SEEK funding. In 2022, the AADA used to calculate SEEK was 609,855 . In 2023, the AADA of Kentucky schools was 582,472 , a decline of approximately 27,000.

Chronic Absenteeism. A student who misses more than 10 percent of class days is termed chronically absent. Only one district had a lower chronic absenteeism rate in 2022 than in 2018. In another district, chronic absenteeism increased by 31 percentage points.

Attendance Rate. All 171 Kentucky school districts saw declines in their attendance rates in 2023 compared to 2019. Almost half ( 85 of 171) of Kentucky school districts had a decline in attendance rates of more than 2 percentage points.

Instructional Funds Allocated To School Councils. 702 KAR 3:246, sec. 6 requires that school councils receive a minimum allocation of 3.5 percent of the statewide guaranteed base funding level for SEEK based on prior year final average daily attendance from their districts for instructional purposes. These are known as Section 6 funds. The General Assembly has allowed districts to deviate from fully funding Section 6 allocations since the passage of the 2010 executive branch budget (HB 290) and changed the minimum to $\$ 100$ per pupil in average daily attendance. This language has allowed schools to receive a smaller allocation of Section 6 funds since 2010. Most superintendents stated their districts were giving schools $\$ 100$ per student, compared to 22 percent of districts that gave the 3.5 percent that is codified in 702 KAR 3:246, sec. 6. If districts were required to allocate the full amount of Section 6 funding to schools, the quality of resources could improve, which could prevent teachers from having to spend their own money on classroom supplies. OEA makes the following recommendation.

## Recommendation 3.4

The General Assembly may consider discontinuing budget language that allows school district to provide school-based decision-making councils less than the $31 / 2$ percent of the SEEK guaranteed base amount for funds described in 702 KAR 3:246, section 6.

## Superintendents' Recommendations

This report concludes with a review of superintendents' recommendations for mitigating staffing shortages and innovative strategies adopted in Kentucky and other states for addressing staffing shortages.

## OEA Recommendations Regarding Data

OEA made several recommendations regarding data collection and reporting to monitor staffing shortages.

Kentucky Impact Working Conditions Survey. Although the response rate for OEA's teacher survey was not high enough to support reliable conclusions, more than 75 percent of all teachers responded to the 2022 Kentucky Impact Working Conditions Survey. The Kentucky Impact Working Conditions Survey originated as the Teaching, Empowering, Leading and Learning (TELL) survey, which included questions that addressed teachers' intention to stay in the teaching profession. Because some insightful and important questions from the TELL survey were omitted from the Kentucky Impact Working Conditions Survey, OEA makes the following recommendation.

## Recommendation 1.1

When developing the Impact Kentucky Working Conditions Survey questions, Kentucky Department of Education staff may consider including discontinued survey questions from the 2017 Teaching, Empowering, Leading and Learning survey.

KRS 161.028. KRS 161.028(1)(i) and (j) require EPSB to recommend to the Kentucky Board of Education the essential data elements relating to teacher preparation and certification, teacher supply and demand, teacher attrition, teacher diversity, and employment trends in a state comprehensive data and information system and to periodically report data to the Interim Joint Committee on Education. It also requires EPSB to submit reports to the governor and the Legislative Research Commission and to inform the public on the status of teaching in Kentucky. EPSB has not submitted any of these reports; however, KDE produces the annual school report card, which includes some teacher workforce data. In addition, KYSTATS, an executive branch agency, produces the annual Kentucky Teacher Workforce Pipeline report. OEA makes the following recommendation.

## Recommendation 1.2

Because the Education Professional Standards Board (EPSB) has not submitted any reports required by KRS 161.028 (1)(i) and (j), the General Assembly may consider amending KRS 161.028 to require EPSB to submit reports to the Interim Joint Committee on Education and the Legislative Research Commission within a specific time frame. In addition, the General Assembly may specify data elements the reports should include.

Job Descriptions And Data Related to Classified Staff. KRS 161.011(2) required the commissioner of education to establish job classifications and minimum qualifications for district classified positions by January 1992. Most job descriptions for classified staff were established more than 30 years ago and have not been updated. Districts submit employment data, professional staffing data, and classified staffing data to KDE by October 1 each year on the total number of full-time equivalent positions in each job classification. KDE then reports this data to the US Department of Education (ED) as part of its EdFacts data submission. After reviewing classified job descriptions and the EdFacts submission document on staffing specifications, OEA staff have concerns on how KDE is reporting staff to ED. OEA makes the following two recommendations.

## Recommendation 3.1

The Kentucky Department of Education should review and revise classified job descriptions established under KRS 161.011(2) to ensure they align with the duties and qualifications of current classified staff.

## Recommendation 3.2

The Kentucky Department of Education (KDE) should work with school districts to collect data on districts' contract staff annually. For the EdFacts data submission that is required by the US Department of Education, KDE should ensure it is complying with the EdFacts data standards. These standards include submitting the number of districts' full-time equivalent contract staff and the correct job classifications for district staff.

## Chapter 1

# Public Education Staffing Shortages 

## Introduction And Overview

Teacher shortages occur when the supply of available and qualified teachers cannot meet the demand for teachers with specific subject and grade level certifications or when there are fewer high-quality applicants than open positions.

Physics, chemistry, high school math, world languages, biology, and English as a second language (ESL) have severe shortages. The percentage of alternative and emergency certificates remains low. Causes of shortages include fewer teacher preparation program completers and characteristics of schools with high teacher turnover.

Teacher shortages occur when the supply of available and qualified teachers cannot meet the demand for teachers with specific subject and grade level certifications or when there are fewer high-quality applicants than open positions. ${ }^{a}$ Teacher shortages have been occurring in Kentucky for some time, and shortages in classified staffing have also become a concern.

This report reviews indicators of teacher shortages and concludes that some subject areas have severe shortages, including physics, chemistry, high school math, world languages, biology, and English as a second language (ESL). This report also analyzes alternative and emergency certificates and finds that although the numbers have increased, alternative certificates and emergency certificates as a percentage of total certificates remain low. Causes of teacher shortages include fewer completers of teacher preparation programs, particularly in severe shortage areas, and characteristics of schools with high teacher turnover that affect working conditions.

As a result of teacher shortages, districts retain staff who otherwise would have been terminated or nonrenewed, and they rely on substitute teachers. Efforts to mitigate teacher shortages include creative hiring strategies and mentoring current teachers. Many principals, however, reported that their strategies could not overcome teacher shortages or compete with the private sector. Districts are also beginning to explore Option 9 programs.

School districts in Kentucky and the nation are having difficulty employing certain classified staff. Even though a large number of districts have raised the salaries for classified staff, districts struggle to retain and hire classified staff. All classified staff members are crucial in the education of students, but some roles are more directly tied to student instruction. This report reviews shortages in classified staff in the areas of transportation, operations, food service, instructional, and other. Issues related to district funding are also reviewed.

[^4]
## Description Of This Study

In March 2023, the Education Assessment and Accountability Review Subcommittee directed the Office of Education Accountability (OEA) to conduct research on classified and certified staffing shortages in Kentucky school districts. The study agenda directed OEA to examine

- various indicators of classified and certified staffing shortages during recent years and what districts have done historically to recruit and retain classified and certified staff, and
- what Kentucky and other states have done to recruit and retain employees and address possible shortages in developing career pathways.


## Organization Of The Report

Chapter 1. Chapter 1 introduces the study agenda and data used for the report. Major conclusions are also summarized. The chapter concludes with a review of Kentucky teacher certifications.

Chapter 2. Chapter 2 reviews teacher shortage indicators, causes, effects, and mitigation efforts. Indicators include teacher turnover, quality and supply of teacher applicants, unfilled positions, emergency and alternative certified teachers, out-of-field teachers, and National Board Certified teachers. Causes of teacher shortages include teacher preparation program completers and characteristics of schools with high teacher turnover. Effects of teacher shortages include retention of suboptimal staff and reliance on substitute teachers. District and school efforts to mitigate teacher shortages are also reviewed. This chapter presents additional considerations, such as barriers to recruiting and retaining teachers, support from school leadership, students who return to work in education, and financial support for future teachers.

Chapter 3. Chapter 3 reviews classified job descriptions and classified shortages by job description, including transportation, operations, food service, instructional, and other classified staff. Recruitment, retention, and salaries of classified staff are included. This chapter also reviews superintendents' reports of staff who were retained but would have been terminated in previous years, as well as other issues related to districts and district funding.

Chapter 4. Chapter 4 reviews what districts in Kentucky and other states are doing to combat staffing shortages.

Chapter 4 reviews what other states are doing to combat teacher shortages.

Chapter 3 reviews classified positions, including job descriptions, shortages, recruitment, retention, and salaries. It also presents issues related to districts and funding.

## Data Used For This Study

Data for this study was provided by the Kentucky Department of Education (KDE) the Kentucky Center for Statistics (KYSTATS), the Council on Postsecondary Education, and OEA surveys of superintendents and principals.

This report refers to school years by the year in which they end.

The OEA superintendent survey was sent to 171 superintendents and the response rate was 92 percent. The OEA principal survey was sent to approximately $\mathbf{1 , 1 5 1}$ principals and the response rate was 50 percent, representing 84.8 percent of districts.

Data for this study was provided by the Kentucky Department of Education (KDE), the Kentucky Center for Statistics (KYSTATS), the Council on Postsecondary Education (CPE), and OEA surveys of superintendents and principals regarding classified and certified staff shortages. Appendix A shows the surveys. KDE data include

- professional and classified staffing data;
- teacher certification information, including type, subject, and level;
- certificates issued by the Education Professional Standards Board (EPSB);
- unfilled positions from the Kentucky Educator Placement Service (KEPS); and
- Impact KY Working Conditions Survey responses.

KYSTATS provided workforce status and industry employment of certified and classified staff for fiscal years 2009 to 2022 and provided data on Kentucky graduates who later worked as certified or classified staff in Kentucky schools. Data from CPE included candidates in teacher preparation programs. See Appendix B for data notes.

This report refers to school years by the year in which they end. For example, the 2022-2023 school year is called school year 2023, or SY 2023.

2023 OEA Surveys. The OEA Superintendent Survey was sent to 171 superintendents; the response rate was 92 percent. The OEA Principal Survey was sent to approximately 1,150 principals; the response rate was 50 percent, representing 84.8 percent of districts. ${ }^{\text {b }}$ These surveys are a main source of data for this report and include superintendents' and principals' perceptions of staffing shortages and recruitment and retention of certified and classified staff.

OEA conducted a similar principal survey for the 2019 report Teacher Shortages And Supports For New Teachers. Many of the questions on the 2019 and 2023 survey were the same, and responses from both years are compared in Chapter 2.

OEA conducted a teacher survey of approximately 800 teachers; the response rate was approximately 33 percent. Because the

[^5]The 2022 Impact KY Working Conditions Survey lets educators provide anonymous input. Its response rate was 76 percent, representing 38,194 education professionals.

The Impact Survey is the only tool capturing the experience of being a teacher in Kentucky.

A previous Kentucky survey on teachers' working conditions was the Teaching, Empowering, Leading and Learning survey, which contained many insightful items not included in the Impact Survey but of interest to the General Assembly and the public.
response rate was low and the sample small, results are discussed only in Appendix C.

In developing the surveys, OEA staff conducted site visits in 12 schools within 6 districts throughout the commonwealth. Sites were selected on the basis of shifts in classified staffing and teacher turnover. The site visits consisted of semi-structured interviews with superintendents and other central office staff, principals, and teachers and were conducted in a range of school levels and geographic regions. The site visits gave insight into the questions that were developed for the surveys and gave OEA staff some qualitative context for this study.

2022 Impact KY Working Conditions Survey. The 2022 Impact
KY Working Conditions Survey allows anonymous input on teaching conditions in Kentucky from educators including principals, assistant principals, teachers, and other professionals such as school counselors. The most recent Impact Survey was conducted in 2022. It had a 76 percent response rate, representing 38,194 education professionals in Kentucky. Additional information on the Impact Survey appears in Appendix D. ${ }^{\text {c }}$

Because KDE can survey nearly every teacher in Kentucky and receive a high response rate, the Impact Survey is currently the only tool available that captures the experience of being a teacher in Kentucky.

A previous Kentucky survey on teachers' working conditions was the Teaching, Empowering, Leading and Learning (TELL) Survey, which was analyzed in OEA's 2019 report on teacher shortages. The TELL Survey was last administered in 2017; the Impact Survey replaced it in 2020. The TELL Survey contained many insightful items that are not included in the Impact Survey, listed in Appendix E. Some of the questions from the TELL survey that were not included in the Impact Survey would be of interest to the General Assembly and the public. Discontinued items include:

- How much time each week is devoted to addressing student discipline issues?
- Does school administration consistently enforce rules for student conduct?
- Do parents/guardians support teachers, contributing to their success with students?

[^6]- Do community members support teachers, contributing to their success with students?
- Which of the following best describes your immediate professional plans? ${ }^{\text {d }}$
- Which aspects of your teaching conditions most affect your willingness to keep teaching at your school? e

In addition, responses from the Impact Survey can be compared to understand teachers' experience. For example, in the 2019 report, OEA staff was able to examine individual answers and discovered that teachers who planned to continue teaching at their current school in the next year were nearly twice as likely to report that their school was a good place to work and learn ( 89.9 percent) than teachers who planned to teach at a different school or district in the next year (45.1 percent).

KRS 161.028(1)(i) and (j) require
the Education Professional
Standards Board (EPSB) to recommend to the Kentucky Board of Education essential data elements and to report those data to entities including the Legislative Research Commission. No such reports have been submitted. KDE produces the annual school report card, and KYSTATS produces the annual Kentucky Teacher Workforce Pipeline report.

KRS 161.028. KRS 161.028(1)(i) and (j) require the Education Professional Standards Board to recommend to the Kentucky Board of Education the essential data elements relating to teacher preparation and certification, teacher supply and demand, teacher attrition, teacher diversity, and employment trends in a state comprehensive data and information system; EPSB must also periodically report data to the Interim Joint Committee on Education (IJCE). Statute also requires EPSB to submit reports to the governor and the Legislative Research Commission (LRC) and to inform the public on the status of teaching in Kentucky. ${ }^{\text {f }}$

OEA staff requested any teacher shortage reports that were submitted to IJCE or LRC, but none have been submitted as required by KRS $161.028(1)(\mathrm{i})$ and (j). However, KDE produces an annual online school report card that includes some data on teacher qualifications, turnover, working conditions, and emergency and provisional teacher certifications. In addition, KYSTATS, an executive branch agency, produces the annual Kentucky Teacher Workforce Pipeline report, which includes data on numbers of teachers, average teacher salary, average teacher turnover, and demographics of teachers by district. ${ }^{3}$ Based on these findings, the OEA makes the following recommendations.

[^7]
## Recommendation 1.1

When developing the Impact Kentucky Working Conditions Survey questions, Kentucky Department of Education staff may consider including discontinued survey questions from the 2017 Teaching, Empowering, Leading and Learning survey.

## Recommendation 1.2

Because the Education Professional Standards Board (EPSB) has not submitted any reports required by KRS 161.028(1)(i) and (j), the General Assembly may consider amending KRS 161.028 to require EPSB to submit reports to the Interim Joint Committee on Education and the Legislative Research Commission within a specific time frame. In addition, the General Assembly may specify data elements the reports should include.

## Major Conclusions

Shortages have long existed in particular subject areas and types of schools, but the magnitude increased in 2023, reaching the majority of schools and subjects. In almost every subject, at least two-thirds of principals reported a lack of satisfactory applicants for open positions. Shortages were especially pronounced in physics, chemistry, high school math, world languages, biology, ESL, and exceptional children. These are also areas where principals reported fewer applicants than in the past, and there were fewer teacher preparation program completers in these areas. There were 76 world language teacher preparation program completers and 54 ESL teacher preparation program completers between school years 2018 and 2022. World languages and math also have some of the lowest pass rates on the Praxis II exam, which is required for teacher certification. A disproportionately high percentage of ESL certificates are emergency certificates and alternative certificates. With the recent increase in immigration to the United States, universities will need to work harder in recruiting students in these subjects. ${ }^{g}$

Unfilled teacher positions have increased by 260 percent since 2019. ${ }^{\text {h }}$

[^8]The number of emergency certificates has more than doubled over the last 3 years.

To cover unfilled positions, principals used several strategies. Superintendents retained certified staff who normally would not have been renewed.

Schools with high teacher turnover share similar characteristics. There are large gaps between principals' and teachers' perceptions of teacher working conditions.

Many districts have raised salaries, but some schools remain less competitive. Working conditions, student behavior, and job-related stress influence teacher turnover. Most teachers who left in 2019 had lower-paying jobs 3 years later.

There are acute classified staffing shortages despite increased pay. Classified staff leaving the public education workforce earn as much as 115 percent more in the private sector.

Over the last 3 years, the number of emergency certificates has more than doubled, but they make up only 0.7 percent of all certificates.

In 2023, almost half of principals and superintendents reported regular use of long-term substitute teachers to cover unfilled positions. Principals also reported using regular substitutes, having teachers teach during their planning periods, combining classes, increasing class sizes, and eliminating classes. Nearly half of superintendents reported retaining certified staff who normally would not have been renewed.

Schools with high teacher turnover rates share characteristics such as higher percentages of new teachers, free or reduced-price lunch students, and minority students. Support from school leadership may be important to teachers' willingness to continue teaching at their school; in schools with higher teacher turnover, however, there are large gaps between principals' and teachers' perceptions of the teaching profession, the working environment, student behavior, and support from school administration.

Salary has always been a critical teacher workforce consideration, and many districts have raised salaries to remain competitive in recent years. Even so, competing may remain difficult for some schools, especially hard-to-staff schools (low-performing or geographically isolated) or those in close proximity to very high paying districts. Working conditions have long been known to affect teacher recruitment and retention. Post-pandemic, concerns about student behavior and other job-related stress are major factors in increased turnover. Teachers have been leaving the workforce, even without the promise of a higher-paying job. Most teachers who left in 2019 were employed at lower-paying jobs 3 years later.

In addition, acute classified staffing shortages exist for custodians, bus drivers, food service workers, and substitutes. Over the last 5 years, local boards have increased pay by up to 19 percent. However, classified staff leaving the public education workforce appear to be making much more in the private sector, as much as 115 percent beyond their school pay. Contract staff are being used to mitigate classified staffing issues in some districts; however, outsourcing these positions may pose other issues.

[^9]Declining enrollments and Elementary and Secondary School Emergency Relief funding of positions may create financial challenges. Only one district met the minimum teacher starting salary of $\$ 45,000$ recommended by the Kentucky Association of School Administrators.

Teaching certificates are issued through EPSB, which prepares and certifies educators and establishes standards and requirements for teacher preparation programs.

Future financial challenges in funding positions may occur in some districts, especially because of declining enrollments and the ending of federal Elementary and Secondary School Emergency Relief (ESSER) funding. In addition, the Kentucky Association of School Administrators has called on the General Assembly to raise teacher starting salary to at least $\$ 45,000$ per year. In 2023, only one district met that starting salary. If the recommendation were implemented, one district would need to raise beginning salaries by $\$ 11,000$.

## Routes To Teaching Certificates

Teaching certificates are issued through the Education Professional Standards Board. Table 1.1 shows types of certificates available in Kentucky. EPSB prepares and certifies educators and establishes standards and requirements for teacher preparation programs.

Table 1.1
Types Of Teaching Certificates Issued In Kentucky School Year 2023

| Certificate | Description | Statute/Regulation |
| :---: | :---: | :---: |
| Alternative | Nine routes to certification available to distinguished and skilled persons. | 16 KAR 2:010 |
| Conditional | Issued to a teaching applicant who has completed a teacher preparation program but failed certification assessment(s) for up to 1 year. | KRS 161.030(3)(b), 16 KAR 2:010 |
| Emergency | Issued for 1 year with one renewal under certain circumstances. Requires at least a bachelor's degree. District must demonstrate inability to hire qualified teacher. | 16 KAR 2:010, <br> 16 KAR 2:120 |
| Emeritus | Issued for retired teachers for 10 years with one renewal. | KRS 161.030, 16 KAR 2:220 |
| Endorsement | Additional certification to teach specific subjects or grades. | 16 KAR 2:010 |
| Exception | Reissues previously held expired teaching certification, unless the original certificate expired from failure to complete a teacher preparation program. | KRS 161.030, 16 KAR 2.230 |
| Limited | A 1-year certificate with renewal up to 3 years. |  |
| Probationary | Permits out-of-field teaching while teacher pursues certification in a subject area or grade. | 16 KAR 2:010 |
| Professional | Earned by completing a traditional certification program, usually as part of a 4-year bachelor's degree program. Initial certificates are issued for 4 or 5 years with 5-year renewals. | 16 KAR 2:010 |
| Proficiency | Issued when a teacher preparation program recommends a candidate who can demonstrate proficiency in an area. Renewed yearly. | 16 KAR 2:010 |
| Provisional | Permits teaching while candidates complete requirements such as coursework, Kentucky Teacher Internship Program, and licensure exams. | 16 KAR 2:010 |
| Substitute | Renewable 5-year certificate for teachers currently or previously holding a Kentucky teaching certificate. | 16 KAR 2:010, <br> 16 KAR 2:030 |
| Temporary | Issued for up to 6 months for out-of-state teachers who have not yet completed Kentucky teaching assessments. | KRS 161.030, 16 KAR 2:010 |
| Vocational | Professional teaching certificate attained through nontraditional routes for occupation-base career and technical teachers, issued for 5 years with renewals. Candidates are first issued a 1-year provisional certificate with optional renewals. | $\begin{aligned} & 16 \text { KAR 2:010, } \\ & 16 \text { KAR 2:020 } \end{aligned}$ |

Sources: Staff compilation of Kentucky Revised Statutes, Kentucky Administrative Regulations, and Education Professional Standards Board Certificate Reference Guide.

Kentucky teaching candidates traditionally complete an approved teacher preparation program, usually part of a 4-year bachelor's degree program, including coursework, teaching experiences, and certification exams.

In August 2018, the administrative functions of EPSB were transferred to the newly created Office of Educator License and Effectiveness under KDE. The reorganization was intended to improve educator preparation, certification, and discipline.

Professional Certification. In Kentucky, teaching candidates traditionally complete an approved teacher preparation program to become teachers, usually part of a 4 -year bachelor's degree program. Candidates complete coursework related to their subject of certification and classroom teaching experiences during the teacher preparation program, then pass required certification exams for each area of certification. Previously, teaching candidates were required to complete the Kentucky Teacher Internship Program (KTIP) within their first year of teaching. In 2018, the executive branch budget (House Bill 200) did not fund KTIP notwithstanding KRS 161.030, which had the effect of suspending KTIP. Subsequent budget bills also did not include funding for KTIP. As a result, teachers attaining certification through the traditional and alternative routes who have met all other requirements of KRS 161.030 are now issued a 5-year professional teaching certificate.

Emergency Certification. 16 KAR 2:120 establishes the qualifications and procedures for emergency certification. Emergency certificates are issued for less than 1 year and may be issued in a subsequent year if the initial emergency certificate was issued after February 15 or was issued for less than 50 percent of the holder's class schedule. Teacher candidates must have a bachelor's degree, substitute teacher candidates must have at least 64 credit hours, and career and technical education teacher candidates must have at least 4 years of related occupational experience. Emergency certificates cannot be issued to teach exceptional children with communication disorders. Several criteria must be met before school districts may apply for an emergency certified teacher:

- There were no qualified teacher applicants and no available qualified teachers.
- Diligent efforts were made to recruit a qualified teacher.
- A qualified teacher could not be recruited from teacher preparation programs.
- The most suitable applicants shall be chosen.
- A criminal records check must be conducted.

Nine alternative routes to teacher certification are available to distinguished professionals with valuable work and educational experience.

Alternative Certification. The General Assembly recognized that the education system could benefit from alternative routes to teaching certification for distinguished professionals with valuable work and educational experiences. KRS 161.048 establishes nine alternative routes to certification, described in Table 1.2. Approved candidates receive a provisional certification and must fulfill other requirements to earn a professional teaching certificate. In 2023, the General Assembly passed legislation (Senate Bill 49) that allowed up to four renewals of the temporary provisional certificate obtained through Option 6 and Option 7 alternative certification programs.

## Table 1.2

Alternative Routes To Teacher Certification

## School Year 2023

| Option | Description |
| :---: | :---: |
| Option 1, Exceptional Work Experience | Certification for a person with exceptional work experience and a bachelor's degree or graduate degree. Provisional certification for 1 year. |
| Option 2, Local District Training | Certification through a local school district training program as an alternative to the college teacher preparation program; requires a bachelor's degree or graduate degree. Provisional certification for 1 year. |
| Option 3, College Faculty | Certification of a professional from a postsecondary institution; requires a master's degree or doctoral degree in the subject area of certificate and a minimum of 5 years of full-time teaching in the content area in a higher education institution. Provisional certification for 1 year. |
| Option 4, Adjunct Instructor | Certification of an adjunct instruction in specialty areas to teach part-time. |
| Option 5, Veterans of the Armed Forces | Certification of a veteran of the Armed Forces; requires a bachelor's degree or graduate degree related to the content area of certification; 5-year statement of eligibility, 1-year provisional certification. |
| Option 6, University Based | University alternative program concurrent with teacher employment. Provisional certification for 1 year, renewable for 4 years. |
| Option 7, University Institute | Certification of a person in a field other than education, not limited to shortage areas; requires a bachelor's degree in the area of certification or a graduate degree in a related field. Provisional certification for 1 year, renewable for 4 years. |
| Option 8, Teach for America | Certificate of a Teach for America participant; requires a bachelor's degree. Provisional certification for 1 year, renewable twice. |
| Option 9, Expedited | Expedited certification through a cooperative program between a school district and a college or university. |

Source: KRS 161.048.

Under Option 9, a district and a college or university develop a program for certification and a bachelor's degree in 3 years while candidates work in a nonteaching, classified position.

Option 9, Expedited Certification. During the 2022 Regular Session, the General Assembly passed HB 277 and amended KRS 161.048 to create Option 9-an expedited certification pathway. In Option 9 pathways, a school district partners with a college or university to develop a program for teaching candidates to attain an initial teacher certification and a bachelor's degree in 3 years while working at a school district in a nonteaching, classified position. ${ }^{4}$ As of the writing of this report, there are 20 partnerships between universities and local

Substitute teacher certification is possible for applicants holding a statement of eligibility for a Kentucky teaching certificate or previously holding a traditional Kentucky teaching certificate.

Endorsements are held in addition to teaching certificates and allow teachers to teach additional subjects or grade levels.

Career and technical education (CTE) certificates are based on occupational experience. Initial certification does not require a bachelor's degree. This report does not cover CTE certification. More information can be found in OEA's 2019 report Teacher Shortages And Supports For New Teachers.
districts to create approved Option 9 programs. Because this pathway was recently introduced, there are no Option 9 certificates as of the writing of this report. Current Option 9 programs are discussed later in this chapter.

Substitute Teacher Certification. 16 KAR 002:030 establishes a Certificate for Substitute Teaching (the priority selection process for employing a substitute teacher) and the Emergency Noncertified School Personnel Program. Applicants must hold a statement of eligibility for a Kentucky teaching certificate or have previously held a Kentucky teaching certificate through a 4-year program with a bachelor's degree. Initial substitute certification is for 5 years and may be renewed upon the superintendent's recommendation. A substitute certificate is not intended for continuous part-time employment for classroom teaching or as a permanent replacement for a teacher of record. Substitute teachers holding an appropriate regular certification corresponding to the grade level of the position are prioritized.

Endorsements. Kentucky teachers can become certified in additional subject areas after initial certification. Endorsements are held in addition to certificates and allow teachers to teach a particular subject or grade level. Teachers may be eligible for an endorsement if they hold a teaching certificate or complete additional coursework and successfully complete any applicable assessments.

Career And Technical Education Certification. Career and technical education (CTE) offers students career exploration and preparation through both technical and academic instruction. In Kentucky, CTE is offered through comprehensive high schools, state-operated area technology centers, and locally operated career and technology centers. EPSB certifies career and technical education teachers based on occupational experience, and initial certification does not require a bachelor's degree. This report does not cover CTE certification and teachers. More information can be found in OEA's 2019 report Teacher Shortages And Supports For New Teachers. ${ }^{5}$

## Chapter 2

## Teacher Shortages: <br> Indicators, Effects, Causes, And Mitigation Efforts

Teacher shortages occur when the supply of available and qualified teachers cannot meet the demand for teachers with specific subject and grade level certifications or when there are fewer high-quality applicants than open positions.

Teacher shortages occur when the supply of available and qualified teachers cannot meet the demand for teachers with specific subject and grade level certifications or when there are fewer high-quality applicants than open positions. This chapter reviews teacher shortage indicators, causes, effects, and mitigation efforts. Additional considerations are also included.

## Indicators Of Teacher Shortages

Indicators of teacher shortages include teacher turnover, teachers leaving the teaching profession, the quality and supply of teacher applicants, unfilled positions, emergency and alternatively certified teachers, and federal critical shortage areas.

## Teacher Turnover

Figure 2.A shows average annual turnover by school, district, and state. ${ }^{\text {a }}$ Turnover tends to decrease as the geographic area of reference expands because teachers may move among schools within a district or the state. In general, teacher turnover remained steady between SY 2014 and SY 2022, with an uptick in SY 2023.

State-Level Teacher Turnover. On average, 9.1 percent of teachers did not return to teach in Kentucky between school years 2014 and 2023, ranging from 8.1 percent in 2021 to 10.9 percent in 2023.

District-Level Teacher Turnover. On average, 13.4 percent of teachers did not return to teach in their district between school years 2014 and 2023, ranging from 11.8 percent in SY 2021 to 16.7 percent in SY 2023. Average turnover tended to be slightly higher in metropolitan districts and districts that border other states, and it was lower in rural districts.

School-Level Turnover. On average, 16.4 percent of teachers did not return to teach in their schools between school years 2014 and

[^10]2023, ranging from 14.4 percent in 2021 to 20.0 percent in 2023. Turnover tended to be higher in middle schools and lowest in elementary schools

Figure 2.A
Average Annual Teacher Turnover, By Geographic Area School Years 2014 to 2023


Note: Percentages may not match those presented in OEA's District Data Profiles, which use a weighted average. Source: Staff analysis of data from the Kentucky Department of Education.

## Teachers Who Left Teaching In Kentucky

This section examines teachers who left teaching in Kentucky for at least 1 year, including teachers who later returned to teach in Kentucky and teachers who never returned to teach in Kentucky.

Teachers tend to leave teaching for at least 1 year at higher rates in their first few years of teaching and at the highest rates after teaching for 25 years and entering retirement eligibility.

Teaching Experience. By experience, teachers tend to leave at higher rates in their first few years of teaching, and at the highest rates after teaching for 25 years and entering retirement eligibility. ${ }^{\text {b }}$

[^11]On average, 7.2 percent of teachers left the teaching profession for at least 1 year between 2010 and 2015, of whom 29.3 percent eventually returned to teach. Of those who returned, most ( 71.1 percent) returned after 3 or fewer years. New teachers return at slightly higher rates ( 36.7 percent). Few teachers who retire return to teaching ( 5.8 percent).

Teachers Who Return To Teach. Teachers who left the teaching profession between 2010 and 2015 were examined. These years were chosen to allow time for teachers to return to teaching and appear in the data. On average, 7.2 percent of teachers left the teaching profession for at least 1 year between 2010 and 2015, of whom 29.3 percent eventually returned to teach. ${ }^{\text {c }}$ Of those who returned, most ( 71.1 percent) returned after 3 or fewer years. The same analysis was conducted for new teachers and retired teachers. ${ }^{\text {d }}$ New teachers tend to return to teaching at slightly higher rates ( 36.7 percent) than teachers in general, most within 3 years. Few teachers who retire return to teaching ( 5.8 percent); most who do return do so within 3 years.

## Quality And Supply Of Teacher Applicants

On the 2023 OEA Principal Survey, nearly all principals reported that a lack of qualified candidates in general ( 75.5 percent) and in particular subjects ( 76.5 percent) was an extreme or moderate barrier to teacher recruitment. Table 2.1 shows principals' reports of no applicants or no satisfactory applicants and principals reporting fewer or considerably fewer applicants compared to the previous 5 years from the 2019 OEA survey and the 2023 survey.

Subjects Lacking Applicants. In 2023, more than 50 percent of principals reported no available applicants or no satisfactory applicant for physics ( 81.7 percent), chemistry ( 73.6 percent), high school math ( 68.7 percent), world languages ( 58.3 percent), earth science ( 55.8 percent), middle school science ( 55.3 percent), biology ( 53.1 percent), and information technology ( 52.2 percent).

The percentage of unavailable or unacceptable applicants increased from 2019 to 2023 in every subject area. The greatest increases were for biology (17.1 percentage points), earth science (16.7 percentage points), middle school math (16.1 percentage points), and middle school science ( 15.3 percentage points).

[^12]Table 2.1
Percentage Of Principals Indicating Concerns With The Supply And Quality Of Applicants On OEA Survey, By School Level and Subject School Years 2019 And 2023

| Subject | No Available Or No Satisfactory Applicants |  | Fewer OrConsiderably Fewer ApplicantsCompared To Previous 5 Years |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2019 | 2023 | 2019 | 2023 |
| Elementary School |  |  |  |  |
| Elementary education | 9.5\% | 12.5\% | 42.3\% | 83.1\% |
| Middle School |  |  |  |  |
| English | 21.6 | 29.3 | 53.1 | 84.8 |
| Math | 32.6 | 48.7 | 66.5 | 89.8 |
| Science | 40.0 | 55.3 | 69.5 | 88.2 |
| Social studies | 16.4 | 24.1 | 48.0 | 83.7 |
| High School |  |  |  |  |
| Biology | 36.0 | 53.1 | 64.1 | 94.0 |
| Chemistry | 63.0 | 73.6 | 83.1 | 97.0 |
| Earth science | 39.1 | 55.8 | 66.7 | 91.7 |
| English | 17.3 | 22.7 | 44.8 | 82.6 |
| Health science | 28.5 | 38.1 | 54.4 | 85.2 |
| Information technology | 38.7 | 52.2 | 60.4 | 84.9 |
| Math | 55.0 | 68.7 | 82.1 | 91.4 |
| Media arts | 33.4 | 43.3 | 54.7 | 80.2 |
| Physics | 68.1 | 81.7 | 81.1 | 92.2 |
| Social studies | 9.4 | 18.9 | 33.3 | 73.9 |
| Any Grade |  |  |  |  |
| Art | 22.3 | 25.2 | 46.6 | 74.5 |
| English as a second language | 42.9 | 43.5 | 61.2 | 74.8 |
| Exceptional child | 29.0 | 35.4 | 55.5 | 84.1 |
| Gifted and talented | 30.8 | 23.5 | 54.7 | 72.4 |
| Music | 18.1 | 21.8 | 43.6 | 72.0 |
| Physical education | 10.4 | 13.7 | 39.0 | 63.9 |
| World languages | 53.0 | 58.3 | 67.3 | 83.6 |
| Any Level Support Staff |  |  |  |  |
| School counselors | N/A | 17.2 | N/A | 72.2 |
| Library and media specialists | N/A | 10.5 | N/A | 73.2 |
| Tutors and interventionists | N/A | 22.9 | N/A | 72.1 |

Note: N/A = not available.
Sources: OEA 2023 and 2019 principal surveys.

> In 2023, less than one-third of principals reported generally enough or an abundance of satisfactory applicants in every subject except elementary education (34.6 percent).

Subjects With Adequate Applicants. In 2023, less than one-third of principals reported generally enough or an abundance of satisfactory applicants in every subject except elementary education (34.6 percent). ${ }^{\text {e }}$ Less than 10 percent of principals

[^13]In 2023, more than $\mathbf{7 0}$ percent of principals reported fewer or considerably fewer applicants compared to 5 years earlier in every subject except physical education (63.9 percent).

In every subject area, principals reported fewer or considerably fewer applicants at higher rates in 2023 than in 2019.

Physics, chemistry, high school math, and world languages were the areas with the highest percentages of principals reporting no applicants or no satisfactory applicants and reporting fewer or considerably fewer applicants compared to 5 years earlier.

World languages and English as a second language were areas with 40 percent of principals reporting no available or satisfactory applicants and 75 percent or more principals reporting fewer applicants compared to 5 years earlier.
reported generally enough or an abundance of satisfactory applicants for nine non-CTE subjects. ${ }^{\text {f }}$

Applicants Compared To 5 Years Earlier. In 2023, more than 70 percent of principals reported fewer or considerably fewer applicants compared to 5 years earlier in every subject except physical education ( 63.9 percent). Over 90 percent of principals reported that there were fewer or considerably fewer applicants compared to 5 years earlier for chemistry, biology, physics, earth science, and high school math.

In every subject area, principals reported fewer or considerably fewer applicants at higher rates in 2023 than in 2019. However, the increases in chemistry, physics, and high school math were relatively low-likely because most principals reported difficulty finding applicants in these areas in 2019 as well. For example, 83.1 percent of principals reported fewer or considerably fewer chemistry applicants in 2019 compared to 97.0 percent in 2023, a 13.9 percentage point difference.

Elementary Education. While 12.5 percent of principals indicated that elementary education was not an area with no available or no satisfactory applicants, 83.1 percent of principals reported fewer or considerably fewer applicants compared to 5 years earlier in 2023; 42.2 percent of principals made such a report in 2019.

Severe Shortage Subject Areas, 2023. Physics, chemistry, high school math, and world languages were the areas with the highest percentage of principals reporting no applicants or no satisfactory applicants and reporting fewer or considerably fewer applicants compared to 5 years earlier. More than 50 percent of principals reported no applicants at all in these subject areas. ${ }^{\mathrm{g}}$ The 2019 OEA Principal Survey also found that applicants for these subjects were the most difficult to find.

World Languages And English As A Second Language. In 2023, principals reported that there were fewer world language ( 83.6 percent) and English as a second language ( 74.8 percent) applicants than there were 5 years earlier, and more than

[^14]There is not a helpful method of determining how many teaching positions are currently unfilled in Kentucky.

The Kentucky Educator Placement Service (KEPS) website lists available teaching positions in Kentucky schools. Currently, KEPS provides no information to explain the process of position posting or the differences between an unfilled position and an open position.

A 2019 report recommended that KDE consider a method to differentiate between open positions and those that have been unfilled for a long time in KEPS. There is currently no way to differentiate between such positions.

Recommendation 2.1

Analysis of KEPS data revealed that 277 open teacher positions remained unfilled for the start of SY 2023, an increase of 260 percent over the 77 positions that were posted and remained open in SY 2019.

40 percent of principals reported that there were no available or satisfactory applicants for world languages ( 58.3 percent) and English as a second language (43.5 percent).

## Unfilled Positions As Indicators Of Teacher Shortages

Unfilled positions are another indicator of teacher shortages. Unfortunately, there is not a helpful method of determining how many teaching positions are currently unfilled in Kentucky.

Kentucky Educator Placement Service. The Kentucky Educator Placement Service website lists available certified positions in Kentucky schools, including teaching positions. Determining unfilled positions versus open positions is difficult with the information available on the KEPS website. Vacant positions are posted on KEPS until a district sends requests that a position should be removed. If a position is unfilled or if districts do not send notifications that the positions has been filled or modified and subsequently filled, it remains on KEPS. Currently, KEPS provides no information to explain the process of position postings or the differences between an unfilled position and an open position.

The 2019 OEA report on teacher shortages recommended that the Kentucky Department of Education consider a method to differentiate between positions that are open and those that have been unfilled for a long period of time in the Kentucky Educator Placement Service. ${ }^{6}$ As of the writing of this report, there is still no way to differentiate between such positions.

## Recommendation 2.1

## The Kentucky Department of Education should develop a method of determining the number of teacher vacancies at any given time.

Open Positions By Subject Area. Analysis of KEPS data revealed 277 open teacher positions for the start of SY 2023, an increase of 260 percent over the 77 positions that were posted and remained open at the start of SY 2019. ${ }^{\text {h }}$ Approximately half ( 52.4 percent) in 2023 were for elementary education and preschool teacher

[^15]From 2013 to 2022, student membership decreased by 22,145 students while the number of certified staff increased by 1,558 , of whom 495 were teachers.

Individuals may hold more than one teaching certificate. The average was 1.9 certificates per teacher in 2023.
positions, and nearly one-third (27.8 percent) were for exceptional child teacher positions, compared to 19.5 percent for elementary and preschool positions and 22.1 percent for exceptional child teacher positions in 2019.

## Alternative And Emergency Certified Teachers

In Kentucky classrooms, there were fewer students and more teachers in 2023 than in 2013. From 2013 to 2022, student membership decreased by 22,145 students while the number of certified staff increased by 1,558 , of whom 495 were teachers. This section reviews types of certificates held by Kentucky teachers, which were discussed in detail in Chapter 1.

Teaching Certificates. Table 2.2 displays data for teacher certificates between school years 2020 and 2023. ${ }^{\text {i }}$ Certificate information in this section represents only certificates with issue dates and expiration dates between July 1 to June 30 of a given school year and does not represent actual teachers. Therefore, it may be more useful to focus on the percentage of certificates rather than the number of certificates. For many certificates, percentages are also similar to the percentage held by active teachers in the 2019 OEA report. Individuals may hold more than one certificate, and the average was 1.9 certificates per teacher in 2023.

Professional And Provisional Certificates. Teachers in the process of completing teacher preparation programs are issued provisional certificates and are usually beginning teachers or teachers pursuing full certification to teach additional subjects. Because provisional certificates represent teachers following the traditional certification route, it is useful to combine the number of professional and provisional certificates, which together account for 93.5 percent of certificates between school years 2020 and 2023.

[^16]Table 2.2
Number And Percentage Of Teaching Certificates, By Certificate Type School Years 2020 To 2023

|  | Number |  |  |  |  | Percent |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Certificate Type | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 0 - 2 0 2 3}$ |  | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 0 - 2 0 2 3}$ |  |
| Alternative | 2,184 | 3,763 | 11,693 |  | $1.3 \%$ | $2.3 \%$ | $1.8 \%$ |  |
| Emergency | 547 | 1,126 | 2,932 |  | 0.3 | 0.7 | 0.4 |  |
| Professional | 108,132 | 112,033 | 439,883 |  | 65.4 | 69.3 | 67.4 |  |
| Provisional | 47,448 | 37,844 | 170,074 |  | 28.7 | 23.4 | 26.1 |  |
| Vocational | 6,773 | 6,594 | 26,703 |  | 4.1 | 4.1 | 4.1 |  |
| Other | 335 | 260 | 1,183 |  | 0.2 | 0.2 | 0.2 |  |
| Total | 165,419 | 161,620 | 652,468 |  |  |  |  |  |

Note: Certificate data provided by KDE was incomplete for school years prior to SY 2020. KDE was also unable to provide Local Educator Assignment Data for multiple years, and certificates may or may not be held by a teacher currently teaching. Therefore, this table represents only certificates with issue and expiration dates that include July 1 to June 30 of a given school year. For example, SY 2023 includes July 1, 2022, to June 30, 2023. Other certificates include conditional certificates, limited certificates, probational certificates, and temporary certificates. Table includes subjects in career and technical education.
Source: Staff analysis of data provided by the Kentucky Department of Education.

| Districts must document that |
| :--- |
| diligent efforts were made to |
| find a qualified teacher and |
| were unsuccessful before an |
| emergency certified teacher was |
| hired. Emergency certificates |
| represent less than 1 percent |
| of certificates between SY 2020 |
| and SY 2023. |

Schools do not have to prove that an otherwise qualified teacher was unavailable before hiring an alternatively certified teacher. Students can benefit from being taught by distinguished professionals with valuable work experience.

Emergency Certificates. Teachers with emergency certificates can be considered a direct indicator of teacher shortages because districts must document that diligent efforts were made to find a qualified teacher and were unsuccessful. Table 2.2 shows that the number of emergency certificates doubled between school years 2020 and 2023; however, they represent less than 1 percent of certificates for that period.

Alternative Certificates. Teachers with alternative certificates can be considered indirect indicators of teacher shortages because schools do not have to prove that an otherwise qualified teacher was unavailable, and students can benefit from being taught by distinguished professionals with valuable work experience. Table 2.2 shows that alternative certificates increased from 1.3 percent of total certification in SY 2020 to 2.3 percent in SY 2023.

Once teachers complete an alternative route to certification, they receive full professional certificates and are indistinguishable in the data from teachers who pursued the traditional route to certification. ${ }^{j}$

[^17]The number of alternative certificates increased from 2,184 in SY 2020 to 3,763 in SY 2023-an increase of 72 percent. Option 6, the most common route, allows a person with a bachelor's or graduate degree to teach while enrolled in a postbaccalaureate program to earn a full professional teaching certificate.

Table 2.3 shows the number of alternative certificates between school years 2020 and 2023. ${ }^{\text {k }}$ Option 6 was the most common type of alternative certificate, accounting for 78.7 percent of alternative certificates in this period. There were nearly twice as many Option 6 alternative certificates in SY $2023(3,101)$ as in SY 2020 $(1,608)$. This route allows a person with a bachelor's degree or graduate degree to teach while enrolled in a postbaccalaureate program to earn a full professional teaching certificate.

Table 2.3
Number And Percentage Of Alternative Teaching Certificates By Alternative Certification Option School Years 2020 To 2023

| Certification Route | Number |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 | 2023 | 2020-2023 | 2020 | 2023 | 2020-2023 |
| Option 1 | 91 | 107 | 387 | 4.2\% | 2.8\% | 3.3\% |
| Option 2 | 2 | 2 | 8 | 0.1 | 0.1 | 0.1 |
| Option 3 | 185 | 144 | 664 | 8.5 | 3.8 | 5.7 |
| Option 4 | 66 | 60 | 276 | 3.0 | 1.6 | 2.4 |
| Option 5 | 199 | 310 | 999 | 9.1 | 8.2 | 8.5 |
| Option 6 | 1,608 | 3,101 | 9,199 | 73.6 | 82.4 | 78.7 |
| Option 7 | 0 | 9 | 18 | 0.0 | 0.2 | 0.2 |
| Option 8 | 33 | 30 | 142 | 1.5 | 0.8 | 1.2 |
| Total | 2,184 | 3,763 | 11,693 |  |  |  |

Note: Certificate data provided by KDE was incomplete for school years prior to SY 2020. KDE was also unable to provide Local Educator Assignment Data for multiple years, and certificates may or may not be held by a teacher currently teaching. Therefore, this table represents only certificates with issue and expiration dates that include July 1 to June 30 of a given school year. For example, school year 2023 includes July 1, 2022, to June 30, 2023. Source: Staff analysis of data provided by the Kentucky Department of Education.

> Alternative and emergency certificates are a small portion of overall certificates, but in some subjects their percentage is disproportionately high.

## Alternative certificates represented 15.8 percent of ESL certificates in SY 2023. Emergency certificates represented 9.7 percent.

In SY 2023, alternative certificates represented 7.8 percent of preschool certificates, 6.6 percent of information technology certificates, and 5.2 percent of exceptional child certificates.

Subject Areas. Table 2.4 shows alternative and emergency certificates by subject area. Although these certificates represent a small portion of overall certificates, some subjects have a disproportionately high percentage of them.

English As A Second Language. Alternative certificates represented 15.8 percent of certificates for English as a second language in SY 2023, and emergency certificates represented 9.7 percent.

Preschool, Information Technology, And Exceptional Child. In SY 2023, alternative certificates represented 7.8 percent of preschool certificates, 6.6 percent of information technology certificates, and 5.2 percent of exceptional child certificates. Less

[^18]than 1.5 percent of certificates in these subject areas were emergency certificates.

Emergency certificates
represented 9.7 percent of earth science and geology certificates.

Earth Science And Geology. Emergency certificates represented 7.3 percent of earth science and geology certificates; less than 2 percent of certificates in this area were alternative certificates.

Table 2.4

## Alternative And Emergency Certificates, By Certification Subject School Years 2020 To 2023

| Subject | Alternative Certificates |  | Emergency Certificates |  | All Certificates In Subject Area |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2023 | 2020-2023 | 2023 | 2020-2023 | 2023 | 2020-2023 |
| Career and technical education | 108 | 441 | 32 | 101 | 5,868 | 23,406 |
| Elementary education | 724 | 1,727 | 162 | 346 | 50,285 | 205,131 |
| Elementary education, kindergarten | 0 | 0 | 0 | 0 | 78 | 312 |
| Elementary education, preschool | 243 | 559 | 0 | 0 | 3,125 | 12,194 |
| English language arts | 286 | 960 | 137 | 345 | 11,736 | 46,619 |
| English as a second language | 52 | 178 | 32 | 65 | 329 | 1,239 |
| Exceptional child | 1,049 | 3,341 | 242 | 687 | 20,300 | 80,633 |
| Gifted | 0 | 0 | 7 | 24 | 45 | 173 |
| Health and physical education | 124 | 397 | 53 | 150 | 5,280 | 21,414 |
| High school | 0 | 0 | 0 | 0 | 22,463 | 92,036 |
| Information technology | 10 | 44 | 2 | 10 | 152 | 732 |
| Math | 163 | 639 | 137 | 397 | 8,885 | 35,475 |
| Middle school | 0 | 0 | 0 | 0 | 2,234 | 9,611 |
| Music | 36 | 0 | 25 | 0 | 3,312 | 13,654 |
| No subject listed | 310 | 121 | 0 | 46 | 316 | 1,031 |
| Science, biology | 97 | 1,002 | 37 | 0 | 2,521 | 10,226 |
| Science, chemistry | 42 | 376 | 33 | 95 | 1,111 | 4,529 |
| Science, earth science and geology | 5 | 185 | 22 | 81 | 302 | 1,195 |
| Science, general | 135 | 18 | 68 | 44 | 3,962 | 15,396 |
| Science, physical science | 1 | 450 | 0 | 183 | 47 | 205 |
| Science, physics | 11 | 4 | 17 | 0 | 423 | 1,728 |
| Social studies | 250 | 55 | 61 | 49 | 15,312 | 61,078 |
| Visual and performing arts | 67 | 754 | 30 | 125 | 1,603 | 6,475 |
| World languages | 50 | 246 | 29 | 85 | 1,931 | 7,976 |

Note: Certificate data provided by KDE was incomplete for school years prior to SY 2020. KDE was also unable to provide Local Educator Assignment Data for multiple years, and certificates may or may not be held by a teacher currently teaching. Therefore, this table represents only certificates with issue and expiration dates that include July 1 to June 30 of a given school year. For example, SY 2023 includes July 1, 2022, to June 30, 2023.
Source: Staff analysis of data provided by the Kentucky Department of Education.

## In 2022, an average of 7.0 percent of students were taught by out-of-field teachers (those without certification for the subject they teach).

Out-Of-Field Teachers. 16 KAR 2:120 defines out-of-field teachers as those teaching a subject without holding certification for that subject. An average of 7.0 percent of Kentucky students were taught by out-of-field teachers in $2022 .{ }^{1}$

[^19]KRS 161.131 set a goal of at least one teacher certified by the National Board for Professional Teaching Standards in every public school by 2020. In 2022, $\mathbf{7 0 . 9}$ percent of Kentucky A1 schools met that goal.

National Board Certified Teachers. The General Assembly recognizes that student achievement is related to teachers' skills and capabilities and that teachers benefit from additional support in developing their skills. In addition, the General Assembly recognizes that teachers certified by the National Board for Professional Teaching Standards benefit other teachers in their schools through advising, assisting, and mentoring. KRS 161.131 set a goal of at least one National Board certified teacher in every public school in Kentucky by 2020. In 2022, 70.9 percent of Kentucky A1 schools had at least one National Board certified teacher.

## Federal Critical Shortage Areas

KRS 156.106 defines critical shortage area as a "lack of certified teachers in particular subject areas, in grade levels, or in geographic locations."

For SY 2023, critical shortage areas included world languages, ESL, English language arts, exceptional children, preschool and interdisciplinary early childhood education, social studies, middle and high school math, middle and high school science, biology, chemistry, earth and space science, and physics.

States report teacher shortage data to the US Department of Education (ED) every year. Kentucky statutes do not specify how shortage areas should be determined. Instead, KRS 156.106 defines critical shortage area as a "lack of certified teachers in particular subject areas, in grade levels, or in geographic locations."

Table 2.5 shows the subject areas and disciplines Kentucky identified as critical shortage areas for school years 2020 and 2024, and the number of regions experiencing shortages. World languages and English as second language were shortage areas in both years, but all of the science-related subjects became new shortage areas between SY 2020 and SY 2024. Other subjects identified as critical shortage areas in at least one geographic region in SY 2024 include English language arts, exceptional children, preschool and interdisciplinary early childhood education, social studies, middle and high school math, middle and high school science, biology, chemistry, earth and space science, and physics.

## Table 2.5

Critical Shortage Areas, By Subject And Number Of Regions School Years 2020 And 2024

|  | Number Of Regions |  |
| :--- | :---: | :---: |
| Area | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 4}$ |
| Career and technical education | 4 | 0 |
| English as a second language | 3 | 3 |
| English language arts | 3 | 6 |
| Exceptional children | 9 | 9 |
| Health and physical education | 3 | 0 |
| Preschool and interdisciplinary early childhood education | 6 | 7 |
| Social studies | 3 | 1 |
| World languages | 3 | 4 |
| Math |  |  |
| Middle school | 0 | 5 |
| Middle and high school | 3 | 0 |
| High school | 0 | 2 |
| Science |  | 6 |
| Middle school | 0 | 0 |
| Middle and high school | 5 | 2 |
| High school | 0 | 4 |
| Biology | 0 | 5 |
| Chemistry | 0 | 6 |
| Earth and space | 0 | 6 |
| Physics | 0 |  |
| The |  |  |

Note: The data source used educational cooperatives and workforce development areas in 2020 and used educational cooperatives in 2024. Critical shortage areas were determined in 2019 and 2023 for 2020 and 2024, respectively. English language arts in high school grades, middle school grades, and high school and middle school grades were combined. Science and general science in high school grades were combined. Science and general science in middle school grades were combined. Earth and space science for all grades and earth and space science for high school grades were combined. Social studies in high school grades and middle school grades were combined. Exceptional child-general and exceptional child-speech and language were combined.
Source: US Department of Education teacher shortage areas.

## Causes Of Teacher Shortages

## Potential causes of shortages include a decrease in the teaching pipeline and the fact that schools with high teacher turnover share characteristics that affect working conditions.

Teachers pursuing certification through a teacher preparation program generally complete a 4-year bachelor's degree program or an advanced degree program to obtain initial certification.

This section reviews two potential causes of teacher shortages identified in the data. First, the teaching pipeline has decreased, particularly in severe shortage areas. Second, schools with high teacher turnover tend to share characteristics that affect working conditions.

Teacher Pipeline: Teacher Preparation Programs. Teachers pursuing certification through teacher preparation programs generally complete a 4 -year bachelor's degree program or an advanced degree program to obtain initial certification. The Council on Postsecondary Education provided data on teacher preparation program completion at Kentucky public and private institutions, as shown in Table 2.6.

Table 2.6
Candidates Completing Teacher Preparation Programs, By Subject Area School Years 2013 To 2022

| Subject | 2013-2017 |  | 2018-2022 |  | Difference |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Percent | Total | Percent |  |
| Academic Subjects |  |  |  |  |  |
| English language arts | 1,607 | 11.8\% | 1,192 | 9.9\% | -415 |
| Mathematics | 255 | 1.9 | 228 | 1.9 | -27 |
| Sciences, all | 134 | 1.0 | 190 | 1.6 | 56 |
| Social studies | 279 | 2.0 | 245 | 2.0 | -34 |
| Additional Subjects |  |  |  |  |  |
| English as a second language | 141 | 1.0 | 54 | 0.4 | -87 |
| Exceptional children | 2,014 | 14.8 | 1,639 | 13.6 | -375 |
| Health and physical education | 1,712 | 12.6 | 1,404 | 11.7 | -308 |
| Music | 517 | 3.8 | 522 | 4.3 | 5 |
| Visual and performing arts | 80 | 0.6 | 74 | 0.6 | -6 |
| World languages | 77 | 0.6 | 76 | 0.6 | -1 |
| School Level Preparation |  |  |  |  |  |
| Education, general | 0 | 0.0 | 211 | 1.8 | 211 |
| Elementary education and earlier | 4,953 | 36.4 | 4,276 | 35.5 | -677 |
| Intermediary education, general | 1,071 | 7.9 | 1,332 | 11.1 | 261 |
| Secondary education, general | 779 | 5.7 | 603 | 5.0 | -176 |
| Total | 13,619 |  | 12,046 |  | -1,573 |

Note: The percentages and total in the 2013-2017 column do not match the OEA 2019 report percentages and total because the OEA 2019 report included career and technical education subjects in the total. Includes bachelor's and master's degrees. Education, general was not a category in the OEA 2019 report data. Programs of study do not necessarily correspond to teaching certificates obtained in particular subjects.
Source: Staff analysis of data from the Kentucky Council on Postsecondary Education.

## The number of teacher preparation program completers has decreased in every subject area.

## With very few completers of

 teacher preparation programs, world languages and ESL were areas where high percentages of principals reported no applicants or no satisfactory applicants and fewer or considerably fewer applicants.Teacher Preparation Program Completers In Shortage Areas.
The number of teacher preparation program completers has decreased in every subject area. Physics, chemistry, high school math, and world languages were areas for which principals reported difficulty finding applicants; these areas also have relatively fewer teacher preparation program completers.

World Languages And English As A Second Language. In the 2023 OEA survey, approximately 50 percent of principals reported no applicants or no satisfactory applicants for world languages and ESL positions, and approximately two-thirds reported fewer applicants than 5 years earlier. For ESL, there were 54 teacher preparation program completers between school years 2018 and 2022, compared to 141 between 2013 and 2017. For world languages, there were 76 teacher preparation program completers between 2018 and 2022, and 77 from 2013 to 2017. With the
recent increase in immigration to the United States, universities will need to work harder in recruiting students in these subjects. ${ }^{m}$

Exceptional Children. Another critical shortage area is teachers of exceptional children. In 2023, 35.4 percent of principals reported no available or no satisfactory applicants for exceptional child teaching positions and 84.2 percent reported fewer or considerably fewer applicants compared to 5 years earlier, a 28.6 percentage point increase over 2019 ( 55.5 percent). Nearly one-third of open positions posted on KEPS for SY 2023 were for exceptional child teachers, and there were 375 fewer teacher preparation program completers for exceptional children in 2018 to 2022 compared to 2013 to 2017. In SY 2023, a disproportionately high percentage of exceptional child teaching certificates were emergency certificates ( 5.2 percent). Exceptional child teachers were also identified as federal critical shortage areas in 2020 and 2024.

## Praxis II

Teachers must pass the Praxis II exam to demonstrate specific content knowledge, instructional skills, and pedagogy.

The average Praxis II pass rate was 95 percent between school years 2018 and 2023.

Of the 60 subjects that had Praxis II tests, 15 had less than a 90 percent pass rate.

Kentucky requires teachers to pass the Praxis II exam to demonstrate specific content knowledge, instructional skills and pedagogy. Teachers can take the Praxis II multiple times, if needed, in order to get a passing score.

From school years 2018 to 2023 there were 50,537 total Praxis II test takers who took the 60 subjects tested. The overall average pass rate was 95 percent, with a first-time average pass rate of 87 percent.

All but 15 types of assessments had a 90 percent pass rate. Table 2.7 shows assessments with a pass rate below 90 percent. Appendix F includes the number of test takers and average pass rates for all Praxis II assessments.

[^20]
## Table 2.7 <br> Average Pass Rate For Praxis II Assessments With Pass Rates Less Than 90 Percent 2018 To 2023

| Assessment Name | Pass Rate |
| :--- | :---: |
| ASL Proficiency Interview | $67 \%$ |
| Chemistry: Content Knowledge | 86 |
| Earth and Space Sciences: Content Knowledge | 86 |
| Education of Young Children | 86 |
| French: World Language | 69 |
| Japanese: World Language | 33 |
| Latin | 75 |
| Mathematics | 83 |
| Mathematics: Content Knowledge | 62 |
| Middle School English Language Arts | 84 |
| Middle School Science | 87 |
| Music: Content Knowledge | 79 |
| Physical Education: Content and Design | 88 |
| Physics: Content Knowledge | 83 |
| Spanish: World Language | 69 |

Note: Duplicates were removed. If a test taker took a test prior to July 1, 2018, their subsequent test was removed from the data set to ensure accurate pass rates.
Source: Praxis II data provided by the Kentucky Department of Education.

## Characteristics Of Schools With High Turnover

Schools with high teacher turnover generally had higher percentages of students receiving free or reduced-price lunch, minority students, and teachers with 4 or fewer years of experience.

Schools with high teacher turnover share similar characteristics. Schools were divided into quartiles based on average teacher turnover from 2018 to 2022, where Quartile 1 represents low teacher turnover and Quartile 4 represents high teacher turnover. Table 2.8 shows that schools with high teacher turnover generally had higher percentages of students receiving free or reduced-price lunch, higher percentages of minority students, and higher percentages of teachers with 4 or fewer years of experience.

Table 2.8
School Demographic Characteristics By School Turnover School Years 2018 To 2022

|  |  | Average Of All Schools In Quartile |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Turnover Quartile | Average <br> Turnover | Eligible For FRPL | Minority | Teachers With 4 Or Fewer <br> Years Of Experience |
| 1 (lowest) | $9.1 \%$ | $59.1 \%$ | $14.6 \%$ | $12.4 \%$ |
| 2 | 13.1 | 59.9 | 19.5 | 16.6 |
| 3 | 16.9 | 64.7 | 22.1 | 21.6 |
| (highest) | 24.8 | 68.8 | 33.5 | 28.6 |
| Overall | $16.0 \%$ | $63.1 \%$ | $22.4 \%$ | $19.7 \%$ |

Note: FRPL = free and reduced-price lunch. Due to the COVID-19 pandemic, free/reduced-price lunch and minority student data was unavailable or incomplete for SY 2020 and is not included in the calculations.
Source: Staff analysis of data provided by the Kentucky Department of Education.

Schools with lower math and reading scores tended to have higher percentages of students in poverty, minority students, teachers with 4 or fewer years of experience, and turnover.

Math And Reading Outcomes, Middle School Demographics, And Teacher Turnover. Table 2.9 divides Kentucky's middle schools into quartiles based on average math and reading proficiency scores rates on the 2022 Kentucky Summative Assessments. Quartile 1 represents the lowest average proficiency rates, and quartile 4 represents the highest. Within each quartile, the average percentage of students receiving free or reduced-price lunch, percentage of students who are minorities, teacher turnover, and percentage of teachers with 4 or fewer years of experience between school years 2018 and 2022 were calculated.

Schools with lower math and reading scores tended to have higher percentages of students in poverty, higher percentages of minority students, higher percentages of teachers with 4 or fewer years of experience, and higher turnover.

Table 2.9
Middle School Demographic Characteristics And Teacher Turnover By Math And Reading Proficiency Quartiles

School Year 2022

| Proficiency Quartile | Average Proficiency Rate By Quartile 2022 | $\begin{gathered} \text { Percent } \\ \text { FRPL } \\ \text { 2018-2022 } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Percent } \\ \text { Minority } \\ \text { 2018-2022 } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Teacher } \\ & \text { Turnover } \\ & \text { 2018-2022 } \\ & \hline \end{aligned}$ | Teachers With 4 Or Fewer Years Of Experience 2018-2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Math |  |  |  |  |  |
| 1 (lowest) | 20.2\% | 74.1\% | 27.4\% | 21.3\% | 27.8\% |
| 2 | 31.5 | 67.6 | 17.2 | 18.1 | 22.6 |
| 3 | 40.4 | 62.6 | 12.8 | 15.4 | 19.6 |
| 4 (highest) | 54.0 | 49.4 | 16.4 | 14.9 | 17.2 |
| Reading |  |  |  |  |  |
| 1 (lowest) | 30.0 | 73.3 | 27.0 | 20.7 | 27.2 |
| 2 | 41.1 | 64.8 | 17.3 | 17.0 | 21.8 |
| 3 | 47.9 | 60.7 | 14.0 | 16.2 | 19.8 |
| 4 (highest) | 59.8 | 54.0 | 13.5 | 15.3 | 17.6 |

Note: FRPL = students eligible for free or reduced-price lunch. Table includes only schools for which math and reading scores were reported for the Kentucky Summative Assessments. Table does not include 2020 FRPL and minority data.
Source: Staff analysis of data from the Kentucky Department of Education.

[^21]Working Conditions Reported By Teachers. Teachers from schools with lower turnover rates were more likely to positively view the teaching profession, their working environment, student behaviors, and support from their school administration. The greatest differences between teachers at low turnover schools and teachers at high turnover schools appear in Appendix D.

On many Impact Survey items, a large gap between principals' and teachers' responses indicates that principals have a more positive outlook on teachers' environment.

Disparities Between Teachers' And Principals' Perceptions Of Teaching In Kentucky. On many Impact Survey items, principals' responses varied only slightly regardless of whether their school had high or low turnover, while teachers' responses varied greatly. For positive responses in Quartile 1, principals averaged 25.7 percentage points higher than teachers; in Quartile 4 , they averaged 30.2 percentage points higher than teachers. The gap indicates that principals have a more positive outlook on teachers' working environment. ${ }^{\text {n }}$

## Effects Of Teacher Shortages

Principals have many strategies to address teacher shortages, many of which may exacerbate any problems with teachers' working conditions. Teacher shortages have led districts to retain staff who otherwise would have been terminated or nonrenewed, and to rely on substitute teachers.

Strategies To Address Teacher Shortages. The 2023 OEA survey asked principals about strategies to address teacher shortages. Approximately 40 percent of principals reported retaining certified staff who otherwise would have been terminated or nonrenewed in prior years due to poor performance; most retained three or fewer positions. Principals also increased class sizes ( 22 percent), eliminated a class ( 16 percent), and combined programs ( 9 percent). These methods may exacerbate any problems with teachers' working conditions. ${ }^{7}$ Another strategy was having teachers give up their planning period to cover a class (86 percent). Most principals said this happens several times per month ( 27 percent) or a few times a year ( 28 percent).

Retaining Suboptimal Staff. According to KRS 161.750(2), superintendents must give written notice by May 15 to each limited contract certified employee whose contract will not be renewed for the next year. The OEA survey asked superintendents to estimate how many certified staff members their district retained for SY 2023 who would have otherwise been terminated or nonrenewed in prior years due to poor performance. ${ }^{\circ}$

Seventy-nine districts reported retaining such staff, in a total of 307 positions. Table 2.10 shows the number of certified staff retained by districts. Some superintendents commented that they

[^22]would not retain a teacher who negatively impacted students, while others said they have begun focusing on developing capacity from existing staff rather than searching for better teachers.

Table 2.10
Number Of Districts Retaining Certified Staff By Number Of Certified Staff Members Retained Who Would Have Been Nonrenewed Or Terminated Due To Poor Performance In Previous Years School Year 2023

| Number Of Districts | Number Of Certified Staff Retained |
| :---: | :---: |
| 1 | 20 plus |
| 6 | $10-12$ |
| 19 | $5-8$ |
| 27 | $3-4$ |
| 26 | $1-2$ |

Source: Staff compilation of data from superintendent survey.

Sixty-five percent of superintendents reported that hiring substitutes was a crisis area. Superintendents reported 944 unfilled substitute teacher positions at the beginning of SY 2023.

Certified Substitute Teachers. On the OEA Principal Survey, nearly 50 percent of principals reported that unfilled classroom positions were taught by long-term substitutes; non-long-term substitutes were less common. On the OEA Superintendent Survey, 65 percent of superintendents reported that hiring substitutes was a crisis area. Superintendents reported 944 unfilled substitute teacher positions at the beginning of SY 2023. Table 2.11 shows a large range of pay rates for substitute teachers between districts, as well as disparities in the average substitute teacher daily pay rate for districts in rural, micropolitan, and metropolitan areas.

Table 2.11
Average Substitute Teacher Daily Rate Of Pay, By Rank And District Location 2023

|  | Daily Pay |  |  |  | Type Of District |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position | Average | Lowest | Highest |  | Metro | Micro | Rural |
| Rank IV | $\$ 94.70$ | $\$ 60$ | $\$ 167$ |  | $\$ 106.46$ | $\$ 92.38$ | $\$ 85.98$ |
| Rank III | 106.90 | 65 | 175 |  | 119.31 | 104.95 | 97.40 |
| Rank II | 112.86 | 65 | 200 |  | 124.89 | 110.41 | 104.00 |
| Rank I | 117.26 | 65 | 200 |  | 128.20 | 113.95 | 109.83 |
| Retired teacher substitute | 127.00 | 65 | 240 |  | 141.85 | 123.54 | 117.16 |

Source: Staff compilation of data from superintendent survey.

In 23 districts, substitute teachers receive incentive pay.

Incentive Pay For Substitute Teachers. In 23 districts, substitute teachers receive incentive pay. While most districts providing incentives provide additional pay to work a certain number of days or for working on Mondays and Friday, other districts provide

In 2023, 69 districts had fulltime substitutes paid according to the certified teacher salary schedule and receiving all benefits that regular teachers receive. In larger districts, fulltime substitutes report to a specific school each day and receive coverage for whichever teachers are absent in a given day.

Nearly half of principals reported using long-term substitutes to teach unfilled classroom positions. Less common strategies included using non-long-term substitutes, having teachers teach during planning periods, and combining classrooms.
additional pay for substitutes in alternative classrooms, for those in high-priority schools, and for exceptional child substitutes.

Districts With Full-Time Substitute Teachers. Some districts hire full-time substitute teachers paid according to the certified teacher salary schedule and receiving all benefits that regular teachers receive. In larger districts, full-time substitutes generally report to a specific school each day and provide coverage for whichever teachers are absent. Districts that hire full-time substitute teachers do not have to hire substitutes on short notice, and their students have consistency. These long-term substitutes also build relationships with students and understand more about their school's students' needs. In 2023, 69 districts had hired full-time substitutes. Of these districts, 18 employed 25 or more, and 27 employed 1 or 2 . The remaining districts hired 3 to 9 (20 districts) and 10 to 24 (4 districts).

Additional Methods Of Addressing Unfilled Positions. Nearly half of principals reported using long-term substitutes to teach unfilled classroom positions. Less common strategies-including employing non-long-term substitutes, having teachers teach during their planning periods, and combining classrooms with one teacher-were mentioned often, with many principals reporting that it varies by the day or week, and many others reporting many or several times per week or day. Very few principals reported using central office staff in unfilled positions. These methods of addressing unfilled classroom teacher positions may exacerbate the negative effects of teacher shortages on teachers' work environment. ${ }^{8}$

## Mitigating Teacher Shortages

## Efforts to mitigate teacher

 shortages include creative hiring strategies and mentoring current teachers, but these may not overcome teacher shortages or compete with the private sector. Some districts are exploring Option 9 programs.[^23]Efforts to mitigate teacher shortages include using creative hiring strategies and mentoring current teachers. However, many principals reported that their strategies could not completely overcome teacher shortages or successfully compete with the private sector. Districts are also beginning to explore Option 9 programs for alternative certification.

Teacher Recruitment Strategies. Principals were asked to select the strategies their school/district used to recruit teachers. Over 80 percent of principals reported hiring teachers with alternative or emergency certificates. More than 50 percent of principals advertised on social media, hired retired teachers, visited college fairs, and recruited from the local community. Appendix G provides additional information on teacher recruitment strategies.

Superintendents reported attending career fairs, working with local universities, and using recruiting platforms and advertising to recruit teachers. Some districts increased their rank change pay and allow biannual rank change; others offer financial incentives.

Superintendents reported that pay was the largest issue affecting certified staff recruitment, along with change in teacher retirement benefits.

Many states, including Kentucky, have laws regarding teacher recruitment and retention.

Most superintendents reported that their district has a teacher mentoring program.

District Recruitment Strategies. Most superintendents reported attending career fairs, working with local universities, and using recruiting platforms, such as Indeed, ZipRecruiter, and LinkedIn. In addition, districts used their webpages and social media platforms, and advertised with their local newspapers. Several superintendents reported that their districts' "grow-your-own" strategies are helping. A few districts reported increasing their rank change pay and allowing teachers to change their rank twice per year (October and February) instead of once. Other districts reimburse teachers for tuition and taking the Praxis II exam, offer relocation stipends, and signing bonuses. One district offered a $\$ 10,000$ stipend for high school math teachers, while another offered free tuition to children of employees who reside in another district.

Other Factors That Affect Certified Staff Recruitment. Superintendents reported that pay was the largest issue affecting certified staff recruitment, along with change in teacher retirement benefits. Teachers are paid for 185 days while most private industry positions offer 240 days of pay. A few superintendents stated that universities are not producing enough graduates with an education degree, and others cited the overall lack of respect for teachers as a recruitment issue.

Teacher Recruitment And Retention Laws. Many states, including Kentucky, have laws regarding teacher recruitment and retention. For example, KRS 161.167 requires KDE to develop a plan for a multidimensional recruitment and information program to encourage teaching as a profession. Appendix H details teacher recruitment and retention laws in Kentucky, and shows the number of other states with similar laws.

Mentoring Programs. Most superintendents (88 percent) reported that their district has a teacher mentoring program. Very few reported daily mentoring tasks. Over half reported providing mentoring tasks once per week or several times per month, including developing lesson plans, analyzing student work, reviewing results of student assessments, addressing behavioral issues, reflecting on and discussing the effectiveness of teachers’ teaching, and aligning lesson plans with state curriculum and local curriculum. Appendix $G$ shows the frequency of each mentoring task. Superintendents also reported developing an understanding of documentation processes, such as developing plans for students who need accommodations and plans for gifted student services; providing professional learning strategies for effective teaching;

To recruit and retain teachers, districts paid for additional insurance and services, offered free health care, offered gym memberships, or paid teachers more to work in difficult environments.

Option 9 allows school districts to partner with a college or university to develop a program for teaching candidates to attain an initial teacher certification and a bachelor's degree while working in a nonteaching classified position. As of September 2023, there were 20 such partnerships, but 31 percent of superintendents reported that their districts do not plan to participate in Option 9 programs.
providing professional learning communities twice per month; and partnering with universities to provide new teacher supports.

Additional Strategies For Teacher Recruitment And Retention. Districts' additional strategies included paying for additional insurance and services such as life, dental, and vision (23 percent); offering free health care to staff ( 12 percent); and offering a gym membership ( 6 percent). Some districts pay teachers more to work in more difficult learning environments. On the 2023 OEA Superintendent Survey, the highest stipends for teaching in more difficult learning environments were $\$ 6,000$ and $\$ 8,000$.

Option 9 Teacher Certification Programs. Option 9 allows school districts to partner with a college or university to develop a program for teaching candidates to attain an initial teacher certification and a bachelor's degree while working at a school or district in a nonteaching classified position. As of September 20, 2023, there were 20 such partnerships. The OEA Superintendent Survey asked about districts' plans regarding Option 9 programs, and respondents were asked to answer the question regardless of actual Option 9 participation. Most superintendents of districts with an Option 9 program reported that their districts would pay either a portion of tuition, full tuition, or a stipend for enrollees. Some superintendents claimed that their district intended to offer a bonus to teach for a specified amount of time, but a few superintendents reported that their districts were not likely to provide incentive bonuses or cover the tuition costs of classified employees to participate in Option 9 programs. Several superintendents reported that their districts may contractually obligate classified staff to remain as teachers in their district for a specified number of years, and were relatively split between requiring 1 to 5 years. Most districts would not limit participation in Option 9 to particular teaching fields.

Approximately 31 percent of superintendents reported that their districts are not planning to participate an Option 9 program. These superintendents cited a lack of interest, lack of funding, reliance on other alternative certification routes, and the requirement that certified staff be in the classroom with an Option 9 candidate as barriers to participating in an Option 9 program.

Additional considerations regarding teacher shortages are barriers to recruiting and retaining teachers, support from school leadership, Kentucky students who return to work in Kentucky education, and available financial support for future teachers.

Lack of qualified candidates in general and in particular subjects were considered the greatest barrier to teacher recruitment by both principals and superintendents.

Teacher salary and benefits insufficient compared to the private industry and to other districts were considered barriers to teacher recruitment and retention by a high percentage of superintendents and principals, as was work-life balance.

From 2014 to 2023, districts increased starting salaries by 3 percent to 22 percent. In 2023, teacher starting salaries ranged from $\$ 34,004$ to \$45,772.

Sixty-five percent of teachers who left the teaching profession in 2019 were earning roughly $\$ 5,000$ less in other positions in 2022.

## Additional Considerations

Several factors may not affect state-level teacher shortages in Kentucky, but do affect individual districts and should be considered when discussing teacher shortages. This section reviews extreme or moderate barriers to recruiting and retaining teachers, support from school leadership, Kentucky students who return to work in Kentucky education, and available financial support for future teachers. See Appendix G for additional information on barriers to teacher recruitment and retention.

Lack Of Qualified Candidates. Both superintendents and principals considered lack of qualified candidates in general and in particular subjects as the greatest barrier to teacher recruitment. On the 2023 OEA principal and superintendent surveys, nearly all superintendents ( 93.5 percent) and most principals ( 75.5 percent) reported that a lack of qualified candidates in general was an extreme or moderate barrier to teacher recruitment; 75.6 percent of principals reported that a lack of qualified candidates in particular subjects was an extreme or moderate barrier.

Salary, Benefits, And Work-Life Balance. Over half of principals and approximately three-fourths of superintendents reported that teacher salary and benefits insufficient compared to the private industry were a barrier to teacher recruitment, with similar percentages for retaining teachers. Approximately half of superintendents and principals reported that salary compared to other districts was a barrier to recruiting and retaining teachers. Work-life balance was considered a barrier to teacher retention by roughly half of principals and one-third of superintendents.

Teacher Salaries. Between 2014 and 2023, districts increased starting salaries by 3 percent to 22 percent. The lowest teacher starting salary in a district in 2023 was $\$ 34,004$; the highest was $\$ 45,772$. The Kentucky Association of School Administrators' Coalition to Sustain the Education Profession has recommended that the General Assembly raise the minimum teacher salary to $\$ 45,000$ beginning in SY 2025. Changes in starting salaries between 2013 and 2022 are detailed in Appendix I.

Superintendents report that teachers are leaving the teaching profession for better pay, and OEA staff analyzed wage data for individual teachers who left the teaching profession for the private sector. Using KYSTATS data, OEA found that 65 percent of teachers who left the teaching profession in 2019 were earning

Lack of respect for teachers from society, from parents, and from the local community and student behavior were reported by a high percentage of principals as barriers to teacher recruitment. Nearly all reported that lack of respect from administrators was not a barrier or was a minimal barrier.

Nearly half of superintendents and principals considered geographic location a barrier to recruitment. Rural districts have lower salaries, higher percentages of exceptional child students and students eligible for free and reducedprice lunch, and lower per-pupil property assessments.
approximately $\$ 5,000$ less in other positions in $2022 .^{\text {p }}$ See Appendix B for data notes.

Lack Of Respect And Student Behavior. Lack of respect for teachers from society ( 45.7 percent), from parents ( 38.1 percent), and from the local community ( 24.4 percent) was reported by principals as a barrier to teacher recruitment on the OEA Principal Survey. ${ }^{\text {q }}$ Approximately 90 percent of principals reported that lack of respect from administrators was not a barrier or was a minimal barrier to teacher recruitment and retention. Student behavior was considered a barrier to teacher recruitment and retention by approximately one-third of principals and one-fourth of superintendents.

Geographic Location. Approximately half of superintendents (49.4 percent) and principals ( 42.6 percent) considered geographic location a barrier to teacher recruitment. In addition, on average, rural districts have lower teacher salaries, lower classified staff salaries, higher percentages of exceptional child students, higher percentages of free and reduced-price lunch students, and lower per-pupil property assessments that impact funding, as shown in Table 2.12.

Table 2.12

## Average Teacher Salary, Classified Staff Salary, Percentage Of Students With Special Needs, Percentage Of Students Eligible For Free And Reduced-Price Lunch, And Average Property Assessment, By District Location School Year 2022

|  | Type Of District |  |  |
| :--- | :---: | :---: | :---: |
| Data Point | Metropolitan | Micropolitan | Rural |
| Average teacher salary | $\$ 57,893$ | $\$ 52,477$ | $\$ 50,780$ |
| Average classified staff salary | $\$ 29,710$ | $\$ 22,491$ | $\$ 20,653$ |
| Percentage of exceptional child students | $14 \%$ | $17 \%$ | $18 \%$ |
| Percentage of students eligible for FRPL | $56 \%$ | $63 \%$ | $68 \%$ |
| Average per-pupil property assessments | $\$ 725,727$ | $\$ 483,161$ | $\$ 381,925$ |

Note: FRPL = free and reduced-price lunch.
Source: Staff analysis of data from the Kentucky Department of Education.

Support from school leadership may be important to teachers' willingness to continue teaching at their school. However, there was a 27.9 percentage point gap between principals' and teachers' perceptions of support from school leadership on 2022 Impact Survey items.

Support From School Leadership. Support from school-level leadership may be important to teachers' willingness to continue teaching at their school. OEA analyzed the Impact Survey and found that teachers who felt supported by their school's administration also reported more positive attitudes toward the teaching profession. Thirteen questions related to support from

[^24]school administration, and seven questions related to teachers' attitudes toward the teaching profession, as shown in Appendix D. Of teachers who answered all 13 support questions positively, 77.9 percent answered at least five of the seven attitude questions positively. Of teachers who answered none of the support questions positively, 0.8 percent answered five to seven attitude questions positively.

However, OEA analyzed Impact Survey responses for schools in which both principals and teachers responded and found an average gap of 27.9 percentage points between principals' and teachers' positive responses on questions related to support from school leadership on the 2022 Impact Survey, as shown in Table 2.13.

Table 2.13
Percentage Of Positive Responses On Kentucky Impact Survey Items Regarding Support From School Administrators, By Position 2022

| Survey Item | Principals | Teachers | Percentage Point Difference |
| :---: | :---: | :---: | :---: |
| The available professional development opportunities at the respondent's school are extremely to quite valuable. | 90.7\% | 45.9\% | 44.8 |
| Working with the leadership team is extremely to quite motivating. | 95.5 | 58.0 | 37.5 |
| Respondent learns a tremendous amount or quite a bit from the teacher evaluation process at their school. | 84.5 | 48.4 | 36.2 |
| School leaders are extremely or quite responsive to feedback. | 96.7 | 60.8 | 35.9 |
| A tremendous amount or quite a bit of trust exists between school leaders and faculty. | 95.7 | 65.0 | 30.8 |
| Feedback on teaching is extremely to quite useful. | 92.0 | 62.5 | 29.5 |
| School leaders are extremely to quite supportive when the respondent faces challenges at work. | 98.5 | 72.5 | 26.0 |
| School leadership treats the faculty extremely to quite fairly. | 99.1 | 74.2 | 24.9 |
| Overall, the school has been extremely to quite supportive of the respondent's growth as a teacher. | 97.2 | 72.7 | 24.5 |
| School leaders care about the respondent as an individual a tremendous amount or quite a bit. | 98.9 | 76.1 | 22.7 |
| The respondent is extremely to quite confident that school leaders have the best interests of the school in mind. | 99.1 | 78.1 | 21.0 |
| School leaders are extremely to quite respectful toward the respondent. | 99.3 | 84.7 | 14.6 |
| School leaders are extremely to quite understanding when challenges arise in the respondent's personal life. | 99.1 | 85.1 | 14.0 |
| Average number of responses | 539 | 15,402 |  |

Source: Staff analysis of 2022 Kentucky Impact Survey.

The 2022 Kentucky Impact Survey contained 34 questions related to attitudes and support. On average, the gap between principals' responses and teachers' responses was 27.2 percentage points.

Of Kentucky graduates from 2009 to 2015, 4.6 percent worked in Kentucky schools between 2013 and 2022. Of those who returned as certified personnel, 95.5 percent were teachers in 2022. Of those who returned as classified personnel, 44.0 percent held instructional positions in SY 2022 while 32.0 percent held food service, operations, transportation, or warehouse positions.

The Teaching and Learning Career Pathway provides a route for Kentucky high school students to begin pursuing a career in education while still in high school. Students may receive Work Ready Dual Credit Scholarships. KDE reported 2,002 students enrolled in this pathway in SY 2023.

In addition to support from school leadership questions, the 2022 Kentucky Impact Survey contained questions regarding attitudes toward the teaching profession, the working environment, and student behavior. On average, on these questions, principals had the highest rates of positive responses ( 85.6 percent), followed by assistant principals ( 79.3 percent), other education professionals ( 67.7 percent), and teachers ( 58.4 percent). ${ }^{\text {r }}$ Principals in the highest-turnover districts and the lowest-turnover districts had similar positive response rates.

Homegrown Kentucky Education Personnel. According to KYSTATS data, 306,707 students graduated from Kentucky high schools between 2009 and 2015. Of these, 4.6 percent returned to work as certified or classified staff in Kentucky schools between 2013 and 2022. Of those who returned as certified personnel, 95.5 percent were teachers in SY 2022. Of those who returned as classified personnel, 44.0 percent held instructional positions in SY 2022, and 32.0 percent held food service, operations, transportation, or warehouse positions. In addition, nearly half of those with certified positions and nearly one-fourth of those with classified positions worked in 2022 in the district from which they graduated. See Appendix B for data notes.

Teaching And Learning Career Pathway. The Teaching and Learning Career Pathway provides a route for Kentucky high school students to begin pursuing a career in education while still in high school. Students complete three core courses:

- learning communities, focused on responsibilities and systems within $\mathrm{K}-12$;
- learning-centered classrooms, focused on student equity and growth mindsets; and
- being a professional educator, focused on teaching and learning.
Students also complete an additional course on either collaborative clinical experience or principles of career and technical education. Students may receive Work Ready Dual Credit Scholarships for tuition costs at the 23 participating postsecondary institutions in Kentucky. KDE reported 2,002 students enrolled in the Teaching and Learning Pathway in SY 2023.

Teacher Scholarship Programs And Financial Assistance
The Kentucky Higher Education Assistance Authority (KHEAA) wholly or partially administers 16 state-funded teacher grant or

[^25]The Kentucky Higher Education Assistance Authority wholly or partially administers 16 state-funded teacher grant or scholarship programs.

The Teacher Scholarship Program offers need-based financial aid to college students in teacher education programs. Students receive a conversion loan in exchange for teaching service. In FY 2022, there were 150 recipients.

## The Early Childhood

Development Scholarship
provides up to full tuition and mandatory fees for child-care workers to pursue higher education. In FY 2022, there were 369 recipients.

The federal Teacher Education Assistance for College and Higher Education Grant program, the federal Teacher Loan Forgiveness program, and the federal Perkins Loan Teacher Cancellation program are financial assistance options for teachers and for students pursuing a career in teaching.

The Work Ready Kentucky Scholarship program offers free tuition toward an associate's degree in Kentucky's highdemand workforce sectors.
scholarship programs and reports annually on teacher scholarships. Several of these programs are described below, as are federal financial assistance opportunities.

Teacher Scholarship Program. The Teacher Scholarship Program offers need-based financial aid to students admitted to a teacher education program through 25 Kentucky colleges and universities, prioritizing students pursuing initial teacher certification. Students receive a conversion loan scholarship and are required to teach one semester in Kentucky for each semester they receive a scholarship. Scholarship recipients teaching in a critical shortage area or dual credit classes are required to teach one semester for every two scholarship semesters received. Scholarships are converted to loans if the teaching requirement is not fulfilled. Over 85 percent of scholarship recipients were teaching in Kentucky in SY 2021. In fiscal year 2022, there were 150 recipients. ${ }^{9}$

Early Childhood Development Scholarship. The Early Childhood Development Scholarship was designed for professional development of child-care workers currently working at least 20 hours per week in early childhood, and includes 22 postsecondary institutions in Kentucky. Recipients may receive up to full tuition and mandatory fees. In FY 2022, there were 369 recipients.

Federal Financial Assistance. The federal Teacher Education Assistance for College and Higher Education Grant program provides up to $\$ 4,000$ per year for a student pursuing a program area to become a teacher, but it converts to a loan if teaching requirements are not met. The federal Teacher Loan Forgiveness program allows up to $\$ 17,500$ in Federal Direct Loans or Federal Family Education Loans to be forgiven after 5 years of full-time employment in a low-income school or educational service agency. The federal Perkins Loan Teacher Cancellation program allows loan cancellation of up to 100 percent in exchange for full-time employment in a public or nonprofit school that serves low-income families or for teaching exceptional child or shortage area fields.

Work Ready Kentucky Scholarship Program. KRS 164.787 established the Work Ready Kentucky Scholarship Program, administered by KHEAA. It offers students free tuition for up to 60 hours of credit toward an associate's degree in high-demand workforce sectors, including health care, advanced manufacturing, transportation/logistics, business services/IT, and construction, for students who do not have an associate's degree or higher.

Office Of Education Accountability

Gateway Community and Technical College offers an associate's degree in pre-education. Graduates can pursue a bachelor's degree at Northern Kentucky University.

In fall of 2018, Gateway Community and Technical College began offering an education program for an associate's degree in pre-education. Graduates can then pursue a bachelor's degree at Northern Kentucky University. Since 2018, 196 students have enrolled in the program, and 46 have gone on to earn a bachelor's degree in an education-related field.

## Recommendation 2.2

Recommendation 2.2

The General Assembly may consider including pre-education programs that lead to teacher certification in the eligible programs of study for the Work Ready Kentucky Scholarship Program established in KRS 164.787.

## Chapter 3

# Classified Staff Shortages And Other Issues Related To Districts And District Funding 

Nationally, school districts are experiencing shortages in classified positions such as food service workers, transportation staff, and custodians.

Classified Staff

School districts in Kentucky and around the nation are having difficulty employing certain classified staff. ${ }^{10}$ In Kentucky, classified staff positions do not require a teaching certificate. Some classified staff are required to hold certain degrees (such as school nurse, electrician, and finance officer), while others may not require a high school diploma (such as food service worker, custodian, and school bus monitor).

Districts are struggling to hire and retain classified staff, even after increasing their pay. The lack of bus drivers is causing students to miss instruction.

A lack of instructional aides may be causing some students not to receive their required services.

Districts are losing some classified staff members because they work fewer hours per day and fewer days per year than workers in the private sectors.

Most classified job descriptions and minimum qualifications were established over 30 years ago.

Even though many districts have raised the salaries for classified positions, districts are still struggling to retain and hire classified staff. All classified staff are crucial to students' education, but some roles are more directly involved. For instance, if districts do not have enough bus drivers, some students do not get to school in the morning, or they miss instruction when their bus runs late.

Paraeducators-referred to as instructional aides in the remainder of this report-support teachers and students during classroom instruction. There are two types of instructional aides: those who work with regular education teachers and those who work with exceptional child teachers. With the shortages in instructional aides, some students may not be getting the services they needespecially students who have special needs. ${ }^{11}$

Other classified staffing shortages include food service workers, substitutes and secretaries. One reason districts have trouble hiring and retaining classified staff is that these jobs are often seasonal, and classified employees work only when school is in session. Superintendents reported that a bus driver normally works a 185 day annual schedule for 4 hours each day. Many food service workers work a 185-day schedule for 6 hours each day. Classified staff can work more hours per day and more days per year in the private sector.

## Classified Job Descriptions

KRS 161.011(2) required the commissioner of education to establish job classifications and minimum qualifications for district classified positions by January 1992. Most job descriptions for
classified staff were established more than 30 years ago and have not been updated. Districts submit employment data professional staffing data and classified staffing data to KDE by October 1 each year on the total number of full-time equivalent (FTE) positions for each job classification. KDE reports this data to the US Department of Education in its EdFacts data submission.

KDE is not reporting all required staff to the US Department of Education. Some staff who are reported are misclassified.

Recommendation 3.1

Recommendation 3.2

After reviewing classified job descriptions and the EdFacts submission document on staffing specifications, OEA staff have concerns on how KDE is reporting staff to ED. For instance, contract staff working in districts must be included in the EDFacts data submission; however, KDE does not collect data on districts' contract staff and does include districts' contract staff in their submission to ED. In addition, in KDE's EdFacts submission, some administrative and ungraded teaching positions are misclassified. KDE's EdFacts data submission also includes outdated job descriptions and qualifications for some classified and certified positions. Appendix J lists concerns with the way data is compiled and reported to ED.

## Recommendation 3.1

The Kentucky Department of Education should review and revise classified job descriptions established under KRS 161.011(2) to ensure they align with the duties and qualifications of current classified staff.

## Recommendation 3.2

The Kentucky Department of Education (KDE) should work with school districts to collect data on districts' contract staff annually. For the EdFacts data submission that is required by the US Department of Education, KDE should ensure it is complying with the EdFacts data standards. These standards include submitting the number of districts' full-time equivalent contract staff and the correct job classifications for district staff.

## Classified Shortages By Job Classification

Classified staff make up approximately 46 percent of the workforce in local school districts. In 2023, the four classified job classifications with the most staff were instructional, transportation, food service, and operations. Approximately 30 percent of classified staff worked in an instructional role;

There were 817 fewer classified staff in 2023 than in 2019.
transportation staff made up 19 percent; food service staff made up 15 percent; and operations staff made up 10 percent of classified staff. Appendix K shows staffing by job classification and staffing changes from 2019 to 2023.

There were 817 fewer classified staff in 2023 than in 2019. Although there were staffing increases in some classified job classifications, there were decreases in others such as transportation, operations, and food service. Table 3.1 shows increases and decreases by job classification.

Table 3.1
Classified Staffing Changes, By Job Classification School Years 2019 To 2023

| Job Classification | Difference In Number <br> Of FTE Classified Staff | Percentage Point Change <br> From 2019 To 2023 |
| :--- | :---: | :---: |
| Food service | -262.47 | $-3.7 \%$ |
| Health | 284.29 | 22.2 |
| Instructional | 191.08 | 1.4 |
| Maintenance | 2.91 | 0.2 |
| Management | 241.43 | 21.9 |
| Operations | -355.91 | -7.3 |
| Secretarial/clerical | -100.23 | -2.4 |
| Transportation | $-1,255.32$ | -12.9 |
| Other | 437.10 | 13.7 |
| Total | -817.11 | -1.8 |

Note: FTE = full-time equivalent.
Source: Staff compilation of classified staffing data provided by the Kentucky Department of Education.

## Transportation Staff

Transportation staff has decreased by 13 percent since 2019. Superintendents reported needing to hire 764 bus drivers, 400 bus monitors, and 51 mechanics at the start of SY 2023.

To mitigate shortages of bus drivers, districts started paying for background checks and fees for commercial driver's licenses. Teachers, administrators, and other staff fill in to help with job openings in transportation.

Transportation staff includes bus drivers, bus monitors, and mechanics. Table 3.1 shows that there are 1,255 fewer transportation staff (13 percent) in 2023 than in 2019. Most of that difference can be attributed to a lower number of bus drivers. ${ }^{\text {a }}$ On their OEA survey, superintendents reported 764 bus driver positions that were unfilled at the start of SY 2023. They also reported almost 400 unfilled bus monitor positions and 51 unfilled mechanic positions. Rural districts reported having more difficulties hiring bus drivers than metro districts.

Some superintendents stated that, to mitigate shortages of bus drivers, their districts were shifting the costs of background checks and commercial driver's license (CDL) fees from the employee to the school district. To increase bus drivers' take-home salary, some

[^26]Districts are turning to high school students to help with the shortage of bus monitors.
districts increased the number of hours worked. Approximately one-fourth of superintendents reported that their districts combined routes and used transportation software to create more efficient routes and more effectively use their staff. One-third of the superintendents surveyed stated that other staff members in the district drive bus routes in order to compensate for fewer bus drivers. These staff members included teachers, administrators, other transportation staff, and retirees.

To help alleviate the bus monitor shortage, 13 districts have hired high school students, contracted with an outside employment agency, or used other staff due to a vacancy. Superintendents from eight districts reported that they outsourced their mechanic work in order to fill positions.

## Operations Staff

Custodians and groundskeepers are the majority of staff in the operations category. Table 3.1 shows that there are 356 fewer operations staff members in 2023 than in 2019. On the OEA survey, superintendents reported almost 500 unfilled positions for custodians at the beginning of SY 2023. Almost half ( 45 percent) also reported a crisis or major problem in recruiting custodians.

Superintendents in 29 districts were outsourcing some or all custodial jobs due to a lack of applicants. Three superintendents reported that their districts had tried outsourcing janitorial services, but that the external agencies had the same issues in hiring and retaining employees and other issues. One superintendent stated: We tried [outsourcing] custodial work but the company [we contracted with] sent us convicted felons and people that were using drugs [e]ven though our contract explicitly asked for thorough background checks.

## Food Service Staff

Cooks, bakers, account clerks, lunch monitors, and food service managers oversee the daily activities of the food service program. Table 3.1 shows that there are 262 fewer food service workers in 2023 than in 2019. On the OEA survey, 20 percent of superintendents reported that the hiring of food service workers was a major problem or crisis area. Superintendents also reported almost 500 job openings for food service workers at the beginning of SY 2023.

## Instructional Staff

Instructional staff include aides, interpreters, and program specialists.

Overall, the number of instructional staff increased from 2019 to 2023, but superintendents reported 900 unfilled instructional aide positions.

Instructional staff, such as instructional aides, help students with their daily school work in the classroom and assist students in following classroom rules and procedures. Educational interpreters and program specialists are included in this classification. Instructional aides also assist students who have special needs.

While the number of classified instructional staff increased by almost 200 employees between 2019 and 2023, superintendents reported on the OEA survey that they had 900 unfilled positions at the start of SY 2023. According to superintendents, there were 568 unfilled positions for exceptional child instructional aide and 332 unfilled positions for regular instructional aide at the beginning of SY 2023.

Federal Instructional Aide Qualifications. According to the Every Student Succeeds Act, any instructional aide who works in a Title I school must have a high school diploma or a GED and must meet one of the following qualifications:

- Completed at least 2 years of study at an institution of higher education
- Obtained an associate's (or higher) degree
- Met a rigorous standard of quality and can demonstrate, through a formal state or local academic assessment,
- knowledge of, and the ability to assist in instructing, reading, writing, and mathematics, or
- knowledge of, and the ability to assist in instructing, reading readiness, writing readiness, and mathematics readiness, as appropriate

Due to this federal requirement, KDE requires instructional assistants who work in Title I school to pass the Kentucky Paraeducator Assessment (KPA) if the aide does not have an associate's degree or 2 years of study at an institution of higher education. KPA is a district-administered test with 60 multiple-choice questions; candidates must correctly answer 48 , or 80 percent.

Several superintendents raised concerns about KDE's use of only the KPA test in hiring instructional aides. A superintendent from one large metro district stated:

Currently KDE requires using the KY Paraeducator Assessment (KPA). [KPA] has caused and continues to cause challenges with filling classified instructional positions in our district. We have predominantly Title I
schools. Federal law allows for an alternative form of assessment or demonstration of knowledge which would help but KDE states they only accept KPA.

Other than Kentucky, only three states have developed their own instructional aide test. Most states allow more than one test to be administered. Some allow districts to choose which test to allow and to determine passing scores.

Table 3.2 lists the types of tests or local assessments instructional aides must pass in order to work in a Title I school throughout the United States. Kentucky is one of four states that have their own state assessment, like the KPA test. In 31 states, applicants may take the ETS ParaPro Assessment, 10 states allow districts to select the ACT WorkKeys, and an additional 10 states allow districts to determine the type of test, which could include the ETS, WorkKeys or any other type of assessment. Appendix L includes data on which states allow which test and, where available, the minimum passing score.

Table 3.2
Types Of State Or Local Assessments Required For Paraeducators In Title I Schools 2023

| Assessment | Number Of States |
| :--- | :---: |
| ETS ParaPro Assessment | 31 |
| Locally determined assessment | 10 |
| ACT WorkKeys | 10 |
| Other | 9 |
| Not specified | 7 |
| Paraeducator Learning Network (Master Teacher) | 5 |
| State assessment | 4 |

Note: Figures do not sum to 51 (the 50 states and the District of Columba) because some states use more than one assessment.
Source: Amaya Garcia. Exploring Paraprofessional Requirements Across The 50 States And DC. NewAmerica.org. April 5, 2023.

## Recommendation 3.3

## Recommendation 3.3

The job qualification for instructional aides does not meet statutory requirements.

The Kentucky Board of Education should promulgate administrative regulations that govern the qualifications and minimum requirements of instructional aides in accordance with KRS 161.044, which refers to them as teachers' aides. Kentucky Department of Education staff should also evaluate other assessment options for instructional aides in Title 1 schools, in addition to the Kentucky Paraeducator Assessment.

Qualifications For Instructional Aides. The education requirements for Instructional Assistant I and II job descriptions allow instructional aides to be hired if they demonstrate progress toward obtaining a GED. ${ }^{12}$ The job description conflicts with KRS 161.044(1), which requires instructional aides to have a high school diploma or a high school equivalency diploma.

KRS 161.044(1) also requires the Kentucky Board of Education to promulgate administrative regulations governing the qualification of teachers' aides. There is currently no administrative regulation that addresses the qualifications of instructional aides.

## Other Classified Staffing Shortages

Superintendents indicate it is becoming more difficult to hire for other jobs, such as secretarial jobs, speech therapists, and daycare workers.

Over half of superintendents reported a crisis or major problem in hiring classified substitutes, who fill in when a vacancy exists or when staff take days off.

In the OEA survey, some superintendents indicated that it was beginning to become more difficult to fill some other classified staff positions, including secretarial jobs, speech therapists, daycare workers, district level finance positions, sign language interpreters, athletic coaches, and school resource officers.

Classified Substitutes. Substitutes for classified staff are called in to work for classified staff when there is a vacancy due to an unfilled position or when full-time classified staff take a day off from work. In the OEA survey, 52 percent of superintendents reported a major problems or crisis in hiring classified substitutes. In addition, 638 positions were unfilled at the beginning of SY 2023. Several superintendents reported using increased pay, hiring incentives, and flexible scheduling to help with the shortages in substitutes for classified staff, but they reported that these strategies have not increased the pool of substitutes for classified employees available each day.

## Recruitment, Retention, And Salaries Of Classified Staff

A total of 77 percent of superintendents reported a lack of qualified candidates applying for classified openings.

Local boards of education approve salaries for classified staff each year. On the OEA survey, most superintendents reported that salaries that are insufficient compared to the private industry make it difficult to recruit and retain classified staff. ${ }^{\mathrm{b}}$ In addition, 77 percent of superintendents reported that a lack of qualified candidates made it difficult to recruit classified staff.

## Geographic Differences

Of the superintendents who responded to the OEA survey, the portion reporting geographic location as a barrier to recruiting classified staff was more than 30 percentage points higher in

[^27]rural districts than in metropolitan districts. ${ }^{\text {c }}$ In 2023, classified staff earned approximately $\$ 9,000$ less in rural districts than in metropolitan districts. ${ }^{13}$ According to the OEA survey, the portion of superintendents reporting that classified staff salaries compared to private industry were a barrier to recruiting was 18 percentage points higher in metropolitan districts than in rural districts.

## Salaries Of Classified Staff

As shown in Table 3.3, from 2019 to 2023 average salaries for classified staff increased 12 percent to 18 percent depending on their job classification. Table 3.4 shows the 2022 wages of classified staff who left their positions in 2021 and compares them to average salary data for all classified workers by job classification. The average salary of school district employees who worked in transportation was $\$ 17,174$ in 2022. The average wages of classified school district employees with transportation job classifications who left working for Kentucky school districts in 2021 were $\$ 36,944$ in 2022-a difference of 115 percent. ${ }^{\text {d }}$

Table 3.3
Salaries Of Classified Employees, By Job Classification 2019 To 2023

|  | 2019 Average <br> Salary At District | 2023 Average <br> Salary At District | Increase In <br> Average Salaries | Percent Increase <br> In Average <br> Salaries |
| :--- | :---: | :---: | :---: | :---: |
| Job Area | $\$ 12,998$ | $\$ 15,527$ | $\$ 2,530$ | $19 \%$ |
| Food service | 15,845 | 18,693 | 2,848 | 18 |
| Transportation | 24,187 | 27,971 | 3,784 | 16 |
| Operations | 26,461 | 29,625 | 3,164 | 12 |
| Secretarial/clerical |  |  |  |  |

Note Figures may not sum due to rounding.
Source: Staff analysis of data from the Kentucky Department of Education.

[^28]Table 3.4
Average Salaries Of Classified Staff, Fiscal Year 2022, And 2022 Wages Of Classified Staff Who Left School Districts In 2021

|  | 2022 Average <br> Salaries Of <br> Classified Staff By <br> Job Classification | 2022 Wages Of <br> Classified Staff <br> Who Left In 2021 | Difference | Percent Difference |
| :--- | :---: | :---: | :---: | :---: |
| Job Area | $\$ 17,174$ | $\$ 36,944$ | $\$ 19,769$ | $115 \%$ |
| Transportation | 14,577 | 28,559 | 13,982 | 96 |
| Food service | 28,051 | 36,665 | 8,614 | 31 |
| Secretarial/clerical | 26,287 | 34,076 | 7,790 | 30 |
| Operations |  |  |  |  |

Note Figures may not sum due to rounding. The 2022 wages of classified staff who left a school district include wages only of individuals for whom data was recorded in all four quarters of 2022 in the Kentucky Center for Statistics data system.
Sources: Staff analysis of data from the Kentucky Department of Education and Kentucky Center for Statistics.

Districts are giving bonuses and increased salaries to more experienced staff in order to retain classified staff.

## Recruitment And Retention Of Classified Staff

On the OEA survey, 8 percent of superintendents indicated that their districts offered classified staff a bonus or stipend in order to retain their services. ${ }^{e}$ In addition, some superintendents indicated that their districts increase the salaries of more experienced workers in order to retain classified staff. ${ }^{\mathrm{f}}$ Most districts' classified salary schedules restrict years of service to allow only the years employees worked in school districts; however, some superintendents indicated that their districts started to allow employees to transfer years of service in a similar position in the private industry to count toward their longevity. This allows more experienced staff to earn higher starting salaries.

## Staff Retained Who Would Have Been Terminated In Previous Years

KRS 161.011 requires superintendents to give written notice by May 15 each year to classified employees whose contracts will not be renewed. The OEA survey asked superintendents if, due to shortages, they retained classified staff who in previous years would have been terminated due to poor performance. There were 70 superintendents who indicated that due to staffing shortages, they retained staff whom they would have terminated in previous years due to poor performance. According to the OEA survey, in SY 2022, staff shortages led to the retention of 312 classified staff who would have previously been terminated.

[^29]One superintendent terminated two employees due to poor performance, but hired them back because there were no other applicants.

Districts are losing state and federal funding, which will cause staffing cuts.

Table 3.5 shows the number of districts that retained staff who previously would have been terminated due to poor performance and the number of staff retained. One superintendent reported that retention of more than 20 classified staff who in other years would have been terminated, and another 10 districts retained 10 to 15 classified employees in 2022 who otherwise would have been terminated. One superintendent in a rural district terminated two employees due to poor performance in 2022, but rehired them in 2023 because no other applicants were available for those positions.

Table 3.5
Number Of Districts Retaining Classified Staff Who In Other Years Would Have Been Terminated Or Nonrenewed Due To Poor Performance, By Number Of Classified Staff Retained School Year 2023

| Number Of Districts | Number Of Classified Staff Retained |
| :--- | :---: |
| 1 | More than 20 |
| 10 | $10-15$ |
| 15 | $5-8$ |
| 14 | $3-4$ |
| 29 | $1-2$ |

Source: Staff compilation of data from superintendent survey.

## Other Issues Related To Districts And District Funding

In addition to staffing shortages, some local school districts also face a loss of funding though the Support Education Excellence in Kentucky (SEEK) program and the Elementary and Secondary School Emergency Relief fund. ${ }^{g}$ This section examines positions and expenditures that superintendents stated would have to be cut due to the changes in overall revenues.

## Federal Funding

All districts must spend all ESSER funds by September 30, 2024. According to interviews and the superintendent survey, superintendents and local boards are currently budgeting for the loss of the boost in revenues that they experienced with ESSER.

ESSER Positions. When students returned to school after the COVID-19 pandemic, school districts received an influx of federal funding to help students return safely and to support students with

[^30]Districts pay 2,379 certified employees and 1,511 classified employees with federal pandemic funds. Among these positions, almost half the employees already worked at districts.
learning losses during the pandemic. Districts received three rounds of ESSER funding. Table 3.6 shows approximately 2,379 certified staffing positions that were funded using ESSER funds during SY 2023. Table 3.7 shows approximately 1,511 classified staffing positions that were funded through ESSER funds during SY 2023.

Superintendents stated that most of the new certified positions using pandemic funds would be discontinued after funding ended.

Certified Staff. Overall, approximately 2,379 FTE certified positions were coded to ESSER funding in SY 2023, as reflected in Table 3.6. Almost half the positions funded through ESSER funds were newly hired staff. According to the OEA survey, 11 percent of superintendents reported that their districts created no new certified positions using ESSER funding. Superintendents stated that, after federal funding has been depleted, they would keep only 231 of the 1,171 certified positions created. Almost half of the certified staff being paid out of ESSER funding are elementary teachers, followed by 17 percent who are secondary teachers.

Table 3.6
Full-Time Equivalent Certified Staff Paid From ESSER Funding, By Job Classification 2023

| Certified Job Position | FTE Staff |
| :--- | :---: |
| Elementary teachers | $1,152.98$ |
| Secondary teachers | 393.07 |
| Pre-kindergarten teachers | 182.33 |
| School counselors | 164.93 |
| nnstructional coordinators and supervisors to staff | 164.15 |
| Ungraded teachers | 148.46 |
| School administrators | 43.50 |
| Kindergarten teachers | 43.11 |
| District administrators support staff | 36.89 |
| District administrators | 17.94 |
| School psychologist | 15.63 |
| Student support services staff | 9.20 |
| Librarians/media specialists | 6.90 |
| Total certified staff paid with ESSER funding | $2,379.09$ |

Note: FTE = full-time equivalent; ESSER = Elementary and Secondary School Emergency Relief. Student support staff and school psychologists are reported separately.
Source: Staff analysis of data from the Kentucky Department of Education.

## Superintendents reported

 that most new classified staff positions would also be abolished after federal funding ended.Classified Staff. Overall, approximately 1,511 FTE classified positions were coded to ESSER funding in SY 2023, as reflected in Table 3.7. Approximately 51 percent of the classified staff who were paid using ESSER funding in 2023 were instructional assistants. Another 18 percent of classified staff paid with ESSER funds were district administrators support staff. Over half (53 percent) of superintendents reported that they hired a
total of 586 new classified staff positions using ESSER funds. Superintendents reported that they planned to retain 118 of these positions when federal funding lapses.

Table 3.7
Full-Time Equivalent Classified Staff Paid From ESSER Funding, By Job Classification 2023

| Classified Job Position | Full-Time Equivalent Staff |
| :--- | :---: |
| Paraeducators/instructional aides | 775.54 |
| All other support staff | 264.74 |
| Student support staff other than psychology staff | 174.45 |
| School administrative support staff | 126.70 |
| School administrators | 49.16 |
| District administrators support staff | 46.51 |
| Pre-kindergarten teachers | 44.14 |
| District administrators | 10.48 |
| School counselors | 8.70 |
| School psychologist | 7.00 |
| Instructional coordinators and supervisors to staff | 2.00 |
| Librarians/media specialists | 1.00 |
| Library/media support staff | 1.00 |
| Total classified staff paid with ESSER funding | $1,511.42$ |

Note: ESSER = Elementary and Secondary School Emergency Relief.
Source: Staff analysis of data from the Kentucky Department of Education.

## SEEK Program

Support Education Excellence in Kentucky (SEEK) adjusted average daily attendance declined approximately 27,000 from 2022 to 2023.

SEEK funding is distributed based on student attendance and was not being calculated in school years 2021 and 2022, when districts could use outdated attendance numbers in calculating the SEEK funding distribution.

The SEEK program provides funds to school districts based on the previous year's adjusted average daily attendance (AADA). In 2022, the AADA used to calculate SEEK was 609,855 . In 2023, the AADA of Kentucky schools was 582,472 , a decline of more than $27,000 .{ }^{\text {h }}$

Loss Of Average Daily Attendance. SB 1 from the 2021 Special Session of the General Assembly and HB 1 from the 2022 Regular Session allowed school districts to use average daily attendance from 2019 or 2020 in their SEEK funding calculation for school years 2021 and 2022. This adjustment allowed districts that were losing students to maintain the same funding level instead of losing SEEK funds. Due to the pandemic and related issues, districts did not track average daily attendance for students in school years 2021 and 2022. Districts were required to start calculating average daily attendance in SY 2023 so that accurate data would be available for calculating the 2024 SEEK funding.

[^31]Since the pandemic, the number of chronically absent students has increased. Only one district reported a decrease in the percentage of such students. In one district, 63 percent of students were chronically absent.

Chronic Absenteeism. Table 3.8 shows the increase in students classified as chronically absent from school years 2018 to 2022. In 80 districts ( 47 percent), chronic absenteeism increased by at least 10 percent; one district had a 31 percent increase. Only one district had a lower chronic absenteeism rate in 2022 than in 2018. In SY 2022, the district with the lowest rate of chronic absence reported 7 percent of students being chronically absent, and the district with the highest rate reported 63 percent of students being chronically absent.

Table 3.8
Percentage Increase In Chronic Absenteeism, By District School Years 2018 To 2022

|  | <5 Percent | 5 Percent <br> To 9.99 Percent | 10 Percent <br> To 14.99 Percent | 15 Percent <br> To 31 Percent |
| :--- | :---: | :---: | :---: | :---: |
| Number of districts | 33 | 58 | 52 | 28 |

Source: Staff analysis of data from the Kentucky Department of Education.

Student attendance rates decreased between 2019 and 2023.

Attendance Rates. Table 3.9 shows the decrease in districts' attendance rates from 2019 to 2023. Student attendance decreased by more than 5 percent in six districts; all were rural districts in Eastern Kentucky. In the majority of districts (86), attendance rates decreased by less than 2 percent. Appendix M shows attendance rate changes by district.

Table 3.9
Percentage Point Decrease In Student Attendance, By District School Years 2019 To 2023

|  | Percentage Point Decrease |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Less Than 2.0 | $\mathbf{2 . 0}$ To 2.9 | $\mathbf{3 . 0}$ To 3.9 | $\mathbf{4 . 0}$ To 4.9 | $\mathbf{5 . 0}$ To 6.4 |
| Number of districts | 86 | 53 | 18 | 8 | 6 |

Source: Staff analysis of data from 2019 and 2023 Superintendent Annual Attendance Reports.

Roughly 85 percent of superintendents indicated that their district would receive less state funding because of a decline in student attendance. Rural districts were more apt to lose students than metropolitan districts.

Superintendents' Concerns Regarding SEEK Funding. Superintendents have expressed concerns to legislators regarding students who miss more days than they did before the COVID-19 pandemic. Student membership was 650,178 in 2020 and 630,495 in 2022, a decline of nearly 20,000 students. Both declining membership and student absenteeism impact AADA. Roughly 85 percent of superintendents indicated that their districts would lose SEEK funding due to AADA declines. The rate of superintendents anticipating this loss of funding was approximately 16 percentage points higher in rural districts than in metropolitan districts. Superintendents were asked how much they thought their SEEK funding would decrease based
on declines in attendance. They anticipated losing an average of $\$ 714,662$ in SEEK funding. The smallest decline reported was $\$ 40,000$; the largest was $\$ 8.2$ million. Table 3.10 shows that seven districts were unsure how much they would lose, and 35 districts expected to lose $\$ 500,001$ to $\$ 1$ million.

Table 3.10
Number Of Districts Anticipating Losing SEEK Funding In 2024
Due To Decreases In Adjusted Average Daily Attendance, By Anticipated Amount Of SEEK Funding Lost

2023

|  | Unsure Of | $\mathbf{\$ 2 0 0 , 0 0 0}$ | $\mathbf{\$ 2 2 5 , 6 3 2}$ To | $\mathbf{\$ 5 0 0 , 0 0 1}$ To | $\mathbf{\$ 1 , 0 0 0 , 0 0 1}$ To | More Than |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount | Or Less | $\$ 500,000$ | $\mathbf{\$ 1 , 0 0 0 , 0 0 0}$ | $\mathbf{\$ 3 , 5 0 0 , 0 0 0}$ | $\mathbf{\$ 8 , 0 0 0 , 0 0 0}$ |
| Number of districts | 7 | 23 | 28 | 35 | 14 | 1 |

Note: A total of 108 superintendents responded to this question.
Source: OEA Superintendent Survey.

Districts reported having to cut staff, reduce spending, raise taxes, and forgo raises due to the loss of SEEK funding.

The OEA survey asked superintendents how they would handle the loss of SEEK funding. Table 3.11 shows that 57 superintendents reported that their districts would have to cut staff, 15 reported that their districts would use money from their general fund, and 10 would use federal ESSER funding. Six 6 districts would raise taxes, and 5 would not be giving raises in 2024 due to the loss of funding.

Table 3.11
How Districts Planned To Handle Loss Of SEEK Funding In 2024
Due To Decreases In Adjusted Average Daily Attendance, By Strategy Discussed In OEA Survey

2023

|  | Cut <br> Staff | Reduce <br> Spending | Use General Fund <br> Contingency/Fund Balance | Use ESSER <br> Funds | Raise <br> Taxes | No <br> Raises | Other |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of districts | 57 | 34 | 15 | 10 | 6 | 5 | 6 |

Note: A total of 108 superintendents responded to this question. Figures do not total 108 because some superintendents reported more than one way to deal with lower SEEK funding.
Source: OEA Superintendent Survey.

## Instructional Funds Allocated To School Councils

Regulation requires districts to allocate instructional funds to school councils. Since 2010, the General Assembly has allowed districts to give schools less than the required allocation.

702 KAR 3:246, sec. 6(1) requires that school councils receive a minimum allocation of $31 / 2$ percent of the statewide guaranteed base funding level for SEEK based on prior year final average daily attendance from their districts for instructional purposes. These are known as Section 6 funds. The General Assembly has allowed districts to deviate from fully funding Section 6 allocations since the passage of the 2010 executive budget (HB 290) and changed the minimum to $\$ 100$ per pupil in average

Teachers reported a lack of quality resources at their schools. Over half reported spending quite a bit or a tremendous amount of their own funds on school supplies.
daily attendance. Subsequent budget bills through HB 1 (2022), which expires on June 30, 2024, have also allowed districts to allocate $\$ 100$ per pupil in average daily attendance instead of the $31 / 2$ percent required by 702 KAR 3:246, sec. 6(1).

In the results from the 2021 Kentucky Impact Study, 42 percent of teachers stated that the quality of resources at their school needed to improve, and 51 percent stated that they are spending quite a bit or a tremendous amount of their personal funds on classroom supplies. The OEA survey asked superintendents how much money their schools received from the district in Section 6 funds. As shown in Table 3.12, over half of the superintendents stated they were giving schools $\$ 100$ per student, compared to 22 percent of districts that gave the 3.5 percent that is codified in 702 KAR 3:246, sec. 6.

Table 3.12
'How Much Did Your Districts Allocate For Section 6 Funds?'

| Amount | Number Of Districts | Percent Of Responses |
| :--- | :---: | :---: |
| $\$ 100$ | 87 | $59 \%$ |
| 3.5 percent of SEEK base or $\$ 143.50$ | 33 | 22 |
| Other or $\$ 110$ to $\$ 140$ | 22 | 15 |
| No schools in district with a SBDM | 5 | 3 |

Note: SEEK = Support Education Excellence in Kentucky; SBDM = school-based decision-making council. A total of 147 district superintendents answered this question. Percentages do not sum 100 due to rounding.
Source: Staff compilation of data from superintendent survey.

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The quality of resources at schools may improve if districts were required to give the full amount of Section 6 funds required in regulation.
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Recommendation 3.4

If districts were required to allocate the full amount of Section 6 funding to schools, the quality of resources could improve, which may prevent teachers from having to spend their own money on classroom supplies.

## Recommendation 3.4

The General Assembly may consider discontinuing budget language that allows school district to provide school-based decision-making councils less than the $31 / 2$ percent of the SEEK guaranteed base amount for funds described in 702 KAR 3:246, section 6.

## Chapter 4

## Addressing Staffing Shortages

This chapter includes possible changes to current laws recommended by superintendents that may help alleviate issues related to recruitment and retention of staff. Examples of recent changes in other states are also shown.

OEA sent a survey to 171 superintendents and received a response from 158. The survey asked whether superintendents had any suggested changes to state statutes or regulations that may help alleviate shortages of classified and certified staff. This chapter includes suggestions to the General Assembly for changes in law. It ends with innovations that districts in Kentucky and other states have implemented to recruit and retain employees. As districts continue to encounter issues in recruiting and retaining sufficient staff, alternative solutions attract more people to the teaching profession

## Changes To Current Laws Recommended By Kentucky Superintendents

Superintendents' recommendations to alleviate staffing shortages in school districts include increased funding, changes to certification requirements, and changes to laws governing salary schedules.

## Funding

A quarter of superintendents stated that increased funding would help alleviate staffing shortages. The funding could increase salaries, add ESL staff, and increase mental health and behavioral supports, among other goals.

Some superintendents stated that the SEEK formula should use membership instead of adjusted average daily attendance.

Almost 25 percent of superintendents cited the need for increased funding as a factor in alleviating staffing shortages. They stated that the funding was needed to increase salaries; increase staffing in ESL, mental health and behavioral support, and transportation; provide universal preschool; improve facilities; pay for staterequired background checks; add more days for teachers to prepare their classroom at the start of the school year; and reimburse staff members for tuition.

SEEK Formula. Some superintendents stated that the SEEK funding formula should use student membership instead of adjusted average daily attendance.

## Changes To Employment Laws

On the OEA survey, superintendents advocated for changing requirements for classified and certified staff to alleviate staffing shortages.

Other suggested changes addressed teacher certification -for instance, not requiring students to take the Praxis test, removing the student teacher requirement, and eliminating the KDE-required paraeducator test that instructional aides take before being allowed to work in a Title I school.

Superintendents also recommended structural changes to teaching certificates, such as lifetime teaching certificates, changes to grade spans, and generalizing (such as having one science certificate). Expanding some grade levels for teacher certificates was suggested.

Superintendents suggested changes that affect school staff, such as eliminating the required step or years of experience increase on the salary schedule. This would allow school districts to move to incentive pay. Other suggestions addressed retirement and "red tape" on staff training.

Certification Requirements. On the OEA survey, some superintendents advocated for changing certification requirements to alleviate staffing shortages. Among their recommendations were

- eliminating the Praxis test;
- removing student teaching requirements for students in a traditional teacher preparation program to mirror the experiences of Option 6 teachers;
- eliminating or changing the KDE-required paraeducator test for instructional aides to work in Title I schools;
- making it easier for teachers with certifications to add certificates in other content areas and grade levels;
- removing the National Occupational Competency Testing Institute testing requirement for career and technical education teaching positions; and
- allowing high school students enrolled as "future educators" earning college credits in education to work as paid substitute teachers for grades K through 5 for a portion of their day to earn experience in a classroom.

Structural Changes To Teaching Certificates. On the OEA survey, some superintendents advocated for changing the structure of teaching certificates to alleviate staffing shortages. These changes included changes to grade spans, subjects, and expiration of certificates. Among the recommendations were

- bringing back lifetime teaching certificates;
- making elementary teaching certificates valid for grades K through 8;
- making high school certificates valid for grades 5 through 12 ;
- allowing for generalized certification in certain disciplines (for example, one science certificate for all sciences in grades 6 through 12); and
- including preschool in certificates for grades K through 8.

Changes To Laws Regarding Employees. On the OEA survey, some superintendents advocated for changing some laws regarding employee training, pay, and eligibility. These changes included changes to salary schedules, training requirements, eligibility of retired workers to teach, and pension contributions. Among the recommendations were

- doing away with required step increases on the salary schedule to add incentive pay;
- reducing required training for staff;
- reducing the "red tape" associated with required trainings;
- allowing retired teachers to return to the classroom without limits;
- allowing the salary teachers receive when performing classified jobs to be included in their teacher retirement system earnings instead of in the county employee retirement system (CERS);
- reducing the CERS rates, allowing districts to subsidize dental, vision, and life insurance premiums for employees;
- requiring colleges to increase their teacher graduation rates and enrollment numbers each year; and
- requiring the state to pay for required state, federal, and child abuse/neglect background checks.


## Strategies Employed By Districts And Other States To Mitigate Staffing Shortages

This section includes innovative
strategies and practices that some school districts in Kentucky and in the nation are piloting to see if they help address staffing shortages.

Nelson County has partnered with Western Kentucky University to develop a student apprenticeship program that leads to teacher certification within 2 years of high school graduation.

This section includes a selection of the innovative strategies and practices have been developed throughout Kentucky and the rest of the United States to attempt to mitigate staffing shortages. These strategies address preservice teachers, teacher benefits, teacher credentialing, and how the schools are structured.

## Preservice Teachers

In Kentucky and the rest of the United States, innovative programs address the teacher pipeline by considering preservice teacher education. These programs include internships, reimbursement for community college tuition, and paying student teachers.

Grow Your Own. Nelson County Schools is 1 of 16 US districts to participate in the National Center for Grow Your Own National Registered Apprenticeship in Teaching District Network. ${ }^{14}$ The nationally registered apprenticeships allow prospective teachers to undergo training through a teacher preparation program while they are paid to work in schools as classified staff members. ${ }^{15}$ Nelson County has partnered with Western Kentucky University to develop the apprenticeship program, which includes dual-credit coursework, university coursework, and student teaching. Students who complete the program become fully certified teachers 2 years after high school graduation. ${ }^{16}$

Tuition Reimbursement For Community College. Colorado created Career Advance Colorado, a $\$ 40$ million state program to address labor shortages in high-demand fields. ${ }^{17}$ It covers tuition, course materials, and fees for up to 2 years of training for students of education and early childhood education. ${ }^{\text {a }}$ Colorado has seen a

[^32]Student teachers in Kentucky cannot be paid for time they spend in training. Maryland, Michigan, Oklahoma, and other states have started paying to help college students while they complete their student teaching requirements.
need for early education employees, as there was to be an expansion of tuition-free preschool starting in August 2023, with more than 31,000 4-year-old children expected to enroll. ${ }^{18}$

Student Teacher Pay. In Kentucky, student teachers must participate in a minimum number of hours of training, but they cannot be paid for time spent student teaching. 16 KAR 5:040 requires prospective student teachers to complete at least 200 hours of field experience in a variety of primary through grade 12 school settings. The regulation also requires student teaching programs to include 70 full days, or the equivalent, in instructional settings that correspond to the grade levels and content areas of the student teacher's certification program. 16 KAR 5:040, sec. 5(7) prohibits student teachers from receiving direct compensation for student teaching; however, 16 KAR 5:040, sec. 6 regulates how cooperating teachers in school districts can be compensated. ${ }^{\text {b }}{ }^{19}$

Other states have made provisions to compensate student teachers for their services.

- In 2023, Maryland passed a bill creating a stipend for student teachers. ${ }^{20}$ Eligible students would be awarded a $\$ 20,000$ annual stipend over a 10 -month period. The pilot program is restricted to students at in-state institutions where more than 40 percent of attendees are eligible to receive federal Pell Grants. ${ }^{21}$ Students must enroll in a teacher preparation program, participate in an internship at a public school, and continue to work toward a degree. In addition, recipients must teach in the state for 2 years after they complete their degree. ${ }^{22}$
- In SY 2023, Michigan began paying $\$ 9,600$ student teacher stipends. Participants do not have to be Michigan residents but must be enrolled full-time in a required student teaching experience. ${ }^{23}$
- In SY 2022, Oklahoma began paying student teachers a stipend of up to $\$ 3,250$. The program is funded through COVID-19 relief funds, so the program may conclude at the end of SY 2024. Participants are awarded $\$ 1,625$ during their first week of teaching and an additional $\$ 1,625$ from the school district if they are hired as full-time educators. ${ }^{24}$
- In SY 2023, Colorado started offering eligible student teachers $\$ 11,000$ for a 16 -week residency or $\$ 22,000$ for a 32 -week residency. To qualify for the stipends, students' expected

[^33]family contribution must not exceed 200 percent of the maximum federal Pell-eligible expected family contribution. ${ }^{25}$

- In school years 2022 and 2023, Nevada student teachers were eligible to receive up to $\$ 2,000$ in tuition assistance for the final three semesters of their educator preparation program and $\$ 8,400$ for stipends during their student teaching semester. The Incentivizing Pathways to Teaching program was anticipated to support 3,840 preservice teachers in Nevada. Money was allocated to this program from federal COVID-19 relief funds. ${ }^{26}$
- In SY 2023, Tuscaloosa City, Alabama, started paying student interns a stipend during their internship if they committed to teaching in the district after graduation. The pilot program was designed to pay up to 10 student interns $\$ 1,200$ each during their internships. It was cited as a way for the district to get an early commitment from the student interns and keep them in the school system. ${ }^{27}$


## Teacher Certification

This section reviews some innovative teacher pipeline initiatives.

Some states are allowing candidates to receive their teacher certification with an online fast-track program. There are two for-profit online credentialing companies.

The iteach certification program is accredited by the National Council for Accreditation of Teacher Education and is working in four of Kentucky's bordering states. Kentucky does not allow these programs.

Innovative programs in other states address the teacher pipeline by considering aspects of teacher certification. These programs include fast-track certification, changes in teacher certification exams, allowing military veterans to teach, and allowing individuals to become teachers or substitute teachers before completing a bachelor's degree.

Fast-Track Credentialing. Fast-track credentialing programs are designed to prepare candidates to enter the classroom in less than 1 year. ${ }^{28}$ These programs are designed for individuals with bachelor's degrees and are administered by both for-profit and nonprofit organizations. ${ }^{c}$ Two fast-track for-profit online credentialing companies that focus solely on teacher certification, iteach and Teachers of Tomorrow, have been working with states to alleviate teacher shortages. ${ }^{29}$ Kentucky does not currently participate in either program.

Iteach, a for-profit online teacher credentialing company, provides an alternative teacher certification program, accredited by the National Council for Accreditation of Teacher Education. According to its website, iteach is currently working in 11 states, 4 of which -Indiana, Tennessee, Virginia, and West Virginiaborder Kentucky.

[^34]Teachers of Tomorrow is a fully online program whose students receive degrees in 9-12 months.

Twelve states have made changes to teacher certification requirements, such as adjusting Praxis scores, lowering the necessary college GPA, and eliminating licensing tests.

The website of Teachers of Tomorrow website says the program operates in nine states. ${ }^{\text {d }}$ A fully online teaching program, it allows students to get a degree in 9 to 12 months. Texas uses Teachers of Tomorrow but placed the company on probation after state regulators found that its training was not based on research. ${ }^{30}$

Changes In Certification Exams. Approximately 12 states have recently amended, or are considering amending, certification requirements to help alleviate teacher shortages. ${ }^{31}$ In December 2022, Kentucky's Education Professional Standards Board changed the passing score on the Praxis to -1 standard error of measure (SEM) on a trial basis until December 31, 2023. ${ }^{\text {e }}{ }^{32}$ In 2022, other states also changed certification exam requirements.

- Missouri changed the passing score on the Praxis to - 1 SEM, potentially affecting 550 prospective teachers. ${ }^{f 33}$
- Alabama lowered the Praxis test score requirement but increased its GPA requirement from 2.5 to $2.75 .{ }^{34}$
- The New Jersey State Board of Education implemented a new law allowing teachers to apply for certification if they did not meet the minimum GPA requirement or the minimum test score requirements for certification as part of a 5 -year pilot program. ${ }^{35}$
- Iowa removed the Praxis exam requirement for teacher licenses. ${ }^{36}$
- Maine, Montana, New Mexico, and Wisconsin no longer require licensing tests for elementary teacher candidates. ${ }^{37}$

Military Veterans Certification Pathway. In 2022, Florida passed a law allowing military veterans without bachelor's degrees to teach. ${ }^{38}$ To be eligible for this program, military veterans must have completed 4 years of active duty, been honorably or medically discharged, acquired 60 college credits with a GPA of 2.5 , obtained a passing score on a Florida subject area examination, and cleared a background screening. ${ }^{39}$ Teachers with these certificates must also earn their bachelor's degree during the 5-year period and may not teach subject areas that require a master's degree. ${ }^{40}$ The temporary certificate cannot be renewed, nor does it apply to military spouses or families. ${ }^{41}$ As of

[^35]Kentucky allows alternative certification for veterans who meet certain requirements, such as having a bachelor's degree.

September 2023, approximately 31 veterans were teaching in Florida through this certification pathway. ${ }^{42}$

Kentucky allows veterans of the armed forces to become certified teachers through the Option 5 certification pathway. To qualify, applicants must have an honorable discharge from active duty or from 6 years with the Reserve or National Guard, must hold a bachelor's degree in the subject matter or related area for which certification is sought, must have a GPA of 2.75 or hold an advanced degree, and must have passed EPSB-approved subject matter assessments. ${ }^{43}$ A candidate meeting these criteria is issued a 1-year provisional certificate. After 1 year, the teacher is eligible for the professional certificate. ${ }^{44}$ In 2023, 310 teachers held an Option 5 certificate.

Arizona allows high school graduates to become substitute teachers in schools if they pass a background check. Alabama pays student interns to lead a classroom with no oversight by a lead teacher.

## Allowing High School Graduates To Obtain Emergency Substitute Teaching Certificates. In 2022, Arizona removed

 the 120-day limit on work by certified substitute teachers, allowing them to work until the position is filled. ${ }^{45}$ In 2022, the Arizona Board of Education also allowed 2-year emergency substitute teacher certificates, which can be obtained by high schoolgraduates who pass background checks in school districts with staffing emergencies. ${ }^{46}$ In SY 2023, because of trouble finding substitute teachers, Alabama started paying student interns to lead classrooms with no oversight by a lead teacher. The Alabama Department of Education estimated that 50 student interns were leading classrooms and being paid as long-term substitutes in SY $2023 .{ }^{47}$

## Teacher Benefits

Innovative programs in other states address the teacher pipeline by considering teacher benefits. These programs include housing for teachers and allowing retired teachers to teach without affecting their pensions.

Teacher Housing. In the OEA survey, eight superintendents mentioned housing as an issue in recruiting and retaining staff. Superintendents cited lack of availability, affordability, safe housing, the farmland status of most property, and lack of rental homes as contributing to teacher shortages. On the OEA survey, no superintendents stated that their districts provided teacher housing as a recruitment strategy, but some superintendents stated that their districts were examining the possibility.

States including Arizona, Arkansas, California, New Mexico, and Texas are starting to build affordable housing for teachers.

Rhode Island allows retirees to substitute teach without giving up their pensions.

Other states provide housing incentives for school staff. Support Teacher Housing, a nonprofit organization in the Bay Area of California, advocates for affordable housing for local teachers whose income is too high for subsidized housing but too low for market-rate rents in their communities. ${ }^{48}$ In addition, efforts are under way to build affordable housing for teachers in Austin, Texas; Bentonville, Arkansas; and the Pojoaque Valley School District near Santa Fe, New Mexico. ${ }^{49}$ Chino Valley Unified School District in Arizona is using federal money to build 10 studio units for teachers. ${ }^{50}$ To live in these studios, teachers will pay approximately $\$ 550$ per month-much lower than market rents. ${ }^{51}$

Allowing Retirees To Substitute Teach Without Pension Limits. In 2023, Rhode Island passed legislation to allow retirees to substitute teach and earn up to $\$ 300$ per day for a full year for school years 2024 and 2025 without giving up their pensions. ${ }^{52}$ Lawmakers there also eliminated the 90-day post-retirement employment limit as long as a local district has made an unsuccessful effort to fill the position with a nonretired employee. ${ }^{53}$

## Structure Of Schools

Innovative programs in other states address teacher shortages by considering the structure of schools. These initiatives include implementing a 4 -day school week and using remote teachers.

Four-Day School Week. In 2021, 650 US school districts used 4-day school weeks; by 2023, the number was approximately $850 .{ }^{54}$ The trend toward 4-day school weeks is part of an effort to improve teacher recruitment and retention. ${ }^{55}$ Two Kentucky districts-Webster County and Jenkins Independent-have tried the 4-day school week. Hoping to save money, Webster County implemented it in SY 2003 and maintained it until changing to a more traditional schedule in SY 2015. ${ }^{56}$ Jenkins Independent moved to the 4 -day schedule in 2005 but has since reverted to a 5-day week. ${ }^{57}$ Research is still inconclusive on the effects of 4-day weeks on teacher recruitment and retention and student attendance and behavior. ${ }^{58}$

Remote Teachers. In North Carolina, due to teacher shortages, two rural districts are sharing a math teacher. She teaches in Clinton High School and uses Google Meet to teach students in John A. Holmes High School, 150 miles away. ${ }^{59}$ Holmes High

School used ESSER funds to pay the teacher a $\$ 9,000$ stipend per remote class. ${ }^{60}$

A few Kentucky districts, such as Jefferson County, alleviate bus driver shortages by paying parents to drive their children to school.

Reimbursement For Parents Transporting Students To School. Due to a national bus driver shortage, some districts offer parents money to transport their children to school. The School District of Philadelphia provides monthly payments to eligible parents to drive their children to and from school. ${ }^{61}$ The rate is $\$ 300$ a month if the parent provides both morning and afternoon transportation. If parents cannot transport in the afternoon and the student rides the bus home, the parents can still receive $\$ 150$ a month to drive the student to school. ${ }^{\text {h }}{ }^{62}$ In SY 2022, EastSide Charter school in Wilmington, Delaware, offered parents $\$ 700$ a year to drive their children to school. This reimbursement applied per child, so a parent who transported three children was reimbursed $\$ 2,100$ for the school year. ${ }^{63}$

In SY 2023, Jefferson County Public Schools approved stipends for families transporting their preschool students to and from school. ${ }^{64}$ Parents can receive $\$ 5$ per day (up to $\$ 25$ a week) for providing this service. The district board set this amount based on a rate of $\$ 0.44$ per mile and an estimated travel distance of 5.8 miles per day each way. ${ }^{65}$

[^36]
## Appendix A

## Superintendent, Principal, And Teacher Surveys

## Survey Sent To Superintendents

OEA sent a survey concerning staffing shortages to all 171 district superintendents, 158 of whom responded, for a response rate of 92 percent. Below is the text of the survey.

## Superintendent Survey

The Education Assessment and Accountability Review Subcommittee of the Kentucky General Assembly has directed the Office of Education Accountability (OEA) to study classified and certified staffing shortages along with what districts have done to recruit and retain classified and certified staff. To gain more information for the study, OEA is surveying all superintendents concerning classified staffing shortages, all school principals concerning certified staffing shortages, and a random sample of teachers.

This survey addresses classified and certified staffing shortages, substitute teachers, and a few overall district questions. This survey should take approximately 20 minutes to complete. Individual answers will be kept strictly confidential. The final report will summarize aggregate responses and will not identify any individual respondent.

Please complete the survey by April 27, 2023.
If you have any questions, please contact Sabrina Cummins or Allison Stevens by calling (502) 564-8167 or via email at sabrina.cummins@lrc.ky.gov and allison.stevens@lrc.ky.gov.

We appreciate your time and information.

## Respondent Information

1. District name
2. How many total years have you been a superintendent?
3. How many years have you been a superintendent in this district?
4. Name and title of individual completing survey

## Staffing Shortages

The questions below address classified staffing shortages. Please answer the following questions for the 2022-2023 school year.

For classified positions, classified shortages are indicated by unfilled positions and include positions temporarily filled by other school personnel (such as teachers) until an optimally qualified appropriate candidate is found. For example, temporarily filling a bus driving vacancy with a CDL certified teacher until a permanent bus driver is hired would be considered a shortage. ${ }^{\text {a }}$
5. To what extent does your district have staffing shortages for the following positions related to student transportation?

|  | We Do Not <br> Have Any <br> Shortages In <br> This Position | We Have Some <br> Shortages, But <br> They Are Not <br> A Problem | A Small <br> Problem | A Medium <br> Sized <br> Problem | A Major <br> Problem |
| :--- | :--- | :--- | :--- | :--- | :--- | A Crisis |  |  |
| :--- | :--- | :--- |
| Bus drivers |  |
| If applicable, what is your district doing to mitigate the staffing shortages? |  |
| Bus aides |  |
| If applicable, what is your district doing to mitigate the staffing shortages? |  |
| Mechanics |  |
| If applicable, what is your district doing to mitigate the staffing shortages? |  |

6. To what extent does your district have staffing shortages for the following positions related to student mental and physical health?

|  | We Do Not <br> Have Any <br> Shortages In <br> This Position | We Have Some <br> Shortages, But <br> They Are Not <br> A Problem | A Small <br> Problem | A Medium <br> Sized <br> Problem |
| :--- | :--- | :--- | :--- | :--- | | A Major |
| :---: |
| Problem |$\quad$ A Crisis

7. To what extent does your district have staffing shortages for the following positions related to facilities?

|  | We Do Not <br> Have Any <br> Shortages In <br> This Position | We Have Some <br> Shortages, But <br> They Are Not <br> A Problem | A Small <br> Problem | A Medium <br> Sized <br> Problem | A Major <br> Problem |
| :--- | :---: | :---: | :---: | :---: | :---: | A Crisis |  |  |  |
| :--- | :--- | :--- | :--- |
| Custodians |  |  |
| If applicable, what is your district doing to mitigate the staffing shortages? |  |  |
| Maintenance workers |  |  |
| If applicable, what is your district doing to mitigate the staffing shortages? |  |  |

[^37]8. To what extent does your district have staffing shortages for the following "other" positions?

| We Do Not Have Any Shortages In This Position | We Have Some Shortages, But They Are Not A Problem | A Small Problem | A Medium Sized Problem | A Major Problem | A Crisis |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Food service workers <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |
| Paraeducators (instructional <br> aides) for special <br> education students <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |
| Paraeducators (instructional <br> aides) for regular <br> education students <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |
| School resource officers <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |
| Principals <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |
| Assistant principals If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |
| Bookkeepers <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |
| Secretaries <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |  |  |  |

9. To what extent does your district have staffing shortages for the following positions related to substitute workers?

|  | We Do Not <br> Have Any <br> Shortages In <br> This Position | We Have Some <br> Shortages, But <br> They Are Not <br> A Problem | A Small <br> Problem | A Medium <br> Sized <br> Problem | A Major <br> Problem |
| :--- | :---: | :---: | :---: | :---: | :---: | A Crisis |  |  |  |
| :--- | :--- | :--- | :--- |
| Substitutes for <br> classified staff <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |
| Substitutes for <br> certified staff <br> If applicable, what is your district doing to mitigate the staffing shortages? |  |  |

10. Has your district experienced any classified staffing shortages not described in the previous questions?

- Yes
- No

If you answered yes, what was/were the classified staffing shortage area(s) and how many positions were unfilled at the beginning of the 2022-2023 school year and now?
11. Is your district currently outsourcing any positions with an outside agency? For example, custodians, food service, etc. Please do not include contract staff such as behavior consultants or nurses.

- Yes
- No

If yes, what jobs and what has been the impact?
12. In the past, has your district discontinued any strategies that were previously in place to mitigate staffing shortages?

- Yes
- No

If yes, please describe the strategy and explain why it is no longer in place.

## Substitute Teachers

13. What is the daily rate of pay for substitute teachers in your district for fiscal year 2022-2023?

- Rank IV - 64 credit hours or more
- Rank III - Bachelor's degree
- Rank II - Master's degree
- Rank I - Master's degree plus 30 additional hours
- Retired teacher substitute

14. Does your district provide any substitute teacher incentive pay? For example, paying more for high-demand substitute teaching positions, such as special education, chemistry, math, etc.; or working in a challenging school?

- Yes
- No

If yes, please explain
15. Currently, how many full-time substitute teachers does your district employ? (Full-time substitute teachers are paid according to the full-time teacher salary schedule and receive all employee benefits a regular teacher receives. This does not include long-term substitutes.)

## Number Of Unfilled Positions

16. For each of the positions listed below, please indicate how many unfilled staff positions your district had on the first day of school for students in school year 2022-2023.

- Bus drivers
- Bus aides
- Mechanics
- Psychologists
- Speech therapists
- Occupational therapists
- Physical therapists
- School nurses
- Custodians
- Maintenance workers
- Food service workers
- Paraeducators (instructional aides) for special education students
- Paraeducators (instructional aides) for regular education students
- School resource officers
- Principals
- Assistant principals
- Bookkeepers
- Secretaries
- Classified substitutes
- Certified substitutes

17. For each of the positions listed below, please indicate how many unfilled staff positions your district currently has as of April 1, 2023.

- Bus drivers
- Bus aides
- Mechanics
- Psychologists
- Speech therapists
- Occupational therapists
- Physical therapists
- School nurses
- Custodians
- Maintenance workers
- Food service workers
- Paraeducators (instructional aides) for special education students
- Paraeducators (instructional aides) for regular education students
- School resource officers
- Classified substitutes
- Certified substitutes

18. Due to staffing shortages, how many certified staff members did your district retain for the 2022-2023 school year that would have otherwise been terminated or non-renewed in prior years due to poor performance? Comments (if applicable).
19. Due to staffing shortages how many classified staff members did your district retain for the 2022-2023 school year that would have otherwise been terminated or non-renewed in prior years due to poor performance? Comments (if applicable).

## Barriers For Recruiting And Retaining Staff And Possible Solutions

20. To what degree is each of the following a barrier to your district's ability to recruit classified staff?
$\left.\begin{array}{lccc}\hline & \begin{array}{c}\text { Not A } \\ \text { Barrier }\end{array} & \begin{array}{c}\text { Minimal } \\ \text { Barrier }\end{array} & \begin{array}{c}\text { Moderate } \\ \text { Barrier }\end{array}\end{array} \begin{array}{c}\text { Extreme } \\ \text { Barrier }\end{array}\right]$

Please describe any other factors that affect classified staff recruitment that are not listed above and estimate the degree to which each affects your district.
20. To what degree is each of the following a barrier to your district's ability to retain classified staff?

|  | Not A <br> Barrier | Minimal <br> Barrier | Moderate <br> Barrier | Extreme <br> Barrier |
| :--- | :---: | :---: | :---: | :---: |
| Geographic location |  |  |  |  |
| Community and local support |  |  |  |  |
| Salary insufficient compared to other schools or districts |  |  |  |  |
| Salary insufficient compared to private industry |  |  |  |  |
| Benefits insufficient compared to private industry |  |  |  |  |
| Lack of qualified candidates |  |  |  |  |
| Student behavior |  |  |  |  |
| Work-life balance |  |  |  |  |

Please describe any other factors that affect classified staff retention that are not listed above and estimate the degree to which each affects your district.
22. To what degree is each of the following a barrier to your district's ability to recruit classroom teachers?
\(\left.$$
\begin{array}{l}\hline \\
\hline \text { Geographic location } \\
\text { Salary insufficient compared to other districts } \\
\text { Salary insufficient compared to private industry }\end{array}
$$ $$
\begin{array}{c}\text { Minimal } \\
\text { Barrier }\end{array}
$$ $$
\begin{array}{c}\text { Moderate } \\
\text { Barrier }\end{array}
$$ \begin{array}{c}Extreme <br>

Barrier\end{array}\right]\)| Benefits insufficient compared to private industry |
| :--- |
| Lack of qualified candidates, in general |
| Lack of qualified candidates, in particular subjects |
| Student behavior |
| Please describe any other factors that affect certified staff recruitment that are not listed |
| above and estimate the degree to which each affects your district. |
| 23. Please describe any policies, practices, or strategies your district uses to recruit classroom |
| teachers. |

24. To what degree is each of the following a barrier to your district's ability to retain classroom teachers?

|  | Not A <br> Barrier | Minimal <br> Barrier | Moderate <br> Barrier |
| :--- | :---: | :---: | :---: |
| Extreme <br> Barrier |  |  |  |
| Geographic location |  |  |  |
| Community and local support |  |  |  |
| Salary insufficient compared to other schools or districts |  |  |  |
| Salary insufficient compared to private industry |  |  |  |
| Benefits insufficient compared to private industry |  |  |  |
| Lack of qualified candidates |  |  |  |
| Student behavior |  |  |  |
| Work-life balance |  |  |  |

Please describe any other factors that affect certified staff retention that are not listed above and estimated the degree to which each affects your districts.
25. Please describe any policies, practices, or strategies your district uses to retain classroom teachers. For instance, financial assistance for continuing education, housing, reduced class sizes, or mentoring.
26. Does your district have a teacher mentoring program?

- Yes
- No

If yes, please describe.
27. On average, how often does your mentoring program provide the following?

|  | Never | Less Than Once Per Month | Once Per Month | Several Times Per Month | Once Per Week | Almost Daily | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Developing lesson plans |  |  |  |  |  |  |  |
| Being observed by a resource teacher/mentor |  |  |  |  |  |  |  |
| Observing a resource teacher/mentor |  |  |  |  |  |  |  |
| Analyzing student work |  |  |  |  |  |  |  |
| Reviewing results of students' assessments |  |  |  |  |  |  |  |
| Addressing student or classroom behavior issues |  |  |  |  |  |  |  |
| Reflecting on and discussing the effectiveness of teachers' teaching |  |  |  |  |  |  |  |
| Aligning lesson plans with the state curriculum and local curriculum |  |  |  |  |  |  |  |
| Other (please specify) |  |  |  |  |  |  |  |

## Staffing Shortages

28. Does your district provide additional bonuses or stipends for certified or classified staff retention? Please do not include any one-time bonuses that were provided out of ESSER funds. ${ }^{\text {b }}$

|  | Yes |
| :--- | :--- |
|  | No |
| Certified staff retention <br> If yes, please explain |  |
| Classified staff retention <br> If yes, please explain |  |

29. Which of the following additional benefits (paid by the local board of education and not paid by employees) does your district provide to all staff?

- Additional insurance for life, dental, or vision
- Gym or gym membership
- Free health care services available at district/school
- Other, please explain

30. How many new certified positions did your district create due to ESSER funding that would not have otherwise been created had these funds not been available?
31. Once ESSER funding is depleted, how many of these certified positions will be retained?
32. How many new classified positions did your district create due to ESSER funding that would not have otherwise been created had these funds not been available?
33. Once ESSER funding is depleted, how many of these classified positions will be retained?
34. How much money did your district allocate to schools for SBDM Section 6 funding this year? ${ }^{\text {c }}$

- $\$ 100$ per ADA provided in budget language
- $\$ 143.50$ per ADA ( $3.5 \%$ of the SEEK guaranteed base per statute) ${ }^{\text {d }}$
- Other. Please say how much per student.

35. Is your district working toward having an Option 9 teacher certification program?

- Yes
- No
- My district already has an Option 9 program.

If no, please describe the barriers to creating an Option 9 program.

[^38]
## Districts With An Approved Option 9 Teacher Certification Program

36. Other than paying the salaries of classified employees, what forms of financial compensation are offered to participants in approved Option 9 programs in your district? Please check all that apply.

- The district pays a portion of the tuition of classified staff members enrolled in an approved Option 9 teacher certification program.
- The district pays the full tuition of classified staff members enrolled in an approved Option 9 teacher certification program.
- The district pays a stipend to classified staff members enrolled in an approved Option 9 teacher certification program.
- Classified staff members who are enrolled in an approved Option 9 program are eligible for bonuses if they teach in the district for a specified amount of time.
- Other (please specify)

37. Does your district have any contractual obligations for classified staff members who take part in an approved Option 9 teacher certification program? For example, if your district pays the tuition for Option 9 participants, they are contractually obligated to remain as teachers in your district for a specified amount of time.

- Yes, 1 year
- Yes, 2 years
- Yes, 3 years
- Yes, 4 years
- Yes, 5 years
- Yes, 6 or more years
- No

If yes, please explain.
38. Does your district limit participation in approved Option 9 teacher certification programs to certain certification fields? Please select all that apply.

- My district does not limit participation to certain fields
- Academically advanced
- Art
- Career and technical education
- Elementary education
- Early childhood
- English as a second language
- Health and physical fitness
- Language arts
- Math
- Music
- Science
- Social studies
- Special education
- World languages
- Other (please specify)


## SEEK Funding

39. For SY 2023-2024, districts will start receiving SEEK funds based on SY 2022-2023 AADA. ${ }^{e}$ Do you anticipate your district's SEEK funding decreasing due to your district's AADA going down?

- Yes
- No

40. How much money are you anticipating losing? (Dollar amounts only, please.)
41. How is your district handling the loss of funds?

## Overall

42. Please describe any policies, practices, or strategies your district uses or is considering to recruit classified staff that have not already been discussed.
43. Please describe any policies, practices, or strategies your district uses or is considering to recruit certified staff that have not already been discussed.
44. Do you have any suggested changes to state statutes or regulations that may help alleviate classified staffing problems?
45. Do you have any suggested changes to state statutes or regulations that may help alleviate certified staffing problems?

## Thank you for completing the survey.

## Survey Sent To Principals

OEA sent a survey concerning staffing shortages to 1,151 principals, 581 of whom responded, for a response rate of 50.5 percent, representing 84.8 percent of districts. Below is the text of the survey.

## Principal Survey

The Education Assessment and Accountability Review Subcommittee of the Kentucky General Assembly has directed the Office of Education Accountability (OEA) to study classified and certified staffing shortages along with what districts have done to recruit and retain classified

[^39]and certified staff. To gain more information for the study, OEA is surveying all school principals concerning certified staffing shortages, all superintendents concerning classified staffing shortages, and a random sample of teachers.

This survey only addresses certified staff and should take about 20 minutes to complete.
Individual answers will be kept strictly confidential and will not be shared with your district central office. The final report will summarize aggregate responses and will not identify any individual respondent.

Please complete the survey by April 27, 2023.
If you have any questions, please contact Allison Stevens or Sabrina Cummins by calling (502) 564-8167 or via email at allison.stevens@lrc.ky.gov and sabrina.cummins@lrc.ky.gov.

We appreciate your time and information.

## Participant Information

1. Name and title of individual completing survey
2. District name
3. How many total years have you been a principal?
4. How many years have you been a principal at this school?
5. Which grades are included in your school? There are several questions that are organized by school level (elementary school, middle school, and high school). Please only answer the questions for your school level. It is possible that your school may include more than one level. Please answer all questions for the levels included in your school.

- Elementary school
- Elementary and middle school
- Middle school
- Middle and high school
- High school
- Elementary, middle, and high school


## Certified Staffing Shortages

The questions below address shortages for teachers and other certified staff. These shortages are indicated by unfilled positions and include positions filled by professionals with irregular, provisional, temporary, or emergency certificates, and teachers teaching in program areas for which they are not certified.
"Satisfactory" is defined as applicants with appropriate certifications that meet your school's expectations of quality.

Please only answer for your school level. There are several questions that are organized by school level (elementary school, middle school, and high school). It is possible that your school may include more than one level. Please answer all questions for the levels included in your school.
6. For all school levels, in your experience, which best describes the supply of applicants in the following program areas at your school for the 2022-2023 school year?

|  | No <br> Available Applicants | Applicants Available But Not Satisfactory | Few <br> Satisfactory Applicants | Generally Enough Satisfactory Applicants | Abundance Of <br> Satisfactory Applicants | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School counselors |  |  |  |  |  |  |
| Library and media specialists |  |  |  |  |  |  |
| Tutors/interventionists |  |  |  |  |  |  |

7. For all school levels, in your experience, which best describes the supply of teacher applicants in the following program areas at your school for the 2022-2023 school year?

|  | No | Applicants <br> Available <br> Available <br> Applicants | Few <br> Satisfactory | Generally <br> Enough <br> Satisfactory <br> Applicants | Abundance <br> Satisfactory <br> Applicants |
| :--- | :---: | :---: | :---: | :---: | :---: |
| English as a | Of <br> Satisfactory <br> Applicants | N/A |  |  |  |

8. For elementary schools, in your experience, which best describes the supply of teacher applicants in the following program areas at your school for the 2022-2023 school year?

|  |  | Applicants |  | Generally | Abundance |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Available | Few | Enough | Of |
|  | Available | But Not | Satisfactory | Satisfactory | Satisfactory |
| Applicants | Satisfactory | Applicants | Applicants | Applicants | N/A |
|  |  |  |  |  |  |
| Elementary |  |  |  |  |  |
| education |  |  |  |  |  |

9. For middle schools, in your experience, which best describes the supply of teacher applicants in the following program areas at your school for the 2022-2023 school year?

|  | No <br> Available Applicants | Applicants Available But Not Satisfactory | Few Satisfactory Applicants | Generally Enough Satisfactory Applicants | Abundance Of <br> Satisfactory Applicants | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English |  |  |  |  |  |  |
| Math |  |  |  |  |  |  |
| Science |  |  |  |  |  |  |
| Social studies |  |  |  |  |  |  |

10. For high schools, in your experience, which best describes the supply of teacher applicants in the following program areas at your school for the 2022-2023 school year?

|  | No Available Applicants | Applicants Available But Not Satisfactory | Few Satisfactory Applicants | Generally Enough Satisfactory Applicants | Abundance Of <br> Satisfactory Applicants | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Biology |  |  |  |  |  |  |
| Chemistry |  |  |  |  |  |  |
| Earth science |  |  |  |  |  |  |
| English |  |  |  |  |  |  |
| Health sciences |  |  |  |  |  |  |
| Information technology |  |  |  |  |  |  |
| Math |  |  |  |  |  |  |
| Media arts |  |  |  |  |  |  |
| Physics |  |  |  |  |  |  |
| Social studies |  |  |  |  |  |  |

11. Has your school experienced any shortages in the supply of certified applicants not described in the previous questions?

- Yes
- No

If you answered yes, what was the subject area(s)?

## Certified Staffing Shortages in the 2022-2023 School Year

The following questions should be answered for the 2022-2023 school year.
12. Did your school eliminate a class or classes to address a teacher shortage?

- Yes
- No
- N/A - My school has not experienced a shortage.

If you answered yes, please list the class or classes.
13. Did your school use virtual classes to address a teacher shortage?

- Yes
- No
- N/A - My school has not experienced a shortage.

If yes, please explain.
14. Did your school combine classrooms or programs with another school to address teacher shortages? For example, combining emotional behavior disorders (EBD) or other exceptional child programs.

- Yes
- No
- N/A - My school has not experienced a shortage.

If you answered yes, please describe the program.
15. In the 2022-2023 school year, how often are classes with no teachers or substitutes covered by teachers giving up their planning period?

- Never
- Very rarely (a few times per year)
- Rarely (once per month)
- Sometimes (several times per month)
- Frequently (several times per week)
- Very frequently (several times per day)

16. Due to staffing shortages, did your district retain certified staff for the 2022-2023 school year that would have otherwise been terminated or non-renewed in prior years due to poor performance?

- Yes
- No
- N/A - My school has not experienced a shortage.

If you answered yes, how many?
17. Did your school increase class sizes to address a teacher shortage?

- Yes
- No

If you answered yes, which class(es)?
18. Please describe any additional effects of teacher shortages in your school.
19. Please describe any additional effects of school counselor shortages in your school.
20. Please describe any additional effects of librarian shortages in your school.

## Certified Staffing Shortages In The 2022-2023 School Year

21. For all school levels, which best describes the supply of applicants for the 2022-2023 school year compared to five years ago?

|  | Considerably <br> Fewer <br> Applicants | Fewer <br> Applicants | About <br> The <br> Same | More <br> Applicants | Considerably <br> More <br> Applicants |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School counselors |  |  |  |  |  |
| Nibrary and media specialists |  |  |  |  |  |
| Tutors/interventionists |  |  |  |  |  |

22. For all school levels, which best describes the supply of teacher applicants for the 2022-2023 school year compared to five years ago?

|  | Considerably <br> Fewer <br> Applicants | Fewer <br> Applicants | About <br> The <br> Same | More <br> Applicants |
| :--- | :---: | :---: | :---: | :---: |
| English as a | Considerably <br> More <br> Applicants | N/A |  |  |
| second language |  |  |  |  |
| Exceptional children |  |  |  |  |
| World languages |  |  |  |  |
| Art |  |  |  |  |
| Music |  |  |  |  |
| Physical education |  |  |  |  |
| Gifted and talented |  |  |  |  |

23. For elementary schools, which best describes the supply of teacher applicants for the 2022-2023 school year compared to five years ago?

24. For middle schools, which best describes the supply of teacher applicants for the 2022-2023 school year compared to five years ago?

|  | Considerably <br> Fewer <br> Applicants | Fewer <br> Applicants | About <br> The <br> Same | More <br> Applicants | Considerably <br> More <br> Applicants | N/A |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| English |  |  |  |  |  |  |
| Math |  |  |  |  |  |  |
| Science |  |  |  |  |  |  |
| Social studies |  |  |  |  |  |  |

25. For high schools, which best describes the supply of teacher applicants for the 2022-2023 school year compared to five years ago?

|  | Considerably Fewer Applicants | Fewer Applicants | About <br> The <br> Same | More Applicants | Considerably More Applicants | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Biology |  |  |  |  |  |  |
| Chemistry |  |  |  |  |  |  |
| Earth science |  |  |  |  |  |  |
| English |  |  |  |  |  |  |
| Health sciences |  |  |  |  |  |  |
| Information technology |  |  |  |  |  |  |
| Math |  |  |  |  |  |  |
| Media arts |  |  |  |  |  |  |
| Physics |  |  |  |  |  |  |
| Social studies |  |  |  |  |  |  |

## Recruitment And Retention Of Certified Staff

26. To what extent does your school have staffing challenges related to recruitment and retention of teachers?

|  | Not A <br> Challenge | A Small <br> Challenge | A Medium <br> Challenge | A Major <br> Challenge | Crisis |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Recruitment |  |  |  |  |  |
| Retention |  |  |  |  |  |

27. To what degree is each of the following a barrier to your school's ability to recruit teachers?

|  | Not A <br> Barrier | Minimal <br> Barrier | Moderate <br> Barrier |
| :--- | :---: | :---: | :---: |
| Extreme <br> Barrier |  |  |  |
| Geographic location |  |  |  |
| Salary insufficient compared to private industry |  |  |  |
| Benefits insufficient compared to private industry |  |  |  |
| Salary insufficient compared to other districts |  |  |  |
| Lack of qualified candidates, in general |  |  |  |
| Lack of qualified candidates, in particular subjects |  |  |  |
| Student behavior |  |  |  |
| Lack of respect for teacher from administrators |  |  |  |
| Lack of respect for teacher from parents |  |  |  |
| Lack of respect for teachers from local community |  |  |  |
| Lack of respect for teachers from society |  |  |  |

Please describe any other factors that affect teacher recruitment that are not listed above and estimate the degree to which each affects your school.
28. Which of the following strategies does your school/district use to recruit teachers? Select all that apply.

- Hire alternatively certified teachers
- Hire emergency certified teachers
- Hire retired teachers
- Hire Teach for Kentucky teachers
- Host district job fairs
- Visit college job fairs
- Advertise on social media
- Recruit nationally
- Recruit high school students to enter the teaching profession
- Recruit from the local community
- Help pay off student loans
- Offer scholarships or tuition reimbursement
- Offer teacher residency programs
- Extra pay for teachers working in an underserved school
- Extra pay for teachers working in a CSI school ${ }^{\mathrm{f}}$
- District pays for teacher certification renewals
- District pays for teacher background checks
- District pays for teacher physicals
- Provide internal teacher mentoring programs
- Offer affordable housing

Other (please specify)
29. To what degree is each of the following a barrier to your school's ability to retain teachers?

|  | Not A <br> Barrier | Minimal <br> Barrier | Moderate <br> Barrier |
| :--- | :--- | :---: | :---: |
| Extreme <br> Barrier |  |  |  |
| Geographic location |  |  |  |
| Community and local support |  |  |  |
| Salary insufficient compared to private industry |  |  |  |
| Benefits insufficient compared to private industry |  |  |  |
| Salary insufficient compared to other districts |  |  |  |
| Lack of qualified candidates, in general |  |  |  |
| Lack of qualified candidates in particular subjects |  |  |  |
| Student behavior |  |  |  |
| Lack of respect for teachers from administrators |  |  |  |
| Lack of respect for teachers from parents |  |  |  |
| Lack of respect for teaches from local community |  |  |  |
| Lack of respect for teachers from society |  |  |  |
| Work-life balance |  |  |  |
| Continuing education |  |  |  |

Please describe any other factors that affect teacher retention that are not listed above and estimate the degree to which each affects your school.
30. Please describe any policies, practices, or strategies your school/district uses to retain teachers. For instance, financial assistance for continuing education, housing, reduced class sizes, or mentoring.

[^40]31. In the past, has your school tried any strategies to mitigate teaching shortages that have not worked?

- Yes
- No

If yes, please explain.
32. In general, what has been the change in the quality of beginning teachers from teacher preparation programs for the 2022-2023 school year compared to five years ago?

- Much worse
- Worse
- About the same
- Better
- Much better
- N/A

33. How many classroom teacher positions are currently unfilled and being taught by the following?

- Long-term substitutes
- Substitute teachers (not long-term)
- Teachers teaching during their planning periods
- Combined classrooms with one teacher
- Central office staff
- Virtual classes
- Other, please explain and specify how many

34. Do you have any teacher certification issues related to recruitment and/or retention of out-of-state teachers?

|  | Yes $\quad$ No |
| :--- | :--- | :--- |
| Recruitment |  |
| Retention |  |

If yes, please explain.

## Overall

35. Do you have any additional comments regarding teacher shortages?
36. Do you have any suggested changes to state statutes or regulations that may help alleviate certified staffing problems?

Thank you for completing the survey.

## Survey Sent To Teachers

OEA sent a survey concerning staffing shortages to a random sample of 800 teachers, 261 of whom responded, for a response rate of 32.6 percent. Below is the text of the survey.

## Teacher Staff Shortages

The Education Assessment and Accountability Review Subcommittee of the Kentucky General Assembly has directed the Office of Education Accountability (OEA) to study classified and certified staffing shortages along with what districts have done to recruit and retain classified and certified staff. To gain more information for the study, OEA is surveying school teachers concerning teacher staffing shortages.

This survey should take about 15 minutes to complete.
Individual answers will be kept strictly confidential and will not be shared with your principal or district central office. The final report will summarize aggregate responses and will not identify any individual respondent.

Please complete the survey by April 27, 2023.
If you have any questions, please contact Sabrina Cummins or Allison Stevens by calling (502) 564-8167 or via email at sabrina.cummins@lrc.ky.gov and allison.stevens@lrc.ky.gov.

We appreciate your time and information.

## Participant Information

1. District name
2. Please mark all grades you currently teach

- Pre-kindergarten
- Kindergarten
- $1^{\text {st }}$ grade
- $2^{\text {nd }}$ grade
- $3^{\text {rd }}$ grade
- $4^{\text {th }}$ grade
- $5^{\text {th }}$ grade
- $6^{\text {th }}$ grade
- $7^{\text {th }}$ grade
- $8^{\text {th }}$ grade
- $9^{\text {th }}$ grade
- $10^{\text {th }}$ grade
- $11^{\text {th }}$ grade
- $12^{\text {th }}$ grade

3. Do you have tenure?

- Yes
- No

4. Which subjects do you teach?

- Elementary education
- Biology
- Chemistry
- Earth science
- English
- Health science
- Information technology
- Math
- Media arts
- Physics
- Science
- Social studies
- English as a second language
- Exceptional children
- World language
- Art
- Music
- Physical education
- Gifted and talented
- Other (please specify)

5. Are you a special education classroom teacher?

- Yes
- No


## Working Conditions

6. To what extent do you agree that you are paid a fair amount for the work you do?

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

7. Based on district salary schedule, to what extent do you agree that your salary growth potential in the future is adequate?

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

8. How satisfied are you with the following?
$\left.\begin{array}{lcccc}\hline & \begin{array}{c}\text { Very } \\ \text { Dissatisfied }\end{array} & \begin{array}{c}\text { Somewhat } \\ \text { Dissatisfied }\end{array} & \begin{array}{c}\text { Neither Dissatisfied } \\ \text { Nor Satisfied }\end{array} & \begin{array}{c}\text { Somewhat } \\ \text { Satisfied }\end{array}\end{array} \begin{array}{c}\text { Very } \\ \text { Satisfied }\end{array}\right]$
9. Which kinds of support did you receive in your preservice teacher training?

- Aligning instructional goals and activities with Kentucky's academic and content standards
- Using assessment data to inform instruction
- Clearly communicating learning goals to students
- Applying knowledge of how students learn to inform instruction
- Differentiating instruction to support the learning needs of all students
- Using strategies for effective classroom management
- Using a variety of diagnostic, formative, and summative assessments
- Understanding students from diverse cultures, language skills, and experiences
- Using technology to enhance teaching and student learning
- My program collected evidence of my performance on multiple measures to monitor my progress
- My program provided integrated field experiences that supported by development as an effective teacher focused on student learning
- My program provided field experiences in a variety of settings (urban, suburban, rural)
- My program provided cooperating teachers who supported me through observation and conferences
- My program provided university supervisors who supported me through observation and conferences
- My program provided opportunities to work with diverse students (including gifted students, students with disabilities, etc.)
- Faculty integrated diversity-related subject matter within coursework
- Faculty used technology to facilitate teaching and learning

[^41]10. In general, do you think you were properly prepared to teach the students attending your school based on the preservice training you received? For example, your college classes, your student teaching experience, etc.

- Yes
- No

If no, please explain.
11. As a beginning teacher, which kinds of supports did you receive from your school/district?

- Formally assigned mentor
- Seminars specifically designed for new teachers
- Reduced workload
- Common planning time with other teachers
- Release time to observe other teachers
- Formal time to meet with mentor during school hours
- Orientation for new teachers
- Access to professional learning communities where I could discuss concerns with other teacher(s)
- Regular communication with principals, other administrators, or department chair
- Participation in the KTIP program ${ }^{h}$
- I received no additional support as a new teacher

Other (please specify)
12. In general, do you think you were properly prepared to teach the students attending your school based on the mentoring program your school offers?

- Yes
- No
- N/A

13. Do you currently have a second job outside the school district?

- Yes
- No

14. Do you currently have a second job inside the school district for which you are paid? Please select which job(s) you currently have.

- I do not have a second job inside the school district
- Coach
- Bus driver
- Tutoring
- Other (please specify)

[^42]15. Are you satisfied with the amount of planning time you are provided?

- Yes
- No
- I currently don't have a planning period

16. In the 2022-2023 school year, how often are classes with no teachers or substitutes covered by teachers giving up their planning period?

- Never
- Very rarely (a few times per year)
- Rarely (once per month)
- Sometimes (several times per month)
- Frequently (several times per week)
- Very frequently (several times per day)

17. Does your district pay teachers to give up their planning period to cover classes?

- Yes
- No

If you answered yes, how much?
18. To what extent have the following external factors had an effect on your desire to stay in the teaching profession?

|  | Strong Influence <br> To Leave | Influence <br> To Leave | No <br> Influence | Influence <br> To Stay | Strong Influence <br> To Stay |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Overall respect for the profession |  |  |  |  |  |
| Community support |  |  |  |  |  |
| Parental support at your school <br> Parental involvement at your <br> school |  |  |  |  |  |

Please describe any other external factors that have influenced your desire to stay in the teaching profession that are not listed above and estimate the degree to which each affects you.
19. To what extent have the following internal factors had an effect on your desire to stay in the teaching profession?

|  | Strong Influence <br> To Leave | Influence <br> To Leave | No <br> Influence | Influence <br> To Stay | Strong Influence <br> To Stay |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Support from school |  |  |  |  |  |
| leadership |  |  |  |  |  |
| Support from district <br> leadership |  |  |  |  |  |
| Teacher benefits |  |  |  |  |  |
| Teacher pay |  |  |  |  |  |
| Teacher professional |  |  |  |  |  |
| development |  |  |  |  |  |


| Appendix A |  |  | Legislative Research Commission |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Office Of Education Accountability |

Please describe any other internal factors that have influenced your desire to stay in the teaching profession that are not listed above and estimate the degree to which each affects you.
20. To what extent have the following factors had an effect on teachers' decisions to leave the profession in Kentucky since 2020?

|  | Strong Influence To Leave | Influence To Leave | No Influence | Influence To Stay | Strong Influence To Stay |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Large class size |  |  |  |  |  |
| Overall lack of respect for the profession |  |  |  |  |  |
| Lack of support from leadership |  |  |  |  |  |
| Low teacher pay |  |  |  |  |  |
| Low teacher benefits |  |  |  |  |  |
| Student behavior |  |  |  |  |  |
| Lack of professional development |  |  |  |  |  |
| Lack of funding for classroom supplies |  |  |  |  |  |
| Teacher burnout |  |  |  |  |  |
| Safety concerns |  |  |  |  |  |
| Pandemic stress |  |  |  |  |  |
| Lack of mental support for students |  |  |  |  |  |
| Lack of mental support for teachers |  |  |  |  |  |
| Too much paperwork |  |  |  |  |  |
| Higher-paid position within the teaching profession |  |  |  |  |  |
| Higher-paid position outside of the teaching profession |  |  |  |  |  |
| Parent-teacher interactions |  |  |  |  |  |

Please describe any other factors that have influenced teachers' decisions to leave the teaching profession that are not listed above and estimate the degree to which each affects you.
21. How likely are the following events as they relate to your future professional plans?

|  | Extremely <br> Unlikely | Unlikely | Neutral | Likely |
| :--- | :---: | :---: | :---: | :---: |
| Extremely <br> likely |  |  |  |  |
| Continuing to teach in my current school district |  |  |  |  |
| Continuing to teach, but in another school district |  |  |  |  |
| Pursuing a role in education administration |  |  |  |  |
| Retiring in the next 3 years |  |  |  |  |
| Leaving the field of education |  |  |  |  |

22. If more resources were available, which of the following would you choose in your school? Please select your top three preferences from the options below.

- Additional mental health support for staff
- Additional mental health support for students
- Additional social worker
- Additional full time nurse
- Additional full time counselor
- Additional full time tutor
- Additional full time paraeducator in your classroom
- Curriculum specialist
- Behavior interventionist
- School resource officer
- Readily available substitute coverage
- Additional duty free planning period/teams
- Balanced or more even class sizes
- Five fewer students per classroom
- More money for supplies
- 5 percent raise
- Other (please specify)


## Student Behavior

23. Disruptive behaviors from students have $\qquad$ from the 2019-2020 school year to the 2022-2023 school year.

- Decreased
- Stayed the same
- Increased
- N/A

24. How often do you observe the following behavioral disruptions?

|  | Never | Very <br> Rarely <br> (A Few <br> Times <br> Per Year) | Rarely (Once Per Month) | Sometimes (Several Times Per Month) | Frequently (Several Times Per Week) | Very <br> Frequently (Several Times Per Day) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Absenteeism |  |  |  |  |  |  |
| Emotional disconnect/ unresponsiveness |  |  |  |  |  |  |
| Using unapproved technologies during class time (phones, tablets, earbuds, etc.) |  |  |  |  |  |  |
| Fleeing a classroom unexpectedly |  |  |  |  |  |  |
| Tantrums |  |  |  |  |  |  |
| Opposition toward adults |  |  |  |  |  |  |
| Verbal abuse or threats toward a student |  |  |  |  |  |  |
| Verbal abuse or threats toward a teacher or other school personnel |  |  |  |  |  |  |
| Bully another student(s) |  |  |  |  |  |  |
| Physical violence toward self (i.e., self-harm) |  |  |  |  |  |  |
| Physical violence toward another student |  |  |  |  |  |  |
| Physical violence toward a teacher or other school personnel |  |  |  |  |  |  |
| Use of unauthorized or illegal substances (vapes, THC, tobacco products, etc.) ${ }^{i}$ |  |  |  |  |  |  |
| Other (please specify) |  |  |  |  |  |  |

25. Does your school have a building-level team that meets regularly to analyze behavior and develop intervention plans for students with chronic behavior problems?

- Yes
- No
- Unsure

[^43]
## Support From School Administrators

26. My school administration responds $\qquad$ when faced with a behavior incident.

|  | Strongly <br> Disagree | Disagree | Neither Agree <br> Nor Disagree | Agree | Strongly Agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Quickly |  |  |  |  |  |
| Appropriately |  |  |  |  |  |
| According to policy |  |  |  |  |  |

27. How sure are you that, if you report unsafe behaviors, they will be taken care of at your school?

- Not at all sure
- Slightly sure
- Somewhat sure
- Quite sure
- Extremely sure

28. How realistic are your administrators' expectations of you in terms of time? In other words, how reasonable are your assigned tasks compared with how much time you are given to complete them?

- Totally unreasonable
- Usually unreasonable
- It varies
- Mostly reasonable
- Consistently reasonable

29. How often does your principal seek input from teachers on decisions that would impact the work teachers do?

- Never
- Almost never
- Occasionally/sometimes
- Almost every time
- Every time

30. How much do you feel school administrators value your opinions?

- Not at all
- A little bit
- Some
- Quite a bit
- A tremendous amount

31. I like working at this school.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree


## Support From District Administration

32. How often do district administrators visit your school to see what is going on in the classroom?

- Never
- Very rarely (once per year)
- Rarely (a few times per year)
- Sometimes (several times per month)
- Frequently (several times per week)

33. To what extent do you agree or disagree that district administrators listen to the needs of teachers?

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

34. My district provides more $\qquad$ to schools according to student and school needs.
$\left.\begin{array}{lcccc}\hline & \begin{array}{c}\text { Strongly } \\ \text { Disagree }\end{array} & \text { Disagree } & \begin{array}{c}\text { Neither Agree } \\ \text { Nor Disagree }\end{array} & \text { Agree }\end{array} \begin{array}{c}\text { Strongly } \\ \text { Agree }\end{array}\right]$
35. Our district administrators are committed to finding fair solutions to problems at this school.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree


## Support From Parents And Guardians

36. How satisfied are you with parent involvement?

- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

37. How responsive are parents/guardians to teachers' concerns or feedback?

- Not responsive
- Slightly responsive
- Somewhat responsive
- Moderately responsive
- Extremely responsive

38. How engaged are parents/guardians with their child's learning?

- Not at all engaged
- Slightly engaged
- Somewhat engaged
- Moderately engaged
- Extremely engaged

39. Do parents/guardians take responsibility for their child's achievement at this school?

- Yes
- No


## Overall

40. Do you regret becoming a teacher?

- Yes
- No

Please explain.
41. Do you have any additional comments regarding teacher shortages?
42. Do you have any suggested strategies that may help address teacher shortages?

Thank you for completing the survey.

## Appendix B

## Data Notes

## Schools Included Within Report

This report includes A1 schools in analyses and surveys. An A1 school is a stand-alone school with a principal and may establish a school-based decision-making council.

## KYSTATS Workforce Status And Industry Employment

Chapter 2 discusses teacher salaries and wage data for individual teachers who left the teaching profession for the private sector. OEA staff analyzed wage data provided by the Kentucky Center for Statistics (KYSTATS) and found that 65 percent of teachers who left the teaching profession in 2019 were earning approximately $\$ 5,000$ less in the private sector in 2022. ${ }^{\text {a }}$

KYSTATS was only able to provide information about former Kentucky teachers after they left the teaching profession in Kentucky, so the former teachers might be teaching or working in another state but would not appear in the data. However, as this report sought to capture teaching shortages in Kentucky, the data still represents teachers who are no longer available in the commonwealth.

Homegrown Kentucky Education Personnel. Chapter 2 discusses Kentucky graduates who later worked in Kentucky education. KYSTATS provided information on students who graduated from Kentucky high schools between 2009 and 2015, and professional staffing data (PSD) and classified staffing data (CSD) for those students who returned to work in Kentucky education between 2013 and 2022. Students over the age of 17 by Oct. 1, 11 th -graders, and $12^{\text {th }}$-grade graduates were included in this analysis. When determining the primary position held by CSD employees, the primary position was determined using the highest annual pay per position. The count of PSD employees used full-time equivalence (FTE), and individuals could hold partial positions. The analysis matched each graduate's district as a student to the districts they were later employed in to determine if graduates returned to work in Kentucky education. Tables B. 1 and B. 2 show the positions within each category used in the analysis.

[^44]Table B. 1
Classified Job Class Code Categories

| Job Class Code | Description | Report Category |
| :--- | :--- | :--- |
| 0290 | Other central office positions | Central office |
| 2010 | Preschool classroom instructor | Classroom teacher |
| 2025 | Kindergarten instructor | Classroom teacher |
| 2030 | Primary classroom instructor | Classroom teacher |
| 2040 | Elementary classroom instructor | Classroom teacher |
| 2050 | Middle school classroom instructor | Classroom teacher |
| 2060 | High school classroom instructor | Classroom teacher |
| 0150 | Instructional coordinator | Coordinator/consultant |
| 0170 | Instructional TV coordinator | Coordinator/consultant |
| 0230 | Academic program consultant | Coordinator/consultant |
| 2020 | Preschool coordinate/supervise | Coordinator/consultant |
| 2210 | Resource consultant | Coordinator/consultant |
| 2230 | Exceptional childhood consultant | Coordinator/consultant |
| 2350 | Elementary consultant | Coordinator/consultant |
| 2080 | Local career and technical instructor | CTE teacher |
| 2095 | Exceptional child instructor | Exceptional child teacher |
| 2100 | Gifted and talented instructor | Gifted and talented teacher |
| 1050 | Guidance counselor | Guidance counselor |
| 1060 | Media librarian | Library |
| 2070 | Job training instructor | Other teacher |
| 2090 | Instructor test title I | Other teacher |
| 2096 | Homebound teacher | Other teacher |
| 2211 | Technology resource teacher | Other teacher |
| 0065 | Dean of students | School administration |
| 0250 | School psychologist | School administration |
| 1010 | School principal | School administration |
| 1020 | School vice principal | School administration |
| 0130 | School health coordinator | Student support |
| 0255 | Speech therapist | Student support |
| 0270 | School social worker | Student support |
| 2099 | Substitute teacher | Substitute teacher |
| 10 |  |  |

Note: CTE = career and technical education.
Source: Kentucky Center for Statistics.

## Table B. 2

Certified Job Class Code Categories

| Job Class Code | Description | Report category |
| :--- | :--- | :--- |
| 7102 | Public information officer | Communications |
| 7108 | Writer/photographer | Communications |
| 7110 | Copy specialist/writer | Communications |
| 7112 | Graphic artist II | Communications |
| 7114 | Graphic artist I | Communications |
| 7124 | Printing assistant I | Communications |
| 7161 | Accounting manager | Fiscal |
| 7162 | Accounting supervisor | Fiscal |
| 7163 | Account clerk III | Fiscal |
| 7164 | Account clerk II | Fiscal |
| 7165 | Account clerk I | Fiscal |


| Job Class Code | Description | Report category |
| :---: | :---: | :---: |
| 7166 | Treasurer | Fiscal |
| 7176 | Lead property records auditor | Fiscal |
| 7181 | Financial analyst | Fiscal |
| 7183 | Funding services specialist | Fiscal |
| 7184 | Director of finance III (graduate degree or CPA) | Fiscal |
| 7185 | Director of finance II (bachelor's degree) | Fiscal |
| 7186 | Director of finance I (high school diploma) | Fiscal |
| 7191 | Payroll clerk II | Fiscal |
| 7192 | Payroll clerk I | Fiscal |
| 7205 | Food service account clerk | Food services |
| 7211 | Food service manager II | Food services |
| 7212 | Food service manager I | Food services |
| 7213 | Lunchroom monitor | Food services |
| 7221 | Food service operations coordinator added January 2016 | Food services |
| 7222 | Food service supervisor II | Food services |
| 7224 | Food service program assistant | Food services |
| 7232 | Lead food service assistant I | Food services |
| 7233 | Food service assistant II | Food services |
| 7234 | Food service assistant I | Food services |
| 7466 | School food service director I | Food services |
| 7467 | School food service director II | Food services |
| 7241 | Cook/baker | Food services |
| 7262 | Registered nurse | Health |
| 7263 | School nurse | Health |
| 7271 | Local district health coordinator | Health |
| 7272 | Health services technician | Health |
| 7273 | Health services assistant | Health |
| 7289 | Clinical psychologist | Health |
| 7291 | Physical/occupation therapist | Health |
| 7292 | Therapy assistant | Health |
| 7293 | Speech language pathology assistant | Health |
| 7294 | Speech language pathologist | Health |
| 7301 | Community relations specialist | Instructional |
| 7312 | Instructor I | Instructional |
| 7313 | Instructor II | Instructional |
| 7314 | Instructor III | Instructional |
| 7315 | Performance specialist | Instructional |
| 7316 | Instructional assistant-bilingual | Instructional |
| 7317 | Instructional monitor | Instructional |
| 7318 | Instructional assistant II | Instructional |
| 7319 | Instructional monitor II | Instructional |
| 7320 | Instructional assistant I | Instructional |
| 7321 | Instructional assistant-high school | Instructional |
| 7322 | Child development center supervisor-medical | Instructional |
| 7324 | Child development center supervisor | Instructional |
| 7326 | Child development center assistant supervisor | Instructional |
| 7328 | Diagnostic/assessment counselor | Instructional |
| 7332 | Program specialist I | Instructional |
| 7333 | Program specialist II | Instructional |
| 7334 | Program assistant I | Instructional |
| 7335 | Program assistant II | Instructional |
| 7336 | Educational interpreter II | Instructional |
| 7337 | Program specialist III | Instructional |


| Appendix B |  | Legislative Research Commission |
| :---: | :---: | :---: |
|  |  | Office Of Education Accountability |
| Job Class Code | Description | Report category |
| 7338 | Educational interpreter I | Instructional |
| 7339 | Educational interpreter III | Instructional |
| 7342 | School home community liaison | Instructional |
| 7344 | Athletic director | Instructional |
| 7345 | Assistant coach I | Instructional |
| 7346 | Assistant coach II | Instructional |
| 7347 | Head coach | Instructional |
| 7348 | Camp counselor | Instructional |
| 7349 | Preschool associate teacher I | Instructional |
| 7350 | Preschool associate teacher II | Instructional |
| 7351 | Preschool associate teacher III | Instructional |
| 7361 | Media technician | Library/media |
| 7362 | Library media clerk | Library/media |
| 7363 | Media producer/tech coordinator | Library/media |
| 7411 | Construction inspector | Maintenance |
| 7424 | HVAC technician | Maintenance |
| 7435 | Maintenance supervisor | Maintenance |
| 7437 | Preventive maintenance technician-HVAC | Maintenance |
| 7441 | Lead maintenance technician | Maintenance |
| 7442 | Maintenance technician IV | Maintenance |
| 7443 | Maintenance technician III | Maintenance |
| 7444 | Maintenance technician II | Maintenance |
| 7445 | Maintenance technician I | Maintenance |
| 7447 | Maintenance worker II | Maintenance |
| 7448 | Maintenance worker I | Maintenance |
| 7449 | Maintenance apprentice | Maintenance |
| 7464 | Director II | Management |
| 7465 | Director I | Management |
| 7471 | Coordinator VI | Management |
| 7472 | Coordinator V | Management |
| 7473 | Coordinator IV | Management |
| 7474 | Coordinator III | Management |
| 7475 | Coordinator II | Management |
| 7476 | Coordinator I | Management |
| 7488 | Family resource center coordinator VI | Management |
| 7489 | Family resource center coordinator V | Management |
| 7490 | Family resource center coordinator IV | Management |
| 7491 | Family resource center coordinator III | Management |
| 7492 | Family resource center coordinator II | Management |
| 7493 | Family resource center coordinator I | Management |
| 7501 | Chief information officer | MIS |
| 7502 | Administrative analyst | MIS |
| 7503 | Assistant director/system development user support | MIS |
| 7504 | Technical support manager | MIS |
| 7505 | User support manager | MIS |
| 7512 | Systems analyst I | MIS |
| 7513 | Systems analyst II | MIS |
| 7514 | Computer programmer I | MIS |
| 7515 | Computer programmer II | MIS |
| 7516 | Database administrator | MIS |
| 7522 | Data communications specialist | MIS |
| 7523 | LAN technician | MIS |
| 7524 | Lead computer maintenance technician | MIS |

## Office Of Education Accountability

| Job Class Code | Description | Report category |
| :---: | :---: | :---: |
| 7525 | Computer maintenance technician | MIS |
| 7526 | Computer lab technician | MIS |
| 7527 | Computer training specialist | MIS |
| 7531 | Microcomputer software tech I | MIS |
| 7533 | Microcomputer tech specialist | MIS |
| 7534 | Microcomputer specialist | MIS |
| 7535 | Microcomputer resource technician | MIS |
| 7536 | Student data specialist | MIS |
| 7537 | Computer operations supervisor | MIS |
| 7549 | Data control clerk | MIS |
| 7602 | Custodial services manager | Operations |
| 7603 | Custodial services trainer | Operations |
| 7605 | Custodial supervisor | Operations |
| 7606 | Lead custodian service worker | Operations |
| 7607 | Lead custodian | Operations |
| 7609 | Custodian | Operations |
| 7625 | Lead grounds worker I | Operations |
| 7626 | Grounds worker III | Operations |
| 7627 | Grounds worker II | Operations |
| 7628 | Grounds worker I | Operations |
| 7634 | Utility worker I | Operations |
| 7651 | Insurance clerk I | Personnel |
| 7660 | Personnel specialist | Personnel |
| 7661 | Personnel assistant | Personnel |
| 7665 | Employee benefit specialist | Personnel |
| 7675 | Data management technician | Personnel |
| 7685 | Substitute teacher center supervisor | Personnel |
| 7724 | Purchasing technician | Purchasing |
| 7732 | Shipping and receiving clerk | Purchasing |
| 7761 | Secretary to the superintendent | Secretarial/clerical |
| 7762 | Administrative secretary I | Secretarial/clerical |
| 7763 | Legal secretary | Secretarial/clerical |
| 7764 | Medical secretary | Secretarial/clerical |
| 7765 | Administrative secretary II | Secretarial/clerical |
| 7767 | Community liaison/administrative assistant | Secretarial/clerical |
| 7771 | Secretary II | Secretarial/clerical |
| 7772 | Secretary I | Secretarial/clerical |
| 7773 | School secretary I-high school | Secretarial/clerical |
| 7774 | School secretary I-middle | Secretarial/clerical |
| 7775 | School secretary I-elementary | Secretarial/clerical |
| 7776 | Staff support secretary | Secretarial/clerical |
| 7777 | School secretary II-elementary | Secretarial/clerical |
| 7778 | School secretary II-high school | Secretarial/clerical |
| 7779 | School secretary II-middle | Secretarial/clerical |
| 7781 | Clerical assistant III | Secretarial/clerical |
| 7782 | Clerical assistant II | Secretarial/clerical |
| 7783 | Clerical assistant I | Secretarial/clerical |
| 7784 | Clerk | Secretarial/clerical |
| 7785 | Mail clerk | Secretarial/clerical |
| 7786 | Project clerk | Secretarial/clerical |
| 7791 | Receptionist | Secretarial/clerical |
| 7824 | Law enforcement officer | Security/law enforcement |
| 7825 | Law enforcement monitor | Security/law enforcement |


| Appendix B |  | Legislative Research Commission |
| :--- | :--- | :--- |
|  |  | Office Of Education Accountability |
| Job Class Code | Description | Report category |
| 7830 | School ground monitor | Security/law enforcement |
| 7831 | Safety inspector | Security/law enforcement |
| 7861 | Attendance supervisor | Student services |
| 7862 | Attendance specialist | Student services |
| 7863 | Attendance data technician | Student services |
| 7871 | Career planner | Student services |
| 7872 | Employment training specialist | Student services |
| 7873 | Employment training assistant | Student services |
| 7881 | Student assistance coordinator | Student services |
| 7882 | Social worker | Student services |
| 7885 | Registrar | Student services |
| 7886 | Migrant recruiter | Student services |
| 7908 | Dispatcher | Transportation |
| 7911 | Vehicle maintenance manager | Transportation |
| 7912 | Vehicle maintenance supervisor | Transportation |
| 7913 | Vehicle maintenance assistant | Transportation |
| 7914 | Lead vehicle mechanic | Transportation |
| 7915 | Vehicle mechanic II | Transportation |
| 7916 | Vehicle mechanic I | Transportation |
| 7917 | Vehicle maintenance attendant | Transportation |
| 7934 | Third party examiner | Transportation |
| 7940 | Mid-day bus driver | Transportation |
| 7941 | Bus driver | Transportation |
| 7942 | Bus monitor | Transportation |
| 7943 | Bus monitor-exceptional children | Transportation |
| 7963 | Delivery driver | Warehouse |
| 7983 | Warehouse worker II | Warehouse |
| 7984 | Warehouse worker I | Warehouse |
| $70: C P A$ |  |  |

Note: CPA $=$ certified public accountant; MIS $=$ management information systems.
Source: Kentucky Center for Statistics.

## Appendix C

## OEA Teacher Survey Results

The OEA Survey was sent to approximately 800 randomly chosen teachers, 261 of whom responded, for a response rate of 32.6 percent. Because the response rate and number of teachers responding were so low, results are not included in the report chapters. For each response shown in this appendix, percentages are calculated based on the total answers for that question, excluding N/A responses. Findings from the OEA teacher survey appear in this appendix.

## OEA Teacher Survey Findings

Most teachers (78.0 percent) disagree or strongly disagree that they are paid a fair amount for the work they do. Most teachers ( 71.4 percent) disagree or strongly disagree that their salary growth potential is adequate based on district salary schedule. More teachers reported being very or somewhat satisfied with their current class size ( 54.3 percent) and room size given the number of students in the class ( 52.7 percent) than with their class makeup ( 37.6 percent) and their input in the creation of student groups/classes ( 34.4 percent).

Preservice Teacher Supports. Teachers were asked about 17 kinds of preservice teacher training supports, as shown in Table C.1. Teachers could select more than one support.

## Table C. 1 <br> Preservice Teacher Training Supports Received By Teachers 2023

| Preservice Teacher Training Support | Percent |
| :--- | :---: |
| My program provided university supervisors who supported me through observation and conferences | $69.4 \%$ |
| My program provided cooperating teachers who supported me through observation and conferences | 68.0 |
| Aligning instructional goals and activities with Kentucky's academic content standards | 64.9 |
| Using assessment data to inform instruction | 62.6 |
| Using strategies for effective classroom management | 62.6 |
| Differentiating instruction to support the learning needs of all students | 62.2 |
| Clearly communicating learning goals to students | 61.3 |
| Applying knowledge of how students learn to inform instruction | 59.9 |
| My program provided integrated field experiences that supported by development as an effective | 58.6 |
| teacher focused on student learning | 58.1 |
| My program collected evidence of my performance on multiple measures to monitor my progress | 57.2 |
| Using a variety of diagnostic, formative, and summative assessments | 55.4 |
| Using technology to enhance teaching and student learning | 51.8 |
| Faculty used technology to facilitate teaching and learning | 50.9 |
| My program provided opportunities to work with diverse students (including gifted students, students |  |
| with disabilities, etc.) | 43.7 |
| Understanding students from diverse cultures, language skills, and experiences | 36.0 |
| My program provided field experiences in a variety of settings (urban, suburban, rural) | 26.6 |
| Faculty integrated diversity-related subject matter within coursework |  |

Note: A total of 222 teachers answered this section.
Source: 2023 OEA Teacher Survey.

District Supports For New Teachers. Approximately one-third (36.7 percent) of teachers thought they were properly prepared to teach the students attending their school based on the preservice training they received, such as college classes and student teaching experiences. In general, the more training teachers received, the more prepared they felt. Table C. 2 shows the preservice supports teachers reported receiving. When asked to explain why they did not feel prepared by their preservice training, many teachers commented on student behavior, classroom management skills, teaching exceptional children, stress and mental health, and work-life balance. Respondents often wrote that their preservice training did not prepare them for their actual classroom experience and that they learned by experience as they taught.

## Table C. 2 Beginning Teacher Supports Provided By School/District 2023

| Beginning Teacher Supports | Percent |
| :--- | :---: |
| Formally assigned mentor | $57.5 \%$ |
| Orientation for new teachers | 52.9 |
| Participation in the KTIP program | 52.1 |
| Common planning time with other teachers | 40.6 |
| Access to professional learning communities where I could discuss concerns with other teacher(s) | 36.4 |
| Regular communication with principals, other administrators, or department chair | 36.4 |
| Seminars specifically designed for new teachers | 31.8 |
| Release time to observe other teachers | 21.1 |
| Formal time to meet with mentor during school hours | 16.9 |
| received no additional support as a new teacher | 5.7 |

Note: A total of 261 teachers answered this question. KTIP = Kentucky Teacher Internship Program. Source: 2023 OEA Teacher Survey.

Experiences As New Teachers. Most teachers (70.3 percent) reported they were properly prepared to teach the students attending their school based on the mentoring program their school offers.

Approximately one-third of teachers (35.3 percent) reported having a second job outside the school district, and 40.5 percent of teachers reported having a second job inside the school district, for which they were paid.

Half of teachers ( 54.6 percent) reported being satisfied with the amount of planning time provided, but 42.3 percent were unsatisfied and 3.1 percent did not have a planning period. Teachers were asked how often classes with no teachers or substitutes were covered by teachers giving up their planning period in SY 2023, and 71.1 percent answered that this occurred at least several times per month. Most ( 80.7 percent) reported that teachers were paid to give up their planning period.

Teachers were asked to what extent external factors have affected their desire to stay in the teaching profession. Results appear in Table C.3. Over half of teachers ( 55.3 percent) said overall respect was an influence or a strong influence to leave the teaching profession.

# Table C. 3 <br> External Factors' Influence On Teachers' Desire To Stay In The Teaching Profession 2023 

| External Factor | Influence Or Strong <br> Influence To Leave | No Influence | Influence Or Strong <br> Influence To Stay | Total |
| :--- | :---: | :---: | :---: | :---: |
| Overall respect | $55.3 \%$ | $22.8 \%$ | $21.9 \%$ | 228 |
| Community support | 38.8 | 36.6 | 24.7 | 227 |
| Parental support | 41.0 | 38.3 | 20.7 | 227 |
| Parental involvement | 29.8 | 54.4 | 15.8 | 228 |

Source: 2023 OEA Teacher Survey.
Factors In Teachers' Decisions To Stay. Teachers were asked to what extent internal factors had affected their desire to stay in the teaching profession. Results appear in Table C.4. Over half of teachers reported that teacher pay ( 64.0 percent) and student discipline ( 62.4 percent) were an influence or a strong influence to leave the teaching profession. More than three-fourths reported that the desire to teach ( 88.1 percent); relationships with students ( 85.8 percent); relationships with coworkers ( 78.5 percent); time off during summer, breaks, and holidays ( 78.5 percent); and student-teacher interactions ( 77.5 percent) were an influence or a strong influence to continue teaching.

## Table C. 4

Influences On Teachers' Desire To Stay In The Teaching Profession 2023

|  | Influence Or <br> Strong Influence <br> To Leave | No <br> Influence | Influence Or Strong <br> Influence To Stay |
| :--- | :---: | :---: | :---: |
| Influence | $32.4 \%$ | $13.3 \%$ | $54.2 \%$ |
| Support from school leadership | 36.6 | 33.0 | 30.4 |
| Support from district leadership | 31.9 | 22.6 | 45.6 |
| Teacher benefits | 64.0 | 14.9 | 21.1 |
| Teacher pay | 25.0 | 60.5 | 14.5 |
| Teacher professional development | 8.4 | 5.8 | 85.8 |
| Relationships with students | 24.6 | 52.2 | 23.2 |
| Class size | 44.7 | 20.2 | 35.1 |
| Principal support with student discipline | 47.8 | 31.1 | 21.1 |
| Support for handling students' mental/emotional health | 46.9 | 35.1 | 18.0 |
| Support for handing your own mental/emotional health | 29.4 | 37.7 | 32.9 |
| Feeling safe at my school | 62.4 | 19.5 | 18.1 |
| Student discipline | 10.5 | 61.8 | 27.6 |
| Diversity, equity, and inclusion initiatives | 4.4 | 17.1 | 78.5 |
| Time off during summer, breaks, and holidays | 7.5 | 14.0 | 78.5 |
| Relationships with coworkers | 4.9 | 7.1 | 88.1 |
| Desire to teach | 8.4 | 14.1 | 77.5 |
| Student-teacher interactions |  |  |  |
| Sure 2023 OEA Tear |  |  |  |

Source: 2023 OEA Teacher Survey.
Factors In Teachers' Decisions To Leave. Teachers were asked to what extent factors affected teachers' decisions to leave the teaching profession in Kentucky since 2020. Results appear in Table C.5. Over 90 percent of teachers reported that teacher burnout ( 93.3 percent), overall lack
of respect for the profession ( 90.3 percent), and student behavior ( 90.3 percent) were an influence or a strong influence to leave the teaching profession in Kentucky.

Table C. 5
Influence On Teachers' Decisions To Leave Teaching In Kentucky Since 2020
2023

|  | Influence <br> Or Strong <br> Influence <br> To Leave | No <br> Influence | Influence Or <br> Strong Influence <br> To Stay |
| :--- | :---: | :---: | :---: |
| Influence | $93.3 \%$ | $4.9 \%$ | $1.8 \%$ |
| Teacher burnout | 90.3 | 8.0 | 1.8 |
| Overall lack of respect for profession | 90.3 | 9.3 | 0.4 |
| Student behavior | 85.8 | 12.8 | 1.3 |
| Low teacher pay | 78.7 | 15.6 | 5.8 |
| Higher-paid position outside of the teaching profession | 78.2 | 20.4 | 1.3 |
| Too much paperwork | 76.5 | 20.8 | 2.7 |
| Pandemic stress | 73.5 | 26.0 | 0.4 |
| Large class sizes | 73.5 | 16.8 | 9.7 |
| Lack of support from leadership | 71.4 | 22.8 | 5.8 |
| Low teacher benefits | 69.5 | 29.2 | 1.3 |
| Lack of mental supports for teachers | 69.0 | 26.1 | 4.9 |
| Safety concerns | 68.8 | 29.0 | 2.2 |
| Lack of mental supports for students | 67.7 | 30.5 | 1.8 |
| Lack of funding for classroom supplies | 61.5 | 30.5 | 8.0 |
| Parent-teacher interactions | 46.2 | 48.9 | 4.9 |
| Lack of teacher training | 45.1 | 45.6 | 9.3 |
| Higher-paid position within the teaching profession | 27.7 | 67.9 | 4.5 |
| Lack of professional development |  |  |  |
| Soure: 2023 OEA Teacer Surver |  | 2 |  |

Source: 2023 OEA Teacher Survey.
Teachers' Plans For The Future. Teachers were asked about their future professional plans. Results appear in Table C.6. More than half of teachers reported that pursuing a role in education administration ( 56.2 percent) and retiring in the next 3 years ( 57.5 percent) were likely or extremely likely.

Table C. 6
Teachers' Future Professional Plans
2023

| Teachers' Future Professional Plans | Unlikely Or <br> Extremely Unlikely | Neutral | Likely Or <br> Extremely Likely |
| :--- | :---: | :---: | :---: |
| Continuing to teach in my current school district | $43.6 \%$ | $13.7 \%$ | $42.7 \%$ |
| Continuing to teach, but in another school district | 29.2 | 25.2 | 45.6 |
| Pursuing a role in education administration | 27.4 | 16.4 | 56.2 |
| Retiring in the next 3 years | 31.9 | 10.6 | 57.5 |
| Leaving the field of public education | 39.4 | 21.7 | 38.9 |

Source: 2023 OEA Teacher Survey.
Resources For Teachers. Teachers were asked to report the top three resources they would choose for their school if more resources were available. Results appear in Table C.7.

Table C. 7
Top Three Resources Teachers Prefer 2023

| Additional support | Number | Percent |
| :--- | :---: | :---: |
| 5 percent raise | 167 | $76.6 \%$ |
| Behavior interventionist | 69 | 31.7 |
| Readily available substitute coverage | 65 | 29.8 |
| Additional duty-free planning period/teams | 56 | 25.7 |
| Five fewer students per classroom | 56 | 25.7 |
| Additional mental health support for students | 51 | 23.4 |
| More money for supplies | 43 | 19.7 |
| Additional full-time paraeducator in your classroom | 30 | 13.8 |
| School resource officer | 24 | 11.0 |
| Additional mental health support for staff | 22 | 10.1 |
| Balanced or more even class sizes | 22 | 10.1 |
| Additional full-time counselor | 20 | 9.2 |
| Additional full-time tutor | 9 | 4.1 |
| Additional social worker | 8 | 3.7 |
| Curriculum specialist | 8 | 3.7 |
| Additional full-time nurse | 3 | 1.4 |
| Answered question | 218 |  |
| Noter Teach |  |  |

Note: Teachers could choose up to three resources. Source: 2023 OEA Teacher Survey.

Behavior Disruptions. Most teachers ( 84.9 percent) reported that disruptive behaviors increased between school years 2022 and 2023. Teachers were asked how often they observe certain behavioral disruptions. Results appear in Table C.8. Half of teachers ( 52.7 percent) reported that their school has a building-level team that meets regularly to analyze behaviors and develop intervention plans for students with chronic behavior problems.

## Table C. 8 <br> Frequency Of Disruptive Student Behaviors 2023

|  | Very <br> Frequently/ <br> Frequently | Sometimes | Rarely/ <br> Very <br> Rarely | Never | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Student Behavior | $74.2 \%$ | $19.6 \%$ | $5.8 \%$ | $0.4 \%$ | 225 |
| Absenteeism | 64.3 | 25.4 | 9.4 | 0.9 | 224 |
| Emotional disconnect/unresponsiveness | 59.7 | 11.1 | 20.4 | 8.8 | 226 |
| Using unapproved technologies during <br> class time (phones, tablets, earbuds, etc.) | 16.8 | 21.7 | 48.2 | 13.3 | 226 |
| Fleeing a classroom unexpectedly | 35.1 | 25.3 | 32.0 | 7.6 | 225 |
| Tantrums | 68.0 | 17.6 | 12.6 | 1.8 | 222 |
| Opposition toward adults | 31.6 | 24.0 | 36.0 | 8.4 | 225 |
| Verbal abuse or threats toward a student | 29.2 | 21.2 | 39.8 | 9.7 | 226 |
| Verbal abuse or threats toward teacher <br> or other school personnel | 37.6 | 23.9 | 33.6 | 4.9 | 226 |
| Bullying another student(s) | 9.7 | 13.3 | 59.7 | 17.3 | 226 |
| Physical violence toward self (i.e., self-harm) | 19.1 | 24.4 | 49.8 | 6.7 | 225 |


|  | Very <br> Frequently/ <br> Frequently | Sometimes | Rarely/ <br> Very <br> Rarely | Never | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Student Behavior | 11.6 | 13.8 | 53.8 | 20.9 | 225 |
| Physical violence toward teacher or <br> other school personnel | 28.8 | 17.3 | 23.9 | 30.1 | 226 |
| Use of unauthorized or illegal substances <br> (vapes, THC, tobacco products, etc.) |  |  |  |  |  |

Note: THC = tetrahydrocannabinol.
Source: 2023 OEA Teacher Survey.
Teachers were asked whether their school administration responds quickly, appropriately, or according to policy. Results appear in Table C.9. Nearly half of teachers ( 47.6 percent) were extremely sure to quite sure that unsafe behaviors would be addressed at their school if reported.

Table C. 9
School Administration Responses When Faced With A Behavior Incident
2023

| Response | Strongly Agree <br> Or Agree | Neither Agree <br> Nor Disagree | Disagree Or <br> Strongly Disagree |
| :--- | :---: | :---: | :---: |
| Quickly | $65.5 \%$ | $13.9 \%$ | $20.6 \%$ |
| Appropriately | 51.4 | 18.9 | 29.7 |
| According to policy | 65.8 | 19.4 | 14.9 |

Source: 2023 OEA Teacher Survey.
District And School Support. Teachers were asked about their administrators' expectations of them in terms of time and the reasonableness of their assigned tasks and the time they were given to complete them. Nearly half ( 47.6 percent) said their school administrators were consistently or mostly reasonable, but 36.9 percent reported that it varies and 15.6 percent said totally or usually unreasonable.

Less than half of teachers ( 41.5 percent) reported that their school administrators value their opinion a tremendous amount or quite a bit, and 33.9 percent said their school administrators value their opinion not at all or a little bit.

Most teachers (69.8 percent) reported that they liked working at their school and did not regret becoming a teacher ( 71.6 percent). Most teachers who said they did not regret becoming a teacher commented that it was a calling or a fulfilling career or that they loved their job. However, among all teachers-regardless of whether they regretted becoming a teachermany expressed frustration with their level of pay for their level of education and workload; negative impacts on mental and emotional health; student behavior; lack of respect for the teaching profession; and taking on additional roles to support students such as emotional health counseling.

Teachers were asked how often district administrators visit their school to see what is going on in the classroom. Half ( 50.7 percent) reported that these visits occur rarely or very rarely, 40.4 percent reported frequently or sometimes, and 8.9 percent reported never.

Nearly half of teachers (45.1 percent) disagreed or strongly disagreed that their district administrators listen to the needs of teachers. Teachers were asked whether their district administrators were committed to finding fair solutions to problems at their school, and 39.6 percent strongly agreed or agreed while 32.0 percent disagreed or strongly disagreed.

Teachers were asked if districts provide more resources to schools according to student and school needs. Responses appear in Table C.10.

Table C. 10
Resources Provided By Districts According To Student And School Need 2023

| Resource | Strongly Agree <br> Or Agree | Neither Agree <br> Nor Disagree | Disagree Or <br> Strongly Disagree |
| :--- | :---: | :---: | :---: |
| Classroom and material resources | $38.2 \%$ | $28.9 \%$ | $32.9 \%$ |
| Professional development | 44.4 | 30.2 | 25.3 |
| Support staff | 27.7 | 31.3 | 41.1 |

Source: 2023 OEA Teacher Survey.
One-fourth of teachers ( 24.0 percent) were satisfied or very satisfied with parent involvement and that parents/guardians were extremely or moderately responsive to teachers' concerns or feedback, 38.7 percent were dissatisfied or very dissatisfied, and 38.8 percent reported that parents/guardians were slightly to not responsive. Nearly half ( 52.7 percent) reported that parents/guardians were not at all or slightly engaged with their child's learning. Two-thirds (68.3 percent) reported that parents/guardians take responsibility for their child's achievement at school.

## Appendix D

## 2022 Impact KY Working Conditions Survey

## Overview

2022 Impact KY Working Conditions Survey. The 2022 Impact KY Working Conditions Survey is an anonymous survey to receive input on teaching conditions in Kentucky from educators including principals, assistant principals, teachers, and other professionals such as school counselors. As of the writing of this report, the most recent Impact Survey was conducted in 2022, with a 76 percent response rate representing 38,194 education professionals in Kentucky.

Answer Categorization. Each question offered five answers ranging from positive to negative, with a neutral response in the middle. For the following analysis, the two positive answers were combined and are referred to as positive. Similarly, the two negative answers were combined and are referred to as negative. For example, teachers could answer that the school administration treats the faculty extremely fairly, quite fairly, somewhat fairly, slightly fairly, or not fairly at all. The answer choices extremely fairly and quite fairly were combined to represent a positive response and the answer choices slightly fairly or not fairly at all were combined to represent a negative response.

Data Analysis. Questions on the Impact Survey were categorized into attitudes toward the teaching profession, working conditions, student behavior, and support for school leadership. Only A1 school responses were included in the analysis. Table D. 1 shows the survey items and their responses in each category.

## Table D. 1 <br> Impact Survey Item Categories <br> 2022

| Survey Item | Responses |  |  |
| :---: | :---: | :---: | :---: |
|  | Positive | Neutral | Negative |
| Attitudes Toward Teaching Profession |  |  |  |
| To what extent are teachers trusted to teach in the way they think is best? | Trusted a tremendous amount Trusted quite a bit | Trusted somewhat | Trusted a little bit Not trusted at all |
| How positive are the attitudes of your colleagues? | Extremely positive Quite positive | Somewhat positive | Slightly positive Not at all positive |
| Overall, how positive is the working environment at your school? | Extremely positive Quite positive | Somewhat positive | Slightly positive Not at all positive |
| How effective do you feel at your job right now? | Extremely effective Quite effective | Somewhat effective | Slightly effective Not at all effective |
| How concerned are you about the emotional well-being of your | Not at all A little | Some | Quite a bit A great deal |


| Survey Item | Responses |  |  |
| :---: | :---: | :---: | :---: |
|  | Positive | Neutral | Negative |
| How concerned are you about your own emotional well-being as a result of your work? | Not at all A little | Some | Quite a bit A great deal |
| Overall, how much do you feel like you belong at your school? | Completely belong Belong quite a bit | Belong somewhat | Belong a little bit Do not belong at all |
| Support From School Administration |  |  |  |
| At your school, how valuable are the available professional development opportunities? | Extremely valuable Quite valuable | Somewhat valuable | Slightly valuable Not at all valuable |
| How useful do you find the feedback you receive on your teaching? | Extremely useful Quite useful | Somewhat useful | Slightly useful Not at all useful |
| How much do you learn from the teacher evaluation processes at your school? | Learn a tremendous amount Learn quite a bit | Learn some | Learn a little bit Learn almost nothing |
| Overall, how supportive has the school been of your growth as a teacher? | Extremely supportive Quite supportive | Somewhat supportive | Slightly supportive Not at all supportive |
| How confident are you that your school leaders have the best interests of the school in mind? | Extremely confident Quite confident | Somewhat confident | Slightly confident Not at all confident |
| How much trust exists between school leaders and faculty? | A tremendous amount of trust Quite a bit of trust | Some trust | A little bit of trust Almost no trust |
| When you face challenges at work, how supportive are your school leaders? | Extremely supportive Quite supportive | Somewhat supportive | Slightly supportive Not at all supportive |
| At your school, how motivating do you find working with the leadership team? | Extremely motivating Quite motivating | Somewhat motivating | Slightly motivating Not at all motivating |
| How responsive are school leaders to your feedback? | Extremely responsive Quite responsive | Somewhat responsive | Slightly responsive Not at all responsive |
| How much do your school leaders care about you as an individual? | Care a tremendous amount Care quite a bit | Care somewhat | Care a little bit Do not care at all |
| How respectful are your school leaders toward you? | Extremely respectful Quite respectful | Somewhat respectful | Slightly respectful Not at all respectful |
| When challenges arise in your personal life, how understanding are your school leaders? | Extremely understanding Quite understanding | Somewhat understanding | Slightly understanding Not at all understanding |
| How fairly does the school leadership treat the faculty? | Extremely fairly Quite fairly | Somewhat fairly | Slightly fairly Not fairly at all |
| Student Behavior |  |  |  |
| How respectful are the relationships between teachers and students? | Extremely respectful Quite respectful | Somewhat respectful | Slightly respectful Not at all respectful |
| How often does student misconduct disrupt the learning environment at your school? | Almost never Once in a while | Sometimes | Frequently <br> Almost all the time |
| Overall, how safe is the school environment? | Extremely safe Quite safe | Somewhat safe | Slightly safe Not at all safe |
| Work Environment |  |  |  |
| How knowledgeable are you regarding where to find resources for working with students who have unique learning needs? | Extremely knowledgeable Quite knowledgeable | Somewhat knowledgeable | Slightly knowledgeable Not knowledgeable at all |


\left.|  |  |  | Responses |
| :--- | :--- | :--- | :--- |$\right]$

Source: 2022 Impact KY Working Conditions Survey.
Differences By Turnover Rates. Districts were divided into quartiles based on the 5-year average turnover between school years 2018 and 2022, as discussed in Chapter 2. Quartile 1 represents low-turnover districts, and Quartile 4 represents high-turnover districts. Teachers from schools with lower turnover rates were more likely to positively view the teaching profession, their working environment, student behaviors, and support from their school administration. Table D. 2 lists the questions indicating the greatest differences between teachers at low-turnover schools and teachers at high-turnover schools.

Table D. 2
Teacher Responses To 2022 Impact Survey By Teacher Turnover Quartile School Year 2022

| Question | Q1 <br> (lowest) | Q2 | Q3 | Q4 <br> (highest) | Percentage point difference between Q1 and Q4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The relationships between teachers and students are extremely or quite respectful. | 76.6\% | 71.5\% | 65.2\% | 55.8\% | -20.8 |
| Student misconduct disrupts the learning environment at the respondent's school almost never or once in a while. | 41.9 | 36.2 | 30.4 | 21.4 | -20.5 |
| Teachers are trusted to teach in the way they think is best a tremendous amount or quite a bit. | 74.2 | 70.9 | 68.4 | 58.3 | -15.9 |
| Overall, the school environment is extremely or quite safe. | 86.7 | 83.6 | 80.0 | 71.9 | -14.8 |
| The quality of resources at the respondent's school needs to improve not at all or a little bit. | 61.2 | 59.3 | 55.4 | 48.2 | -13.0 |
| The working environment at the respondent's school is overall extremely or quite positive. | 60.0 | 59.6 | 57.6 | 49.3 | -10.7 |
| A tremendous amount or quite a bit of trust exists between school leaders and faculty. | 65.9 | 66.0 | 64.3 | 55.9 | -10.1 |

Source: 2022 Impact KY Working Conditions Survey.

## Positive Responses By Educational Cooperative

Tables D. 3 and D. 4 show average positive responses of teachers and principals by educational cooperative for all 34 questions analyzed on the Impact Survey and by question category.

## Table D. 3 <br> Principals' Positive Responses By Question Category And All Questions By Educational Cooperative School Year 2022

| Educational <br> Cooperative | Overall | Attitudes Toward <br> Teaching Profession | Working <br> Environment | Student <br> Behavior | Support From School <br> Administration |
| :--- | :---: | :---: | :---: | :---: | :---: |
| CKEC | $85.5 \%$ | $77.6 \%$ | $78.6 \%$ | $86.4 \%$ | $95.4 \%$ |
| GRREC | 84.2 | 76.6 | 75.3 | 86.3 | 95.4 |
| Jefferson | 85.8 | 74.0 | 81.6 | 85.7 | 95.7 |
| KEDC | 86.1 | 82.3 | 76.5 | 88.6 | 95.7 |
| KVEC | 88.0 | 84.0 | 81.8 | 92.2 | 94.3 |
| NKCES | 87.1 | 78.7 | 80.6 | 80.9 | 98.6 |
| OVEC | 82.0 | 74.6 | 71.8 | 83.7 | 94.4 |
| SESC | 87.4 | 84.2 | 78.2 | 90.2 | 96.1 |
| WKEC | 86.3 | 78.9 | 78.3 | 86.1 | 97.2 |

Note: CKEC = Central Kentucky Educational Cooperative; GRREC= Green River Regional Educational
Cooperative; Jefferson = Jefferson County Exceptional Child Education Services; KEDC = Kentucky
Educational Development Corporation; KVEC = Kentucky Valley Educational Cooperative; NKCES =
Northern Kentucky Cooperative for Educational Services; OVEC = Ohio Valley Educational Cooperative;
SESC= Southeast/Southcentral Education Cooperative; WKEC = West Kentucky Education Cooperative.
Source: Staff analysis of the 2022 Kentucky Impact Working Conditions Survey.

Table D. 4
Teachers' Positive Responses By Question Category And All Questions By Educational Cooperative School Year 2022

| Educational <br> Cooperative | Overall | Attitudes Toward <br> Teaching Profession | Working <br> Environment | Student <br> Behavior | Support From School <br> Administration |
| :--- | :---: | :---: | :---: | :---: | :---: |
| CKEC | $58.2 \%$ | $49.1 \%$ | $54.8 \%$ | $62.0 \%$ | $65.2 \%$ |
| GRREC | 60.1 | 53.4 | 52.3 | 65.2 | 69.0 |
| Jefferson | 56.5 | 48.2 | 54.9 | 54.2 | 62.8 |
| KEDC | 63.8 | 58.2 | 54.7 | 69.8 | 73.1 |
| KVEC | 68.4 | 63.4 | 58.8 | 75.3 | 77.6 |
| NKCES | 52.8 | 45.2 | 49.9 | 53.4 | 59.4 |
| OVEC | 56.9 | 48.7 | 50.8 | 59.5 | 65.8 |
| SESC | 66.3 | 54.4 | 57.0 | 71.3 | 75.5 |
| WKEC | 61.3 | 54.9 | 66.1 | 69.4 |  |

Note: CKEC = Central Kentucky Educational Cooperative; GRREC= Green River Regional Educational Cooperative; Jefferson = Jefferson County Exceptional Child Education Services; KEDC = Kentucky Educational Development Corporation; KVEC = Kentucky Valley Educational Cooperative; NKCES = Northern Kentucky Cooperative for Educational Services; OVEC = Ohio Valley Educational Cooperative; SESC= Southeast/Southcentral Education Cooperative; WKEC = West Kentucky Education Cooperative.
Source: Staff analysis of the 2022 Kentucky Impact Working Conditions Survey.
In all 34 answers and within each category (except for principals regarding support from administration), the highest positive response rates were from principals and teachers in the Kentucky Valley Educational Cooperative (KVEC).

For teachers, the lowest positive response rates, overall and within each category, were in the Northern Kentucky Cooperative for Educational Services (NKCES).

For principals overall, the lowest positive response rates were in the Ohio Valley Educational Cooperative (OVEC). For principals by category, the lowest positive response rates were in Jefferson County for attitudes, in OVEC for working environment, in NKCES for student behavior, and in KVEC for support from school administration.

The differences between principals and teachers, overall and within most question categories, were greatest in NKCES (34.3 percentage points) and lowest in KVEC (19.6 percentage points).

## Appendix E

## Teaching, Empowering, Leading And Learning Survey Items Excluded From 2022 Impact Survey

This appendix lists questions and bulleted answer options from the most recent Teaching, Empowering, Leading and Learning (TELL) Survey in 2017 that were not included in the 2022 Impact Survey. ${ }^{66}$ The bulleted answer options apply to each subquestion or phrase. Some questions from the 2017 TELL Survey are similar to questions in the 2022 Impact Survey and are included here where they are a subquestion within a question.
2.1 Please rate how strongly you agree or disagree with the following statements about the use of time in your school.
a. Class sizes are reasonable such that teachers have the time available to meet the needs of all students.
b. Teachers have time available to collaborate with colleagues.
c. Teachers are allowed to focus on educating students with minimal interruptions.
d. The non-instructional time provided for teachers in my school is sufficient.
e. Efforts are made to minimize the amount of routine paperwork teachers are required to do.
f. Teachers have sufficient instructional time to meet the needs of all students.
g. Teachers are protected from duties that interfere with their essential role of educating students.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
2.2 In an average week, how much time do you devote to the following activities during the school day (i.e., time for which you are under contract to be at the school)?
a. Individual planning time
b. Collaborative planning time
c. Supervisory duties
d. Required committee and/or staff meetings
e. Completing required administrative paperwork
f. Preparing for/participating in the teacher evaluation process
g. Communicating with parents/guardians and/or the community
h. Addressing student discipline issues
i. Professional learning
j. Preparation for required federal, state, and local assessments
k. Delivery of assessments

1. Utilizing results of assessments

- None
- Less than or equal to 1 hour
- More than 1 hour but less than or equal to 3 hours
- More than 3 hours but less than or equal to 5 hours
- More than 5 hours but less than or equal to 10 hours
- More than 10 hours
2.3 In an average week of teaching, how many hours do you spend on school-related activities outside the regular school work day (before or after school, and/or on weekends)?
- None
- Less than or equal to 1 hour
- More than 1 hour but less than or equal to 3 hours
- More than 3 hours but less than or equal to 5 hours
- More than 5 hours but less than or equal to 10 hours
- More than 10 hours
3.1 Please rate how strongly you agree or disagree with the following statements about your school facilities and resources.
a. Teachers have sufficient access to appropriate instructional materials.
b. Teachers have sufficient access to instructional technology, including computers, printers, software and internet access.
c. Teachers have sufficient support to use effectively the state-approved electronic platform (i.e., CIITS, EDS). ${ }^{\text {a }}$
d. Teachers have access to reliable communication technology, including phones, faxes and email.
e. Teachers have sufficient access to office equipment and supplies such as copy machines, paper, pens, etc.
f. Teachers have sufficient access to a broad range of professional support personnel.
g. The school environment is clean and well maintained.
h. Teachers have adequate space to work productively.
i. The physical environment of classrooms in this school supports teaching and learning.
j. The reliability and speed of Internet connections in this school are sufficient to support instructional practices.
k. Teachers have sufficient access to the library and media facilities.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
4.1 Please rate how strongly you agree or disagree with the following statements about community support and involvement in your school.
a. Parents/guardians are influential decision makers in this school.
b. This school maintains clear, two-way communication with the community.

[^45]c. This school does a good job of encouraging parent/guardian involvement.
d. Teachers provide parents/guardians with useful information about student learning.
e. Parents/guardians know what is going on in this school.
f. Parents/guardians support teachers, contributing to their success with students.
g. Community members support teachers, contributing to their success with students.
h. The community we serve is supportive of this school.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
5.1 Please rate how strongly you agree or disagree with the following statements about managing student conduct in your school.
a. Students at this school understand expectations for their conduct.
b. Students at this school follow rules of conduct.
c. Policies and procedures about student conduct are clearly understood by the faculty.
d. School administrators consistently enforce rules for student conduct.
e. School administrators support teachers' efforts to maintain discipline in the classroom.
f. Teachers consistently enforce rules for student conduct.
g. The faculty work in a school environment that is safe.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
6.1 Please rate how strongly you agree or disagree with the following statements about teacher leadership in your school.
a. Teachers are recognized as educational experts.
b. Teachers are trusted to make sound professional decisions about instruction.
c. Teachers are relied upon to make decisions about educational issues.
d. Teachers are encouraged to participate in school leadership roles.
e. The faculty has an effective process for making group decisions to solve problems.
f. In this school we take steps to solve problems.
g. Teachers are effective leaders in this school.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
6.2 Please indicate the role teachers have at your school in each of the following areas.
a. Selecting instructional materials and resources
b. Devising teaching techniques
c. Setting grading and student assessment practices
d. Determining the content of in-service professional learning programs
e. Establishing student discipline procedures
f. Providing input on how the school budget will be spent
g. Selecting teachers new to this school
h. Planning school improvement
i. Leading professional learning
j. Modeling instructional methods, assessments, and/or classroom management
- No role at all
- Small role
- Moderate role
- Large role
6.5 Teachers have an appropriate level of influence on decision making in this school.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
7.1 Please rate how strongly you agree or disagree with the following statements about school leadership in your school.
a. The faculty and leadership have a shared vision.
b. There is an atmosphere of trust and mutual respect in this school.
c. Teachers feel comfortable raising issues and concerns that are important to them.
d. The school leadership consistently supports teachers.
e. Teachers are held to high professional standards for delivering instruction.
f. The school leadership facilitates using data to improve student learning.
g. Teacher performance is assessed objectively.
h. Teachers receive feedback that can help them improve teaching.
i. The procedures for teacher evaluation are consistent.
j. The school improvement team provides effective leadership at this school.
k. The faculty are recognized for accomplishments.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
7.3 The school leadership makes a sustained effort to address teacher concerns about:
a. Leadership issues
b. Facilities and resources
c. The use of time in my school
d. Professional learning
e. Teacher leadership
f. Community support and involvement
g. Managing student conduct
h. Instructional practices and support
i. New teacher support
- Strongly disagree
- Disagree
- Agree
- Strongly agree
7.4 Please rate how strongly you agree or disagree with the following statements about the school council in your school.
a. Teachers on the school council are representative of the faculty (i.e., experience, subject/grade, etc.).
b. Parents on the school council are representative of the diversity within the school community.
c. The school council makes decisions that positively impact instruction (i.e., curriculum, instructional practices, etc.).
d. The school council makes decisions that positively impact school staffing and schedules.
e. Overall, the school council provides effective leadership in this school.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
8.1 Please rate how strongly you agree or disagree with statements about professional learning in your school.
a. Sufficient resources are available for professional learning in my school.
b. An appropriate amount of time is provided for professional learning.
c. Professional learning offerings are data driven.
d. Professional learning opportunities are aligned with the school's improvement plan.
e. Professional learning is differentiated to meet the needs of individual teachers.
f. Decision making about professional learning is guided by evidence from the growth and effectiveness system.
g. Professional learning deepens teachers' content knowledge.
h. Teachers have sufficient training to fully utilize instructional technology.
i. Teachers are encouraged to reflect on their own practice.
j. In this school, follow up is provided from professional learning.
k. Professional learning provides ongoing opportunities for teachers to work with colleagues to refine teaching practices.

1. Professional learning is evaluated and results are communicated to teachers.
m . Professional learning enhances teachers' ability to implement instructional strategies that meet diverse student learning needs.
n. Professional learning enhances teachers' abilities to improve student learning.
o. Teachers contribute to the planning, selection, and/or design of professional learning.

- Strongly disagree
- Disagree
- Agree
- Strongly agree
8.2 In which of the following areas (if any) do you need professional learning to teach your students more effectively?
a. Your content area
b. Kentucky Academic Standards
c. Student assessment
d. Differentiating instruction
e. Special education (students with disabilities)
f. Special education (gifted and talented)
g. English Language Learners
h. Closing the Achievement Gap
i. Methods of teaching
j. Reading strategies
k. Integrating technology into instruction

1. Classroom management techniques

- Yes
- No
8.3 In the past 2 years have you had 10 clock hours or more of professional learning in any of the following areas?
a. Your content area
b. Kentucky Academic Standards
c. Student assessment
d. Differentiating instruction
e. Special education (students with disabilities)
f. Special education (gifted and talented)
g. English Language Learners
h. Closing the Achievement Gap
i. Methods of teaching
j. Reading strategies
k. Integrating technology into instruction

1. Classroom management techniques

- Yes
- No
9.1 Please rate how strongly you agree or disagree with the following statements about instructional practices and support in your school.
a. State assessment data are available in time to impact instructional practices.
b. Local assessment data are available in time to impact instructional practices.
c. Teachers use assessment data to inform their instruction.
d. Teachers work in professional learning communities to develop and align instructional practices.
e. Provided supports (i.e., instructional coaching, professional learning communities, etc.) translate to improvements in instructional practices by teachers.
f. Teachers are encouraged to try new things to improve instruction.
g. Teachers are assigned classes that maximize their likelihood of success with students.
h. Teachers have autonomy to make decisions about instructional delivery (i.e., pacing, materials and pedagogy).
i. The curriculum taught in this school is aligned with Kentucky Academic Standards.
j. An appropriate amount of instructional time is spent on required local assessments in this school.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
10.1 Which of the following best describes your immediate professional plans? (Select one.)
- Continue teaching at my current school
- Continue teaching in this district but leave this school
- Continue teaching in this state but leave this district
- Continue working in education but pursue an administrative position
- Continue working in education but pursue a non-administrative position
- Leave education entirely
10.3 Which aspect of your teaching conditions most affects your willingness to keep teaching at your school? (Select one.)
- Time during the work day
- Facilities and resources
- Community support and involvement
- Managing student conduct
- Teacher leadership
- School leadership
- Professional learning
- Instructional practices and support
10.5 Which aspect of your teaching conditions is most important to you in promoting student learning? (Select one.)
- Time during the work day
- Facilities and resources
- Community support and involvement
- Managing student conduct
- Teacher leadership
- School leadership
- Professional learning
- Instructional practices and support
10.6 Overall, my school is a good place to work and learn.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
10.7 At this school, we utilize the results from the TELL Kentucky Survey as a tool for school improvement.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
11.1 As a beginning teacher, I have received the following kinds of supports during this current school year.
a. Formally assigned resource teacher/mentor
b. Seminars specifically designed for new teachers
c. Reduced workload
d. Common planning time with other teachers
e. Release time to observe other teachers
f. Formal time to meet with mentor during school hours
g. Orientation for new teachers
h. Access to professional learning communities where I could discuss concerns with other teacher(s)
i. Regular communication with principals, other administrator or department chair
j. Participation in the KTIP program
k. Other

1. I received no additional support as a new teacher.

- Yes
- No
11.2 On average, how often did you engage in each of the following activities with your resource teacher/mentor during this current school year?
a. Developing lesson plans
b. Being observed teaching by my resource teacher/mentor
c. Observing my resource teacher's/mentor's teaching
d. Analyzing student work
e. Reviewing results of students' assessments
f. Addressing student or classroom behavioral issues
g. Reflecting on and discussing the effectiveness of my teaching
h. Aligning my lesson planning with the state curriculum and local curriculum
i. Other
- Never
- Less than once per month
- Once per month
- Several times per month
- Once per week
- Almost daily
11.3 How much did the support you received from your resource teacher/mentor influence your practice in the following areas during this current school year?
a. Instructional strategies
b. Subject matter I teach
c. Classroom management strategies
d. Using data to identify student needs
e. Differentiating instruction based upon individual student needs and characteristics
f. Creating a supportive, equitable classroom where differences are valued
g. Enlisting the help of family members, parents and/or guardians
h. Working collaboratively with other teachers at my school
i. Connecting with key resource professionals (e.g., coaches, counselors, etc.)
j. Complying with policies and procedures
k. Completing administrative paperwork

1. Providing emotional support
m. Other

- Not at all
- Hardly at all
- Some
- Quite a bit
- A great deal
11.4 Please indicate whether each of the following were true for you and your resource teacher/mentor during this current school year.
a. My resource teacher/mentor and I were in the same building.
b. My resource teacher/mentor and I taught in the same content area.
c. My resource teacher/mentor and I taught the same grade level.
- Yes
- No
11.5 Overall, the additional support I received as a new teacher during this current school year improved my instructional practice.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
11.6 Overall, the additional support I received as a new teacher during this current school year has helped me to impact my students' learning.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
11.7 Overall, the additional support I received as a new teacher during this current school year has been important in my decision to continue teaching at this school.
- Strongly disagree
- Disagree
- Agree
- Strongly agree


# Appendix F 

Praxis II Test Results By Assessment Type

Kentucky requires teachers to pass the Praxis II exam to demonstrate specific content knowledge, instructional skills and pedagogy. Teachers can take the test multiple times, if needed, in order to get a passing score. Table F. 1 includes each of the Praxis II assessment types, the number of people taking each test, what percentage of test takers that test accounts for relative to all test takers, and the average pass rate by assessment. The pass rates range from a low of 33 percent in Japanese: World Language to 100 percent in several tests.

Table F. 1
Praxis II Test Takers By Assessment Type School Years 2018 To 2023

|  | Number <br> Of Test | Percent <br> Of Test <br> Takers | Takers |
| :--- | ---: | :---: | ---: |
| Praxis Test | 208 | $0.41 \%$ | $97 \%$ |
| Agriculture | 239 | 0.47 | 90 |
| Art: Content and Analysis | 3 | 0.01 | 67 |
| ASL Proficiency Interview | 412 | 0.82 | 98 |
| Biology: Content Knowledge | 182 | 0.36 | 98 |
| Business Education: Content Knowledge | 1 | 0.00 | 100 |
| Chemistry | 176 | 0.35 | 86 |
| Chemistry: Content Knowledge | 11 | 0.02 | 100 |
| Chinese (Mandarin): World Language | 59 | 0.12 | 92 |
| Early Childhood: Content Knowledge | 57 | 0.11 | 86 |
| Earth and Space Sciences: Content Knowledge | 21 | 0.04 | 86 |
| Education of Young Children | 5,872 | 11.62 | 96 |
| Elementary Education: Mathematics | 5,904 | 11.68 | 97 |
| Elementary Education: Reading and Language Arts | 5,884 | 11.64 | 95 |
| Elementary Education: Science | 5,873 | 11.62 | 94 |
| Elementary Education: Social Studies | 895 | 1.77 | 94 |
| English Language Arts Content and Analysis | 670 | 1.33 | 99 |
| English to Speakers of Other Languages | 77 | 0.15 | 96 |
| Family and Consumer Sciences | 16 | 0.03 | 69 |
| French: World Language | 8 | 0.02 | 100 |
| German: World Language | 366 | 0.72 | 96 |
| Gifted Education | 264 | 0.52 | 92 |
| Health and Physical Education: Content Knowledge | 95 | 0.19 | 94 |
| Health Education | 750 | 1.48 | 97 |
| Interdisciplinary Early Childhood Education | 3 | 0.01 | 33 |
| Japanese: World Language | 4 | 0.01 | 75 |
| Latin | 407 | 0.81 | 96 |
| Library Media Specialist | 260 | 0.51 | 83 |
| Mathematics | 452 | 0.89 | 62 |
| Mathematics: Content Knowledge | 769 | 1.52 | 84 |
| Middle School English Language Arts | 906 | 1.79 | 91 |
| Middle School Mathematics | 659 | 1.3 | 87 |
| Middle School Science |  |  | 9 |


| Praxis Test | Number Of Test Takers | Percent Of Test Takers | Pass Rate |
| :---: | :---: | :---: | :---: |
| Middle School Social Studies | 752 | 1.49 | 94 |
| Music: Content and Instruction | 553 | 1.09 | 92 |
| Music: Content Knowledge | 14 | 0.03 | 79 |
| Music: Instrumental and General Knowledge | 62 | 0.12 | 97 |
| Music: Vocal and General Knowledge | 26 | 0.05 | 96 |
| Physical Education: Content and Design | 395 | 0.78 | 88 |
| Physical Education: Content Knowledge | 21 | 0.05 | 90 |
| Physics: Content Knowledge | 81 | 0.16 | 83 |
| Principles of Learning and Teaching: Grades K-6 | 5,919 | 11.71 | 99 |
| Principles of Learning and Teaching: Grades 5-9 | 1,816 | 3.59 | 99 |
| Principles of Learning and Teaching: Grades 7-12 | 3,135 | 6.2 | 99 |
| Reading Specialist | 372 | 0.74 | 91 |
| School Psychologist | 159 | 0.31 | 100 |
| Social Studies: Content and Interpretation | 900 | 1.78 | 90 |
| Social Studies: Content Knowledge | 34 | 0.07 | 91 |
| Spanish: World Language | 212 | 0.42 | 69 |
| Special Education: Core Knowledge and Applications | 322 | 0.64 | 99 |
| Special Education: Core Knowledge and Mild to Moderate Applications | 2,843 | 5.63 | 98 |
| Special Education: Core Knowledge and Severe to Profound Applications | 564 | 1.12 | 100 |
| Special Education: Education of Deaf and Hard of Hearing Students | 71 | 0.14 | 92 |
| Special Education: Teaching Students with Visual Impairments | 64 | 0.13 | 98 |
| Speech Communication: Content Knowledge | 2 | 0.00 | 100 |
| Speech-Language Pathology | 637 | 1.26 | 98 |
| Teaching Reading | 24 | 0.05 | 100 |
| Teaching Reading: K-12 | 11 | 0.02 | 100 |
| Technology Education | 10 | 0.02 | 100 |
| Theatre (Computer) | 35 | 0.07 | 94 |

Note: Duplicates were removed. If a test taker took a test prior to July 1, 2018, their subsequent tests were removed from the data set to ensure these were first-time test takers in the data. ASL = American Sign Language.
Source: Praxis II data provided by the Kentucky Department of Education.

## Appendix G

## OEA Survey Additional Data

## 2023 OEA Superintendent Survey

The OEA Superintendent Survey was sent to 171 superintendents, 158 of whom responded, for a response rate of 92.4 percent. OEA staff analyzed data from the Kentucky Department of Education and determined that of the 171 superintendents, 53 percent had 5 years or fewer of service as a superintendent and 33 percent had 6 to 10 years. The average was 6 years. Table G. 1 shows the number and percentage of superintendents by years of experience.

Table G. 1
Superintendents' Years Of Experience
School Year 2023

| Years Of Experience As A Superintendent | Number | Percent |
| :--- | :---: | :---: |
| 1 to 5 | 90 | $53 \%$ |
| 6 to 10 | 56 | 33 |
| 11 to 15 | 20 | 12 |
| More than 15 | 5 | 3 |
| Total | 171 | 100 |

Note: Percentages do not sum to 100 percent due to rounding.
Source: Staff compilation of data from the Kentucky Department of Education.

## 2023 OEA Principal Survey

OEA sent a survey concerning staffing shortages to 1,151 principals, 581 of whom responded, for a response rate of 50.5 percent representing 84.8 percent of districts. Principals reported their number of years serving as principal, as shown in Table G.2. The average total time as a principal was 6.7 years, and the average time as a principal at the current school was 5 years. More than half had 5 or fewer total years of experience as a principal. Many respondents reported they had experience as an assistant principal before becoming a principal.

## Table G. 2 <br> Principals' Years Of Experience School Year 2023

| Years Of Experience | Number | Percent |
| :--- | :---: | :---: |
| 0 to 5 | 303 | $52 \%$ |
| 5 to 10 | 162 | 28 |
| 10 to 15 | 70 | 12 |
| 15 to 20 | 32 | 6 |
| More than 20 | 14 | 2 |
| Total | 581 |  |
| lat |  |  |

Source: Staff compilation of data from the 2023 OEA Principal Survey.

Principals' Reports Of Applicants. Table G. 3 shows, by subject, principals' reports on the sufficiency of the supply of satisfactory applicants and their reports on the current supply compared to the supply 5 years earlier.

Table G. 3
Satisfactory Applicants, Positive Responses School Years 2023 And 2019

| Subject | Generally Enough Or An Abundance Of Satisfactory Applicants |  | About The Same, More, Or Considerably More Applicants Compared To Past 5 Years |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2019 | 2023 | 2019 | 2023 |
| Elementary School |  |  |  |  |
| Elementary education | 59.9\% | 34.6\% | 57.7\% | 16.9\% |
| Middle School |  |  |  |  |
| English | 40.2 | 20.4 | 46.9 | 15.2 |
| Math | 22.3 | 8.3 | 33.6 | 10.2 |
| Science | 18.6 | 6.8 | 30.5 | 11.8 |
| Social studies | 49.5 | 22.5 | 52.0 | 16.3 |
| High School |  |  |  |  |
| Biology | 13.4 | 3.9 | 33.0 | 6.0 |
| Chemistry | 2.9 | 0.0 | 16.9 | 3.0 |
| Earth science | 20.5 | 5.0 | 33.3 | 8.3 |
| English | 46.4 | 24.2 | 55.2 | 17.4 |
| Health science | 32.0 | 10.6 | 45.6 | 14.8 |
| Information technology | 15.5 | 6.2 | 39.7 | 15.1 |
| Math | 11.0 | 5.2 | 17.8 | 8.6 |
| Media arts | 21.4 | 11.5 | 45.3 | 19.8 |
| Physics | 3.6 | 2.5 | 18.9 | 7.8 |
| Social studies | 65.7 | 32.6 | 66.7 | 26.1 |
| Any Grade |  |  |  |  |
| Art | 34.5 | 27.4 | 53.4 | 25.5 |
| English as a second language | 12.5 | 14.5 | 38.9 | 25.2 |
| Exceptional child | 27.9 | 15.7 | 44.5 | 15.9 |
| Gifted and talented | 25.1 | 27.3 | 45.3 | 27.6 |
| Music | 37.2 | 30.3 | 56.5 | 28.0 |
| Physical education | 53.8 | 45.9 | 61.0 | 36.1 |
| World languages | 10.3 | 7.1 | 32.7 | 16.4 |
| Any Level, Support Staff |  |  |  |  |
| Library and media specialists | N/A | 52.7 | N/A | 26.8 |
| School counselors | N/A | 38.3 | N/A | 27.8 |
| Tutors/interventionists | N/A | 29.8 | N/A | 27.9 |

Source: 2019 Principal Survey; 2023 OEA Principal Survey.
Teacher Recruitment Strategies. The OEA Principal Survey asked principals to select the strategies their school/district used to recruit teachers. Results appear in Table G.4.

## Table G. 4 <br> Principals Reporting Strategies To Recruit Teachers School Year 2023

| Strategy | Percent | Number |
| :--- | :---: | :---: |
| Hire alternatively certified teachers | $86 \%$ | 466 |
| Hire emergency certified teachers | 83 | 449 |
| Advertise on social media | 76 | 411 |
| Hire retired teachers | 73 | 394 |
| Visit college job fairs | 61 | 332 |
| Recruit from the local community | 59 | 320 |
| Provide internal teacher mentoring programs | 49 | 265 |
| Recruit high school students to enter the teaching profession | 48 | 258 |
| Host district job fairs | 43 | 233 |
| Hire Teach for Kentucky teachers | 18 | 97 |
| Recruit nationally | 15 | 84 |
| District pays for teacher background checks | 15 | 81 |
| Offer scholarships or tuition reimbursement | 14 | 75 |
| Extra pay for teachers working in a CSI school | 12 | 65 |
| Offer teacher residency programs | 9 | 47 |
| Extra pay for teachers working in an underserved school | 8 | 46 |
| District pays for teacher physicals | 5 | 28 |
| Help pay off student loans | 4 | 21 |
| District pays for teacher certification renewals | 1 | 7 |
| Offer affordable housing | 1 | 6 |
| Total answering question |  | 542 |

Note: CSI = comprehensive support and improvement.
Source: 2023 OEA Principal Survey.

## Teacher Mentoring, Recruitment And Retention

Superintendents and principals were asked questions about teacher mentoring, recruitment, and retention.

Mentoring Of Teachers. Superintendents were asked if their district had a teacher mentoring program and, if so, how often the program provided mentoring tasks. Most superintendents (88 percent) reported having such a program. Superintendents' reports of the frequency of mentoring tasks appear in Table G.5.

Table G. 5
Frequency Of District Teacher Mentoring Tasks 2023

|  | Almost <br> Daily | Once Per <br> Week | Several <br> Times Per <br> Month | Once Per <br> Month | Less Than <br> Once Per <br> Month | Never |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Mentoring Task | $3 \%$ | $19 \%$ | $32 \%$ | $31 \%$ | $13 \%$ | $2 \%$ |
| Developing lesson <br> plans <br> Being observed by resource/mentor <br> teacher | 1 | 3 | 26 | 36 | 33 | 2 |
| Observing resource teacher/mentor | 1 | 3 | 20 | 34 | 42 | 1 |
| Analyzing student <br> work | 4 | 17 | 31 | 36 | 13 | 0 |
| Reviewing results of <br> students' assessments | 2 | 14 | 42 | 30 | 12 | 0 |
| Addressing student or <br> classroom behavioral issues <br> Reflecting on and discussing <br> effectiveness of teachers' teaching | 4 | 14 | 37 | 34 | 12 | 0 |
| Aligning lesson plans with state <br> curriculum and local curriculum | 4 | 17 | 32 | 29 | 17 | 0 |

Source: 2023 OEA Superintendent Survey.
Barriers To Teacher Recruitment And Retention. Chapter 2 discusses barriers to teacher recruitment and retention reported by superintendents and principals on the OEA surveys. For recruitment, Table G. 6 shows superintendents' responses and Table G. 7 shows principals’ responses. For retention, Table G. 8 shows superintendents' responses and Table G. 9 shows principals' responses.

Table G. 6
Barriers To Teacher Recruitment Reported By Superintendents 2023

|  | Extreme <br> Barrier | Moderate <br> Barrier | Minimal <br> Barrier | Not <br> A Barrier |
| :--- | :---: | :---: | :---: | :---: |
| Geographic location | $15.6 \%$ | $33.8 \%$ | $26.0 \%$ | $24.7 \%$ |
| Salary insufficient compared to other districts | 20.8 | 26.0 | 33.8 | 19.5 |
| Salary insufficient compared to private industry | 44.2 | 27.9 | 32.5 | 27.9 |
| Benefits insufficient compared to private industry | 16.9 | 22.7 | 32.5 | 27.9 |
| Lack of qualified candidates | 72.7 | 20.8 | 3.9 | 2.6 |
| Student behavior | 7.8 | 16.9 | 43.5 | 31.8 |

Source: 2023 OEA Superintendent Survey.

Table G. 7
Barriers To Teacher Recruitment Reported By Principals 2023

|  | Extreme <br> Barrier | Moderate <br> Barrier | Minimal <br> Barrier | Not A <br> Barrier | Number Of <br> Respondents |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Geographic location | $12.3 \%$ | $30.3 \%$ | $27.8 \%$ | $29.6 \%$ | 544 |
| Salary insufficient compared to private industry | 31.1 | 27.5 | 23.3 | 18.1 | 546 |
| Benefits insufficient compared to private industry | 15.8 | 24.7 | 29.9 | 29.7 | 546 |
| Salary insufficient compared to other districts | 19.6 | 29.3 | 26.7 | 24.5 | 547 |
| Lack of qualified candidates, in general | 33.9 | 41.6 | 18.5 | 6.0 | 546 |
| Lack of qualified candidates, in particular subjects | 39.3 | 36.3 | 14.9 | 9.5 | 545 |
| Student behavior | 13.4 | 25.9 | 30.0 | 30.7 | 544 |
| Lack of respect for teachers from administrators | 1.8 | 8.6 | 21.0 | 68.6 | 544 |
| Lack of respect for teachers from parents | 12.8 | 25.3 | 32.1 | 29.7 | 545 |
| Lack of respect for teachers from local community | 5.9 | 18.5 | 33.2 | 42.4 | 545 |
| Lack of respect for teachers from society | 17.6 | 28.1 | 29.8 | 24.4 | 544 |
| Sascer |  |  |  |  |  |

Source: 2023 OEA Principal Survey.
Table G. 8
Barriers To Teacher Retention Reported By Superintendents 2023

| Barrier | Extreme <br> Barrier | Moderate <br> Barrier | Minimal <br> Barrier | Not <br> A Barrier |
| :--- | :---: | :---: | :---: | :---: |
| Geographic location | $11.7 \%$ | $28.6 \%$ | $28.6 \%$ | $31.2 \%$ |
| Community and local support | 3.3 | 11.8 | 35.9 | 49.0 |
| Salary insufficient compared to other districts | 18.8 | 31.2 | 29.9 | 20.1 |
| Salary insufficient compared to private industry | 42.2 | 29.2 | 16.9 | 11.7 |
| Benefits insufficient compared to private industry | 18.8 | 21.4 | 30.5 | 29.2 |
| Lack of qualified candidates | 36.4 | 34.4 | 18.2 | 11.0 |
| Student behavior | 7.8 | 20.1 | 40.9 | 31.2 |
| Work-life balance | 12.4 | 19.0 | 45.1 | 23.5 |

Source: 2023 OEA Superintendent Survey.

Table G. 9
Barriers To Teacher Retention Reported By Principals 2023

| Barrier | Extreme Barrier | Moderate Barrier | Minimal Barrier | Not A Barrier | Number Of Respondents |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Geographic location | 7.9\% | 20.4\% | 34.0\% | 37.7\% | 544 |
| Community and local support | 2.8 | 16.2 | 38.5 | 42.5 | 543 |
| Salary insufficient compared to private industry | 24.1 | 25.0 | 26.5 | 24.4 | 544 |
| Benefits insufficient compared to private industry | 15.3 | 21.6 | 32.7 | 30.4 | 542 |
| Salary insufficient compared to other districts | 19.2 | 24.7 | 28.2 | 28.0 | 543 |
| Lack of qualified candidates, in general | 23.1 | 33.0 | 27.1 | 16.8 | 542 |
| Lack of qualified candidates, in particular subjects | 27.6 | 28.9 | 23.1 | 20.4 | 540 |
| Student behavior | 12.4 | 23.1 | 32.0 | 32.5 | 541 |
| Lack of respect for teachers from administrators | 2.2 | 4.8 | 22.7 | 70.3 | 543 |
| Lack of respect for teachers from parents | 10.1 | 20.3 | 36.1 | 33.5 | 543 |
| Lack of respect for teachers from local community | 5.9 | 14.9 | 36.1 | 43.1 | 543 |
| Lack of respect for teachers from society | 13.8 | 23.4 | 32.2 | 30.6 | 543 |
| Work-life balance | 18.5 | 33.9 | 31.7 | 15.9 | 540 |
| Continuing education | 4.6 | 19.1 | 40.3 | 35.9 | 538 |

Source: OEA 2023 principal survey.

## Appendix H

## 2022 Teacher Recruitment And Retention Laws

Table H. 1 shows laws that relate to teacher recruitment and retention, how many states have those laws, and whether Kentucky has a law related to that topic.

Table H. 1
States With Teacher Recruitment And Retention Laws, And Applicable Kentucky Law 2023

| Law | States With Law | Kentucky's Law |
| :---: | :---: | :---: |
| Statute or regulation requires pathway, program, or incentive to recruit high school students into teaching profession. | 32 | Statute requires department of education to develop teacher recruitment plan with early recruitment program to inform middle and high school students about potential of a teaching career. State education agency awarded grant funding to 10 districts to establish "grow your own" programs. Students may complete teaching and learning career pathway in high school. |
| Statute or regulation creates or supports teacher residency program. | 22 | Statute establishes alternative certification option allowing teacher to be certified through residency program. Policy requires establishment of residency program through approved partnership between postsecondary institution and school district. |
| Statute or regulation provides pathway, program, or incentive to recruit paraprofessionals into teaching profession. | 26 | Statute requires department of education to develop teacher recruitment plan including program encouraging paraprofessionals to become teachers. Statute permits colleges and universities to partner with districts to establish alternative certification programs for paraprofessionals in the district with approval of the Education Professional Standards Board. |
| Induction and mentoring support is required for new teachers. | 31 | Not identified in state policy, but statute let districts provide mentorship for 1 year to new teachers who finish preparation program without completing the necessary assessments. |
| Reduced teaching load is required or encouraged for new and/or mentor teachers | 30 | - |
| Established portion of teacher's workday/work week must be designated exclusively for planning. | 14 | Teachers must be provided additional time for nonteaching activities during school day, including instructional planning. No time requirements are specified. |
| Teacher leader license or endorsement is offered. | 19 | State offers Teacher Leader certification. |
| Statute establishes minimum teacher pay. | 25 | State has a minimum teacher salary schedule based on years of teaching experience and licensure rank. |
| Statute defines at least one statewide scholarship or grant program to help recruit teachers for underserved schools and/or shortage subject areas. | 39 | Teacher scholarships for eligible persons agreeing to render qualified teaching service in Kentucky and District teacher certification loan fund. |

Source: Staff compilation of data from Education Commission of the States.

## Appendix I

## Change In School District Starting Salaries School Years 2014 To 2023

Table I. 1
School District Certified Starting Salaries By District School Years 2014 And 2023

| District | 2014 | 2023 | Difference | Percent Change |
| :---: | :---: | :---: | :---: | :---: |
| Adair County | \$33,301 | \$38,000 | \$4,699 | 14\% |
| Allen County | 35,901 | 39,249 | 3,348 | 9 |
| Anchorage Independent | 38,544 | 43,097 | 4,553 | 12 |
| Anderson County | 34,436 | 38,789 | 4,353 | 13 |
| Ashland Independent | 34,875 | 36,831 | 1,956 | 6 |
| Augusta Independent | 35,615 | 39,703 | 4,088 | 11 |
| Ballard County | 34,285 | 37,948 | 3,663 | 11 |
| Barbourville Independent | 33,289 | 36,756 | 3,467 | 10 |
| Bardstown Independent | 38,656 | 42,893 | 4,237 | 11 |
| Barren County | 35,119 | 40,560 | 5,441 | 15 |
| Bath County | 33,955 | 36,238 | 2,283 | 7 |
| Beechwood Independent | 38,472 | 41,692 | 3,220 | 8 |
| Bell County | 31,478 | 34,739 | 3,261 | 10 |
| Bellevue Independent | 37,035 | 41,830 | 4,795 | 13 |
| Berea Independent | 35,546 | 40,229 | 4,683 | 13 |
| Boone County | 37,452 | 42,786 | 5,334 | 14 |
| Bourbon County | 34,256 | 38,930 | 4,674 | 14 |
| Bowling Green Independent | 35,362 | 41,200 | 5,838 | 17 |
| Boyd County | 33,492 | 39,092 | 5,600 | 17 |
| Boyle County | 35,606 | 42,941 | 7,335 | 21 |
| Bracken County | 34,775 | 37,616 | 2,841 | 8 |
| Breathitt County | 36,325 | 38,422 | 2,097 | 6 |
| Breckinridge County | 36,581 | 40,785 | 4,204 | 11 |
| Bullitt County | 36,440 | 42,066 | 5,626 | 15 |
| Burgin Independent | 33,452 | 38,401 | 4,949 | 15 |
| Butler County | 34,673 | 38,447 | 3,774 | 11 |
| Caldwell County | 35,027 | 37,921 | 2,894 | 8 |
| Calloway County | 35,325 | 40,110 | 4,785 | 14 |
| Campbell County | 36,933 | 41,274 | 4,341 | 12 |
| Campbellsville Independent | 35,006 | 38,658 | 3,652 | 10 |
| Carlisle County | 34,452 | 36,930 | 2,478 | 7 |
| Carroll County | 37,450 | 41,155 | 3,705 | 10 |
| Carter County | 33,946 | 38,424 | 4,478 | 13 |
| Casey County | 34,237 | 37,808 | 3,571 | 10 |
| Caverna Independent | 36,366 | 42,488 | 6,122 | 17 |
| Christian County | 36,780 | 38,996 | 2,216 | 6 |
| Clark County | 34,760 | 39,137 | 4,377 | 13 |
| Clay County | 34,017 | 38,113 | 4,096 | 12 |


| Appendix I | Legislative Research Commission |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Office Of Education Accountability |  |  |  |
| District | 2014 | 2023 | Difference | Percent Change |
| Clinton County | 34,259 | 36,003 | 1,744 | 5 |
| Cloverport Independent | 33,916 | 36,358 | 2,442 | 7 |
| Corbin Independent | 35,564 | 40,648 | 5,084 | 14 |
| Covington Independent | 37,371 | 42,054 | 4,683 | 13 |
| Crittenden County | 35,103 | 38,760 | 3,657 | 10 |
| Cumberland County | 33,945 | 37,726 | 3,781 | 11 |
| Danville Independent | 37,400 | 42,726 | 5,326 | 14 |
| Daviess County | 37,281 | 41,578 | 4,297 | 12 |
| Dawson Springs Independent | 33,007 | 34,004 | 997 | 3 |
| Dayton Independent | 35,217 | 42,148 | 6,931 | 20 |
| East Bernstadt Independent | 35,974 | 41,105 | 5,131 | 14 |
| Edmonson County | 34,223 | 35,256 | 1,033 | 3 |
| Elizabethtown Independent | 36,416 | 40,616 | 4,200 | 12 |
| Elliott County | 32,752 | 35,550 | 2,798 | 9 |
| Eminence Independent | 33,641 | 38,000 | 4,359 | 13 |
| Erlanger-Elsmere Independent | 35,805 | 41,508 | 5,703 | 16 |
| Estill County | 35,990 | 39,347 | 3,357 | 9 |
| Fairview Independent | 33,792 | 39,354 | 5,562 | 16 |
| Fayette County | 40,346 | 44,106 | 3,760 | 9 |
| Fleming County | 34,331 | 36,369 | 2,038 | 6 |
| Floyd County | 36,482 | 40,080 | 3,598 | 10 |
| Fort Thomas Independent | 38,534 | 41,946 | 3,412 | 9 |
| Frankfort Independent | 35,500 | 38,814 | 3,314 | 9 |
| Franklin County | 34,781 | 40,560 | 5,779 | 17 |
| Fulton County | 33,474 | 37,167 | 3,693 | 11 |
| Fulton Independent | 34,401 | 39,074 | 4,673 | 14 |
| Gallatin County | 34,626 | 39,736 | 5,110 | 15 |
| Garrard County | 35,534 | 38,463 | 2,929 | 8 |
| Glasgow Independent | 35,799 | 38,373 | 2,574 | 7 |
| Grant County | 34,933 | 37,074 | 2,141 | 6 |
| Graves County | 35,958 | 39,674 | 3,716 | 10 |
| Grayson County | 35,323 | 37,843 | 2,520 | 7 |
| Green County | 34,572 | 38,172 | 3,600 | 10 |
| Greenup County | 33,734 | 37,829 | 4,095 | 12 |
| Hancock County | 36,224 | 40,160 | 3,936 | 11 |
| Hardin County | 36,742 | 41,672 | 4,930 | 13 |
| Harlan County | 33,506 | 36,968 | 3,462 | 10 |
| Harlan Independent | 33,685 | 35,730 | 2,045 | 6 |
| Harrison County | 33,842 | 39,937 | 6,095 | 18 |
| Hart County | 35,350 | 37,510 | 2,160 | 6 |
| Hazard Independent | 35,732 | 39,650 | 3,918 | 11 |
| Henderson County | 34,163 | 41,600 | 7,437 | 22 |
| Henry County | 34,776 | 37,646 | 2,870 | 8 |
| Hickman County | 34,416 | 37,944 | 3,528 | 10 |
| Hopkins County | 35,243 | 38,885 | 3,642 | 10 |
| Jackson County | 34,926 | 38,158 | 3,232 | 9 |
| Jackson Independent | 32,966 | 35,150 | 2,184 | 7 |
| Jefferson County | 40,118 | 44,853 | 4,735 | 12 |
| Jenkins Independent | 35,191 | 39,619 | 4,428 | 13 |

Legislative Research Commission
Appendix I
Office Of Education Accountability

| District | 2014 | 2023 | Difference | Percent Change |
| :---: | :---: | :---: | :---: | :---: |
| Jessamine County | 35,057 | 42,446 | 7,389 | 21 |
| Johnson County | 36,010 | 38,974 | 2,964 | 8 |
| Kenton County | 39,637 | 45,772 | 6,135 | 15 |
| Knott County | 36,233 | 40,008 | 3,775 | 10 |
| Knox County | 32,653 | 36,756 | 4,103 | 13 |
| LaRue County | 37,473 | 40,156 | 2,683 | 7 |
| Laurel County | 35,972 | 40,887 | 4,915 | 14 |
| Lawrence County | 34,189 | 36,832 | 2,643 | 8 |
| Lee County | 35,326 | 38,213 | 2,887 | 8 |
| Leslie County | 34,932 | 36,314 | 1,382 | 4 |
| Letcher County | 36,223 | 39,600 | 3,377 | 9 |
| Lewis County | 34,962 | 37,947 | 2,985 | 9 |
| Lincoln County | 34,867 | 38,492 | 3,625 | 10 |
| Livingston County | 35,333 | 39,795 | 4,462 | 13 |
| Logan County | 35,500 | 38,055 | 2,555 | 7 |
| Ludlow Independent | 37,635 | 41,824 | 4,189 | 11 |
| Lyon County | 35,492 | 39,781 | 4,289 | 12 |
| Madison County | 35,850 | 40,545 | 4,695 | 13 |
| Magoffin County | 35,074 | 37,218 | 2,144 | 6 |
| Marion County | 35,809 | 41,341 | 5,532 | 15 |
| Marshall County | 36,726 | 42,179 | 5,453 | 15 |
| Martin County | 35,112 | 38,739 | 3,627 | 10 |
| Mason County | 37,000 | 39,484 | 2,484 | 7 |
| Mayfield Independent | 36,123 | 40,085 | 3,962 | 11 |
| McCracken County | 36,672 | 42,297 | 5,625 | 15 |
| McCreary County | 35,198 | 37,727 | 2,529 | 7 |
| McLean County | 33,022 | 40,005 | 6,983 | 21 |
| Meade County | 34,458 | 40,222 | 5,764 | 17 |
| Menifee County | 33,171 | 37,752 | 4,581 | 14 |
| Mercer County | 35,414 | 40,656 | 5,242 | 15 |
| Metcalfe County | 34,179 | 36,274 | 2,095 | 6 |
| Middlesboro Independent | 33,845 | 36,998 | 3,153 | 9 |
| Monroe County | 33,438 | 38,003 | 4,565 | 14 |
| Montgomery County | 35,593 | 38,344 | 2,751 | 8 |
| Morgan County | 34,645 | 37,925 | 3,280 | 9 |
| Muhlenberg County | 36,426 | 38,670 | 2,244 | 6 |
| Murray Independent | 36,010 | 39,770 | 3,760 | 10 |
| Nelson County | 36,561 | 42,512 | 5,951 | 16 |
| Newport Independent | 36,502 | 42,109 | 5,607 | 15 |
| Nicholas County | 33,304 | 37,852 | 4,548 | 14 |
| Ohio County | 37,253 | 40,324 | 3,071 | 8 |
| Oldham County | 35,154 | 38,414 | 3,260 | 9 |
| Owen County | 33,650 | 38,123 | 4,473 | 13 |
| Owensboro Independent | 37,481 | 42,216 | 4,735 | 13 |
| Owsley County | 32,500 | 36,532 | 4,032 | 12 |
| Paducah Independent | 37,863 | 42,008 | 4,145 | 11 |
| Paintsville Independent | 35,870 | 38,831 | 2,961 | 8 |
| Paris Independent | 33,646 | 40,000 | 6,354 | 19 |
| Pendleton County | 33,889 | 39,938 | 6,049 | 18 |


| Appendix I |  |  | Legislative Research Commission |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Office Of Education Accountability |  |
| District | 2014 | 2023 | Difference | Percent Change |
| Perry County | 34,833 | 38,620 | 3,787 | 11 |
| Pike County | 37,250 | 39,922 | 2,672 | 7 |
| Pikeville Independent | 39,260 | 43,343 | 4,083 | 10 |
| Pineville Independent | 32,797 | 35,498 | 2,701 | 8 |
| Powell County | 33,666 | 35,731 | 2,065 | 6 |
| Pulaski County | 34,857 | 37,735 | 2,878 | 8 |
| Raceland-Worthington Independent | 34,936 | 36,896 | 1,960 | 6 |
| Robertson County | 33,069 | 37,270 | 4,201 | 13 |
| Rockcastle County | 35,405 | 38,703 | 3,298 | 9 |
| Rowan County | 33,992 | 37,533 | 3,541 | 10 |
| Russell County | 33,986 | 38,829 | 4,843 | 14 |
| Russell Independent | 36,874 | 39,922 | 3,048 | 8 |
| Russellville Independent | 35,030 | 38,229 | 3,199 | 9 |
| Science Hill Independent | 36,703 | 38,567 | 1,864 | 5 |
| Scott County | 35,783 | 40,329 | 4,546 | 13 |
| Shelby County | 36,031 | 39,573 | 3,542 | 10 |
| Simpson County | 36,205 | 41,991 | 5,786 | 16 |
| Somerset Independent | 35,859 | 40,394 | 4,535 | 13 |
| Southgate Independent | 34,282 | 39,655 | 5,373 | 16 |
| Spencer County | 37,172 | 41,657 | 4,485 | 12 |
| Taylor County | 35,210 | 38,050 | 2,840 | 8 |
| Todd County | 33,666 | 36,089 | 2,423 | 7 |
| Trigg County | 35,991 | 39,547 | 3,556 | 10 |
| Trimble County | 35,499 | 37,265 | 1,766 | 5 |
| Union County | 33,922 | 38,079 | 4,157 | 12 |
| Walton-Verona Independent | 36,789 | 41,615 | 4,826 | 13 |
| Warren County | 35,418 | 40,277 | 4,859 | 14 |
| Washington County | 35,785 | 41,301 | 5,516 | 15 |
| Wayne County | 34,218 | 37,232 | 3,014 | 9 |
| Webster County | 33,241 | 36,206 | 2,965 | 9 |
| Whitley County | 34,803 | 38,420 | 3,617 | 10 |
| Williamsburg Independent | 33,378 | 35,418 | 2,040 | 6 |
| Williamstown Independent | 34,178 | 36,440 | 2,262 | 7 |
| Wolfe County | 34,685 | 39,051 | 4,366 | 13 |
| Woodford County | 36,236 | 39,830 | 3,594 | 10 |

Note: Certified Starting Salary is for a Rank III employee with 0 years of service
Source: Staff analysis of data from the Kentucky Department of Education.

## Appendix J

## Classified Job Descriptions And Overall Staffing Categories

The commissioner of education establishes job classifications and minimum qualifications for classified job descriptions. Districts are to use these job descriptions when they hire classified staff at the district level. Each job description has a job class code to use when setting up employees in the MUNIS payroll system. By October 1 of each year, districts submit classified and certified staffing data to the Kentucky Department of Education (KDE). The information submitted includes data on each active employee such as the employee ID, position held, salary, days and hours employed. KDE then compiles this data according to submission requirements from the US Department of Education. A sample review of this data reveled errors in KDE's coding. Table J. 1 lists possible coding issues.

## Staff Not Being Reported To NCES

The classified and professional staffing data files submitted to KDE include only employees hired directly by the district; the files do not include contract staff employed by another entity that is contracted to provide work for the district's regular operations, such as bus drivers, school nurses, psychologists, physical therapists, custodians, and vocational teachers working in staterun vocational schools. Also currently excluded are school security staff who are contracted through local law enforcement. Data for these workers should be reported to the National Center for Education Statistics (NCES) as part of KDE's routine data submission. As of 2023, data for contract staff are not included in KDE's submission to NCES.

## Misclassification Of Employees

KDE reports all high school teachers as secondary teachers, but a teacher with a classroom of students from different grades should be reported as an ungraded teacher. KDE codes all alternative school teachers as elementary and/or secondary teachers instead of as ungraded teachers. Some classified jobs are coded to school counselors or directors, job titles that should be used only for certified staff.

## Job Description Not Matching KDE Staffing Categories In FS059 - Staff FTE File Specifications

KDE codes chief information officers (CIOs) to local education agency (LEA) administrative staff support positions. To be classified as LEA administrative staff support, a staff member must provide direct support to LEA administrators, business office support, data processing, or secretarial and other clerical staff. The CIO job description should be classified as an LEA administrator, which includes superintendent, deputy superintendent, assistant superintendent, and other persons with districtwide responsibilities (for instance: accountants; auditors; business managers; facilities managers; technology or information system administrators; and supervisors of transportation, food services, or security). Under this definition, KDE should also be using

LEA administrator to code other jobs such as staff attorneys, maintenance supervisors, transportation managers, directors of special education, and directors of federal programs.

## Incorrect Education And Experience

Two instructional assistant job class codes, 7318 and 7320, allow any combination of high school diploma, GED, or demonstrated progress toward obtaining a GED. Under KRS 161.044(1), however, these positions require a high school diploma or GED. Nothing allows for these staff to be working toward a GED. In addition, nothing in the job descriptions requires an instructional assistant in a Title I school to have an associate's degree or pass the KDE-approved Kentucky Paraeducator Assessment (KPA) test, which are required to work as an instructional aide in a Title I school.

## Job Descriptions Need Updating

Some job descriptions are out of date. The textbook services supervisor's job description says to file claims for reimbursement with the state department of education and to learn the state textbook program, which no longer exists. In addition, none of the instructional assistant descriptions mandate passing the KPA, which is required for any instructional assistant working in a Title I school. Finally, there are no job descriptions for school resource officer or special law enforcement officer, as required by KRS 158.4415 and 61.900 .

## Table J. 1 <br> Classified Job Descriptions Issues By Job Class Code and Job Title School Year 2023

| Code | Job Title | Current Coding Area | Comment |
| :---: | :---: | :---: | :---: |
| 7100 | Staff Attorney | District administrative support staff | Assistant General Counsel is considered district administration, but Staff Attorney is administrative support. |
| 7481 | Assistant General Counsel | District administration | It is not clear why this position is not included in administrative support with Staff Attorney. |
| $\begin{aligned} & 7488 \\ & \text { to } \\ & 7493 \end{aligned}$ | Family Resource Coordinator | School administration | - FS059 defines professional as requiring a bachelor's degree or higher, with coursework in the profession, and usually requires certification or licensing by the state education agency. 7493 requires only a high school diploma or GED and thus does not meet the definition of professional. <br> - Staff included in school administration should supervise school operations, assign duties to staff members, and coordinate school instructional activities, which these positions do not. |
| $\begin{aligned} & 7466 \\ & \text { to } \\ & 7468 \end{aligned}$ | School Food Service Director | Student support services staff* | These positions should be LEA administration. All food service directors require a bachelor's degree or equivalent. |


| Code | Job Title | Current Coding Area | Comment |
| :---: | :---: | :---: | :---: |
| 7501 | Chief Information Officer | District administrative support staff | This position should be LEA administration. |
| 7902 | Transportation Manager | Student support services staff (without psychology) | This position should be LEA administration. |
| 7464 and 7465 | Director II and I | School administration | - These jobs do not require a bachelor's degree and thus do not meet the FS059 definition of professional. <br> - CSD indicate 117 district-level FTE staff who are coded at the school level. |
| 0050 | Director of Exceptional Child | Instructional coordinators and supervisors of staff | This position should be LEA administration. |
| 0060 | Director of Federal Programs | Instructional coordinators and supervisors of staff | This position should be LEA administration. |
| 7318 and 7320 | Instructional Assistant II and I | Paraeducator | - Under these codes, staff could be working toward a GED, but statute requires a GED or high school diploma. <br> - Codes should specify that paraeducators in Title I school must have an associate's degree or pass the KPA. |
| 7321 | Instructional Assistant High School | Paraeducator | Job description requires a 2-year degree but should not. Job description does not allow for the KPA test. It is unclear whether all high school instructional assistants must meet these guidelines, or whether a can district hire a I or II instructional assistant. |
| 7348 | Camp Counselor | GUI | This job description requires only a high school diploma or GED and thus does not meet the FS059 definition of professional, which requires a bachelor's degree or higher, with coursework in the profession, and usually requires certification or licensing by the state education agency. |
| None | Head Start Teacher | Currently does not exist | It is unclear which classified job description a Head Start teacher should be coded to. FSO59 includes Head Start teachers in the code for pre-K teachers, but KDE uses the pre-K teacher code only for preschool teachers, not for Head Start teachers. |
| 7166 | Treasurer | District support | - Per KRS 160.560, the local board of education hires the treasurer, but this job description does not say that the treasurer reports to the board of education. <br> - The job description lists supervisory duties, but if the treasurer is hired by the board there will be no one to supervise. |
| 7183 | Funding Services Specialist | School support | This position should be school administration, not school support, because it involves supervising personnel and assisting the principal with administrative responsibilities. |


| Code | Job Title | Current Coding Area | Comment |
| :--- | :--- | :--- | :--- |
| 7822 | Law Enforcement/Investigator | Security law <br> enforcement | These job titles need to be changed to <br> school resource officer and special law <br> enforcement officer to match KRS 158.441 |
| 7823 |  | and KRS 158.4414. Job descriptions and <br> education requirements need to be updated <br> to match Kentucky requirements. |  |

Note: LEA= local education agency (school district); CSD = classified staffing data; FTE = full-time equivalent; KPA = Kentucky Paraeducator Assessment; GUI = school counselors; KDE = Kentucky Department of Education.
*Staff other than school psychologists.
Source: Kentucky. Department of Education. Classified Code Listing. March 26, 2019. Web.

## Appendix K

## Classified Job Classifications

As shown in Table K.1, instructional classified staff make up 30 percent of all classified staff. Instructional classified staff include instructional aides; monitors; child development staff; and specialists, such as interpreters and bilingual staff. Transportation staff make up almost 19 percent of the total classified staff; jobs in the transportation sector include bus drivers, bus monitors, and vehicle maintenance staff. Food service staff make up 15 percent of classified staff; food service workers include field include cooks/bakers, food service assistants, and managerial staff.

Table K. 1
Percentage Of Classified Jobs By Job Classification School Year 2023

| Job Classification | Percent Of Jobs |
| :---: | :---: |
| Food service | 15\% |
| Health | 3 |
| Instructional | 30 |
| Maintenance | 3 |
| Management | 3 |
| Operations | 10 |
| Secretarial/clerical | 9 |
| Transportation | 19 |
| Other | 8 |

Source: Staff compilation of data provided by the Kentucky Department of Education.

Other staff make up 8 percent of total classified jobs. As shown in Table K.2, fiscal jobs make up a little over 2 percent of this classification, with jobs such as finance officer, accounting clerk, payroll clerk, and auditor. The next largest group of other classified jobs is in management information systems, making up 1.7 percent of other classified jobs.

Table K. 3 shows the change in the number of other classified jobs over the last 5 years. Library and media staff had the biggest loss of classified employees, 32.56 jobs. Student servicesincluding classified positions such as social workers, migrant recruiters, and attendance staffgained 218 jobs.

Table K. 2
Percentage Of "Other" Jobs By Job Classification
School Year 2023

| "Other" Classification | Percent Of "Other" Jobs |
| :--- | :---: |
| Communications | $0.2 \%$ |
| Fiscal | 2.3 |
| Library/media | 0.3 |
| Management information systems | 1.7 |
| Personnel | 0.4 |
| Purchasing | 0.1 |
| Security/law enforcement | 1.1 |
| Student services | 1.5 |
| Warehouse | 0.2 |
| Total | 8.0 |

Note: "Other" jobs make up 8 percent of all classified job positions.
Percentages do not sum to total, due to rounding
Source: Staff compilation of data provided by the Kentucky
Department of Education.

Table K. 3
Changes In Number Of "Other" Classified Jobs By Job Classification
From School Year 2019 To School Year 2023

| "Other" Classification | Difference |
| :--- | :---: |
| Communications | 5.57 |
| Fiscal | -2.67 |
| Library/media | -32.56 |
| Management information systems | 60.38 |
| Personnel | 17.78 |
| Purchasing | -2.71 |
| Security/law enforcement | 173.42 |
| Student services | 217.79 |
| Warehouse | 0.10 |
| Total | 437.10 |

Note: "Other" jobs make up 8 percent of all classified job positions.
Source: Staff compilation of data provided by the Kentucky
Department of Education.

## Appendix L

## Assessment For Paraeducators In Title I Schools

Paraeducators working in a Title I school have to meet the following federal law qualifications:

- Completed at least 2 years of study at an institution of higher education;
- Obtained an associate's (or higher) degree; or
- Met a rigorous standard of quality and can demonstrate, through a formal state or local academic assessment, knowledge of and the ability to assist in:
- instructing, reading, writing, and mathematics; or
- instructing, reading readiness, writing readiness, and mathematics readiness, as appropriate.

Table L. 1 displays what other states require for paraeducators in Title I schools. The federal requirement can be met through several assessments, including ParaPro, WorkKeys, and locally developed assessments. Kentucky requires Title I paraeducators who do not meet the educational requirement to pass the Kentucky Paraeducator Assessment.

Table L. 1
Paraeducator Required Assessment By State School Year 2023

| State | Required Assessment |
| :---: | :---: |
| Alabama | ACT WorkKeys: Applied Math, Workplace Documents, Business Writing (level 3 or higher) |
| Alaska | - ETS ParaPro Assessment (459) <br> - Higher Education Learning Profile (41 percent to 55 percent) <br> - Master Teacher Inc. (Paraeducator) Online Training and Assessments (65 percent to 70 percent <br> - ACT WorkKeys (3 to 4) <br> - Basic Competency Exam (under 4) |
| Arizona | - ETS ParaPro Assessment (459) <br> - Master Teacher's ParaEducator PD Now!* <br> - ACT WorkKeys: Writing, Applied Mathematics, and Reading for Information* |
| Arkansas | ETS ParaPro Assessment (457) |
| California | - Localities have the option to select an assessment of knowledge and skills; many use the California Basic Educational Skills Test minimum score of 123. <br> - Eleven localities/programs use the ETS ParaPro Assessment setting their own qualifying scores (445 to 460) |
| Colorado | At the discretion of hiring district |
| Connecticut | ETS ParaPro Assessment (461) |
| Delaware | - ETS ParaPro Assessment (459) <br> - Other approved alternative |
| District of Columbia | ETS ParaPro Assessment (461) |
| Florida | At the discretion of hiring county |
| Georgia | GACE Paraprofessional Assessment (250) |
| Hawaii | ETS ParaPro Assessment (459) |
| Idaho | ETS ParaPro Assessment (460) |


| State | Required Assessment |
| :---: | :---: |
| Illinois | - ETS ParaPro Assessment (460) <br> - ACT WorkKeys: <br> - Applied Mathematics/Applied Math (4) <br> - Reading for Information/Workplace Documents (4) |
| Indiana | ETS ParaPro Assessment (460) |
| Iowa | LEAs should carefully choose an assessment that will measure the knowledge of and ability to assist in instructing reading, writing, and mathematics (or as appropriate, reading readiness, writing readiness, and mathematics readiness). The criterion established for approval as a paraprofessional under the No Child Left Behind Act must be rigorous and defendable. Examples of measures available to LEAs include ACT WorkKeys (which has been normed for paraprofessionals) and ParaPro Assessment from ETS. |
| Kansas | - ETS ParaPro Assessment (455) <br> - Paraeducator Online Training by Master Teacher Inc. There are two assessments; both must be passed to meet the requirements: <br> - Assessment 1 Reading, Writing and Math: Instructional Support (65 percent) <br> - Assessment 2 Reading, Writing and Math: Knowledge and Application (70 percent) <br> - ACT WorkKeys: <br> - Workplace Documents (level 4), <br> - Applied Math (level 4), and <br> - Graphic Literacy (level 3) |
| Kentucky | Kentucky Paraeducator Assessment (48 of 60 questions) |
| Louisiana | ETS ParaPro Assessment (450) |
| Maine | N/A |
| Maryland | ETS ParaPro Assessment (455)** |
| Massachusetts | - ETS ParaPro Assessment (464) <br> - ACT WorkKeys Assessment: <br> - Reading for Information (Skill Level 5); <br> - Applied Mathematics (Skill Level 4); <br> - Business Writing (Skill Level 3); <br> - Writing, used in lieu of Business Writing if districts request paper/pencil testing (Skill Level 4) |
| Michigan | - SAT (evidence-based reading/writing, 480; math, 530) <br> - ETS ParaPro Assessment (460) |
| Minnesota | - ETS ParaPro Assessment (460) <br> - Paraeducator Online Training and Assessments (Instructional Support test, 65 percent; Knowledge and Application test, 70 percent) |
| Mississippi | For teacher assistants <br> - Prior to 2017: ACT WorkKeys <br> - Reading for Information (4) <br> - Applied Mathematics (4) <br> - Writing or Business Writing (3) <br> - After 2017: ACT WorkKeys (Silver Level certification) |
| Missouri | Paraprofessional Assessment (220) |
| Montana | N/A |
| Nebraska | - ETS ParaPro Assessment (456) <br> - Paraeducator Learning Network: Master Teacher (70 percent on comprehensive exam) <br> - Project Para, UNL (116 composite) |
| Nevada | ETS ParaPro Assessment (455) |
| New Hampshire | N/A |
| New Jersey | N/A |
| New Mexico | - ETS ParaPro Assessment (457) or <br> - Paraeducator (70 percent in each section) or <br> - Completion of Core Academic Skills for Educators: Reading, Writing, and Mathematics* |


| State | Required Assessment |
| :---: | :---: |
| New York | Assessment of Teaching Assistant Skills (220) |
| North Carolina | N/A |
| North Dakota | - ETS ParaPro Assessment (464) <br> - Praxis CORE Assessment: <br> - Reading (156) <br> - Mathematics (150) <br> - Writing Test (160)*** <br> - ACT WorkKeys Assessment: <br> - Workplace Documents, previously known as Reading for Information (4) <br> - Applied Mathematics (4) <br> - Writing or Business Writing (3) <br> - Paraeducator Online Training Assessment: <br> - Assessment 1: Reading, Mathematics and Writing—Instructional Support (65 percent) <br> - Assessment 2: Reading, Mathematics, and Writing—Knowledge and Application (65 percent) <br> - Project PARA Assessment: Requires a composite score of $69 \%$ |
| Ohio | ETS ParaPro Assessment (456) |
| Oklahoma | - ACT WorkKeys Test (Bronze) <br> - ETS ParaPro Assessment (455) |
| Oregon | ETS ParaPro Assessment (455) |
| Pennsylvania | Determined locally |
| Rhode Island | ETS ParaPro Assessment (461) |
| South Carolina | ETS ParaPro Assessment (456) |
| South Dakota | ETS ParaPro Assessment (461) |
| Tennessee | Unknown |
| Texas | Locally determined |
| Utah | ETS ParaPro Assessment (460) |
| Vermont | - ETS ParaPro Assessment (458) <br> - The ParaEducator Learning Network* <br> - Through a locally developed portfolio process |
| Virginia | - ETS ParaPro Assessment (455) <br> - School boards have the option of approving a local assessment. |
| Washington | ETS ParaPro Assessment (461) |
| West Virginia | State Aide Competency test administered by county or school district* |
| Wisconsin | - ETS ParaPro Assessment (460) <br> - ParaEducator Master Teacher: <br> - Instructional Support (65 percent) and <br> - Content and Application (70 percent) <br> - ACT WorkKeys: <br> - Applied Mathematics (4) <br> - Workplace Documents Assessment (4) <br> - Business Writing Assessment (4) <br> - Authentic Portfolio (local assessment) ${ }^{\dagger}$ |
| Wyoming | At the discretion of hiring district |

[^46]and all portfolio artifacts are submitted to the LEA. The LEA may then document scores for each standard competency on the Paraprofessional Portfolio Review form.
Source: Amaya Garcia. Exploring Paraprofessional Requirements Across The 50 States And DC. NewAmerica.org. April 5, 2023.

## Appendix M

## Change In School District Starting Salaries School Years 2019 To 2023

## Table M. 1 <br> Attendance Rates By District School Years 2019 And 2023

| District | Attendance Rate |  | Percentage Point Difference |
| :---: | :---: | :---: | :---: |
|  | 2019 | 2023 |  |
| Adair County | 94.3\% | 92.4\% | 1.9\% |
| Allen County | 94.1 | 92.3 | 1.8 |
| Anchorage Independent | 96.8 | 96.0 | 0.8 |
| Anderson County | 94.2 | 92.3 | 1.9 |
| Ashland Independent | 94.0 | 91.5 | 2.5 |
| Augusta Independent | 94.3 | 92.3 | 2.0 |
| Ballard County | 94.9 | 93.6 | 1.3 |
| Barbourville Independent | 92.7 | 89.7 | 3.0 |
| Bardstown Independent | 94.1 | 92.5 | 1.6 |
| Barren County | 94.8 | 93.1 | 1.7 |
| Bath County | 93.0 | 91.1 | 1.9 |
| Beechwood Independent | 96.8 | 95.6 | 1.2 |
| Bell County | 92.6 | 90.1 | 2.5 |
| Bellevue Independent | 94.3 | 93.0 | 1.3 |
| Berea Independent | 93.4 | 90.4 | 3.0 |
| Boone County | 95.5 | 94.2 | 1.3 |
| Bourbon County | 94.5 | 92.2 | 2.3 |
| Bowling Green Independent | 96.2 | 94.7 | 1.5 |
| Boyd County | 94.3 | 91.3 | 3.0 |
| Boyle County | 95.5 | 94.1 | 1.4 |
| Bracken County | 95.1 | 93.0 | 2.1 |
| Breathitt County | 93.8 | 88.6 | 5.2 |
| Breckinridge County | 93.9 | 91.9 | 2.0 |
| Bullitt County | 94.5 | 92.7 | 1.8 |
| Burgin Independent | 95.5 | 94.4 | 1.1 |
| Butler County | 94.6 | 93.3 | 1.3 |
| Caldwell County | 94.9 | 93.1 | 1.8 |
| Calloway County | 95.7 | 94.4 | 1.3 |
| Campbell County | 95.6 | 93.8 | 1.8 |
| Campbellsville Independent | 93.4 | 91.7 | 1.7 |
| Carlisle County | 95.9 | 94.2 | 1.7 |
| Carroll County | 93.6 | 91.6 | 2.0 |
| Carter County | 93.2 | 90.2 | 3.0 |
| Casey County | 94.7 | 92.9 | 1.8 |
| Caverna Independent | 93.5 | 91.4 | 2.1 |
| Christian County | 94.5 | 92.9 | 1.6 |
| Clark County | 94.1 | 91.5 | 2.6 |
| Clay County | 91.1 | 87.7 | 3.4 |
| Clinton County | 93.6 | 90.7 | 2.9 |
| Cloverport Independent | 95.6 | 92.8 | 2.8 |


| District | Attendance Rate |  | Percentage Point Difference |
| :---: | :---: | :---: | :---: |
|  | 2019 | 2023 |  |
| Corbin Independent | 94.3 | 92.4 | 1.9 |
| Covington Independent | 95.2 | 92.9 | 2.3 |
| Crittenden County | 94.8 | 93.5 | 1.3 |
| Cumberland County | 94.4 | 93.3 | 1.1 |
| Danville Independent | 94.1 | 92.5 | 1.6 |
| Daviess County | 95.2 | 93.4 | 1.8 |
| Dawson Springs Independent | 95.0 | 92.4 | 2.6 |
| Dayton Independent | 93.9 | 90.9 | 3.0 |
| East Bernstadt Independent | 95.3 | 93.4 | 1.9 |
| Edmonson County | 92.9 | 91.2 | 1.7 |
| Elizabethtown Independent | 95.1 | 93.7 | 1.4 |
| Elliott County | 92.0 | 90.0 | 2.0 |
| Eminence Independent | 95.6 | 93.7 | 1.9 |
| Erlanger-Elsmere Independent | 94.8 | 93.2 | 1.6 |
| Estill County | 93.9 | 91.0 | 2.9 |
| Fairview Independent | 92.7 | 91.2 | 1.5 |
| Fayette County | 94.2 | 91.9 | 2.3 |
| Fleming County | 95.0 | 92.6 | 2.4 |
| Floyd County | 94.0 | 88.9 | 5.1 |
| Fort Thomas Independent | 96.9 | 96.1 | 0.8 |
| Frankfort Independent | 93.8 | 91.6 | 2.2 |
| Franklin County | 94.7 | 92.7 | 2.0 |
| Fulton County | 95.2 | 93.2 | 2.0 |
| Fulton Independent | 95.0 | 91.6 | 3.4 |
| Gallatin County | 94.6 | 93.1 | 1.5 |
| Garrard County | 93.9 | 92.4 | 1.5 |
| Glasgow Independent | 94.9 | 93.5 | 1.4 |
| Grant County | 94.4 | 91.1 | 3.3 |
| Graves County | 96.0 | 94.2 | 1.8 |
| Grayson County | 94.1 | 92.5 | 1.6 |
| Green County | 94.2 | 93.7 | 0.5 |
| Greenup County | 93.7 | 91.3 | 2.4 |
| Hancock County | 95.0 | 93.4 | 1.6 |
| Hardin County | 94.3 | 92.9 | 1.4 |
| Harlan County | 89.6 | 87.0 | 2.6 |
| Harlan Independent | 94.2 | 90.7 | 3.5 |
| Harrison County | 94.6 | 93.1 | 1.5 |
| Hart County | 94.0 | 92.5 | 1.5 |
| Hazard Independent | 93.7 | 89.6 | 4.1 |
| Henderson County | 94.7 | 93.3 | 1.4 |
| Henry County | 94.7 | 92.4 | 2.3 |
| Hickman County | 95.6 | 94.5 | 1.1 |
| Hopkins County | 94.9 | 92.7 | 2.2 |
| Jackson County | 92.1 | 89.0 | 3.1 |
| Jackson Independent | 95.5 | 91.1 | 4.4 |
| Jefferson County | 93.2 | 89.7 | 3.5 |
| Jenkins Independent | 91.7 | 89.9 | 1.8 |
| Jessamine County | 94.3 | 93.2 | 1.1 |
| Johnson County | 92.6 | 88.5 | 4.1 |
| Kenton County | 95.8 | 94.6 | 1.2 |
| Knott County | 90.3 | 85.6 | 4.7 |
| Knox County | 91.3 | 87.7 | 3.6 |

## Office Of Education Accountability

| District | Attendance Rate |  | Percentage Point Difference |
| :---: | :---: | :---: | :---: |
|  | 2019 | 2023 |  |
| LaRue County | 95.0 | 93.4 | 1.6 |
| Laurel County | 92.9 | 90.7 | 2.2 |
| Lawrence County | 93.1 | 90.2 | 2.9 |
| Lee County | 91.9 | 89.0 | 2.9 |
| Leslie County | 92.4 | 88.1 | 4.3 |
| Letcher County | 91.5 | 85.4 | 6.1 |
| Lewis County | 92.9 | 90.6 | 2.3 |
| Lincoln County | 94.0 | 92.3 | 1.7 |
| Livingston County | 93.7 | 91.9 | 1.8 |
| Logan County | 94.6 | 92.4 | 2.2 |
| Ludlow Independent | 94.8 | 93.4 | 1.4 |
| Lyon County | 95.2 | 93.5 | 1.7 |
| Madison County | 94.2 | 91.5 | 2.7 |
| Magoffin County | 90.7 | 84.6 | 6.1 |
| Marion County | 94.3 | 92.5 | 1.8 |
| Marshall County | 94.9 | 93.9 | 1.0 |
| Martin County | 92.8 | 87.1 | 5.7 |
| Mason County | 93.8 | 92.4 | 1.4 |
| Mayfield Independent | 95.5 | 93.3 | 2.2 |
| McCracken County | 95.4 | 93.9 | 1.5 |
| McCreary County | 92.7 | 90.1 | 2.6 |
| McLean County | 93.7 | 92.4 | 1.3 |
| Meade County | 94.3 | 92.4 | 1.9 |
| Menifee County | 93.5 | 90.1 | 3.4 |
| Mercer County | 95.0 | 93.5 | 1.5 |
| Metcalfe County | 93.1 | 91.2 | 1.9 |
| Middlesboro Independent | 92.3 | 87.4 | 4.9 |
| Monroe County | 94.4 | 93.1 | 1.3 |
| Montgomery County | 93.4 | 90.6 | 2.8 |
| Morgan County | 93.0 | 90.3 | 2.7 |
| Muhlenberg County | 93.3 | 91.6 | 1.7 |
| Murray Independent | 96.2 | 95.3 | 0.9 |
| Nelson County | 94.2 | 92.6 | 1.6 |
| Newport Independent | 93.8 | 92.6 | 1.2 |
| Nicholas County | 93.6 | 92.1 | 1.5 |
| Ohio County | 93.5 | 91.9 | 1.6 |
| Oldham County | 95.8 | 94.7 | 1.1 |
| Owen County | 94.9 | 92.1 | 2.8 |
| Owensboro Independent | 94.1 | 92.3 | 1.8 |
| Owsley County | 91.3 | 88.5 | 2.8 |
| Paducah Independent | 95.2 | 93.2 | 2.0 |
| Paintsville Independent | 92.8 | 91.0 | 1.8 |
| Paris Independent | 94.9 | 91.7 | 3.2 |
| Pendleton County | 94.7 | 93.4 | 1.3 |
| Perry County | 92.8 | 86.4 | 6.4 |
| Pike County | 93.4 | 89.5 | 3.9 |
| Pikeville Independent | 95.5 | 94.3 | 1.2 |
| Pineville Independent | 92.1 | 87.2 | 4.9 |
| Powell County | 91.5 | 88.9 | 2.6 |
| Pulaski County | 94.3 | 92.2 | 2.1 |
| Raceland-Worthington Independent | 95.2 | 93.2 | 2.0 |
| Robertson County | 96.1 | 93.7 | 2.4 |


| Appendix M | Legislative Research Commission |  |  |
| :---: | :---: | :---: | :---: |
|  | Office Of Education Accountability |  |  |
|  | Attendance Rate |  | Percentage Point |
| District | 2019 | 2023 | Difference |
| Rockcastle County | 92.5 | 90.8 | 1.7 |
| Rowan County | 93.6 | 90.0 | 3.6 |
| Russell County | 94.3 | 92.7 | 1.6 |
| Russell Independent | 95.9 | 93.4 | 2.5 |
| Russellville Independent | 93.7 | 91.1 | 2.6 |
| Science Hill Independent | 96.0 | 93.1 | 2.9 |
| Scott County | 95.1 | 93.0 | 2.1 |
| Shelby County | 95.1 | 93.6 | 1.5 |
| Simpson County | 94.6 | 92.9 | 1.7 |
| Somerset Independent | 93.9 | 91.4 | 2.5 |
| Southgate Independent | 95.7 | 93.9 | 1.8 |
| Spencer County | 94.9 | 92.7 | 2.2 |
| Taylor County | 94.7 | 92.1 | 2.6 |
| Todd County | 94.2 | 91.8 | 2.4 |
| Trigg County | 94.2 | 92.3 | 1.9 |
| Trimble County | 93.2 | 91.4 | 1.8 |
| Union County | 94.2 | 92.2 | 2.0 |
| Walton-Verona Independent | 96.3 | 94.5 | 1.8 |
| Warren County | 96.0 | 94.0 | 2.0 |
| Washington County | 94.5 | 92.7 | 1.8 |
| Wayne County | 93.2 | 90.9 | 2.3 |
| Webster County | 94.1 | 91.6 | 2.5 |
| Whitley County | 93.3 | 90.3 | 3.0 |
| Williamsburg Independent | 94.0 | 90.1 | 3.9 |
| Williamstown Independent | 95.8 | 94.0 | 1.8 |
| Wolfe County | 92.8 | 88.1 | 4.7 |
| Woodford County | 94.8 | 93.4 | 1.4 |

Source: Staff analysis of data from the Kentucky Department of Education.

## Endnotes

1 Mark Lieberman. "Staff Shortages In Schools Are Here To Stay. Here's Why." Education Week. Aug. 18, 2023. Web.
2 Kentucky. Department of Education. Classified Staffing Data.
3 Kentucky. Kentucky Center for Statistics. Kentucky Teacher Workforce Pipeline. n.d. Web.
4 Kentucky. Department of Education. Option 9 FAQ. July 19, 2022. Web.
5 Kentucky. Legislative Research Commission. Office of Education Accountability. Teacher Shortages And Supports For New Teachers. Research Report No. 463, Oct. 17, 2019. Web.
${ }^{6}$ Ibid.
7 National Education Association. "9 Ways To Improve Educator Working Conditions." Sept. 30, 2022. Web.
8 Ibid.
9 Kentucky Higher Education Assistance Authority and Kentucky Higher Education Student Loan Corporation. "Preparing For Tomorrow: Fiscal Year 2022 Annual Report." 2022. Web.
${ }^{10}$ Mark Lieberman. "Staff Shortages In Schools Are Here To Stay. Here's Why." Education Week. Aug. 18, 2023. Web.
${ }^{11}$ Diane Wiscarson and Taylar Lewis. "Navigating Educational Services With Staffing Shortages." Spectrum Life Magazine. March 17, 2022. Web.
${ }^{12}$ Kentucky. Department of Education. Classified Staff Job Codes And Descriptions. 2019. Web.
${ }^{13}$ Kentucky. Department of Education. Classified Staffing Data.
${ }^{14}$ Madeline Will. "Teacher Apprenticeships Are Booming In Wake Of Shortages. Here's What You Need To Know." Education Week. March 17, 2023. Web.
${ }^{15}$ Ibid.
${ }^{16}$ Joe Ragusa. "Nelson County Schools And Western Kentucky University Create First-Of-Its-Kind Teacher Apprenticeship Program." Kentucky Teacher. March 21, 2023. Web.
${ }^{17}$ Ann Schimke. "Colorado Offers Free Community College For Prospective Early Childhood Teachers." Chalkbeat Colorado. July 18, 2023. Web.
${ }^{18}$ Ibid.
${ }^{19}$ Kentucky. Department of Education. Cooperating Teachers. Web.
${ }^{20}$ Margaret Attridge. "These States Pay Student Teachers." Best Colleges. June 27, 2023. Web.
${ }^{21}$ Ibid.
${ }^{22}$ Ibid.
${ }^{23}$ Ibid.
${ }^{24}$ Ibid.
${ }^{25}$ Ibid.; Colorado. Department of Higher Education. Educator Stipends. n.d. Web.
${ }^{26}$ Nevada. Department of Education. "Incentivizing Pathways To Teaching: 3,840 Pre-Service Nevada Educators To Receive Grants While Completing Coursework Or Student Teaching." n.d. Web.
${ }^{27}$ Trisha Powell Crain. "Citing Staff Shortage, Alabama Starts Paying Student Teachers To Lead Classrooms." AL.com. Nov. 28, 2022.
${ }^{28}$ Elaine Povich. "Plagued By Teacher Shortages, Some States Turn To Fast-Track Credentialing." USA Today. Aug. 3, 2023. Web.
${ }^{29}$ Ibid.
${ }^{30}$ Ibid.
${ }^{31}$ Madeline Will. "States Relax Teacher Certification Rules To Combat Shortages." Education Week. June 28, 2022. Web.
${ }^{32}$ Joe Ragusa. "Kentucky Education Professional Standards Board Approves Alternate Licensure Assessments." Kentucky Teacher. December 12, 2022. Web.
${ }^{33}$ Abigail Swisher. "Setting Sights Lower: States Back Away From Elementary Teacher Licensure Tests." National Center on Teacher Quality. July 28, 2022. Web.
${ }^{34}$ Trisha Powell Crain. "Alabama State Board To Vote On Changes To Praxis, Teacher Certification Rules." AL.com. July 11, 2022. Web.
${ }^{35}$ Mary Ann Koruth. "Teacher Shortages Continue. Here's What New Jersey Is Doing To Make It Easier To Hire More." NorthJersey.com. June 6, 2022.
${ }^{36}$ Teresa Taylor. "Iowa Removes Praxis Requirement For Teaching Licensure." The Diamond. Jan. 6, 2023. Web.
${ }^{37}$ Abigail Swisher. "Setting Sights Lower: States Back Away From Elementary Teacher Licensure Tests." National Center for Teacher Quality. July 28, 2022. Web.
${ }^{38}$ Danielle J. Brown. "A Military Veteran Without A Bachelor’s Degree Could Soon Be At The Head Of A FL Classroom." Florida Phoenix. Aug. 12, 2022.
${ }^{39}$ Florida. Office of the Governor. "Governor Ron DeSantis Highlights Teacher Recruitment Initiatives And Education Rule Changes That Allow Florida Veterans To Receive College Credit For Military Courses." Aug. 17, 2022. Web.
${ }^{40}$ Ibid.
${ }^{41}$ Ibid.
${ }^{42}$ Katie LaGrone. "Florida's New Military Veteran Teacher Program Isn’t Doing Much To Fill Teacher Vacancies." ABC Action News WFTS Tampa Bay. Sept. 20, 2023. Web.
${ }^{43}$ Kentucky. Division of Educator Licensure and Effectiveness. Option 5: Veterans Of The Armed Forces. July 22, 2022. Web.; Kentucky. GoTeachKY. Veterans to Educators. n.d. Web.
${ }^{44}$ Kentucky. Division of Educator Licensure and Effectiveness. Option 5: Veterans Of The Armed Forces. July 22, 2022. Web.
${ }^{45}$ Shelle Jackson. "Arizona Substitute Rule Changes Win-Win For Educators, Students." News4Tucson.com. Jan. 26, 2022.
${ }^{46}$ Ibid.
${ }^{47}$ Trisha Powell Crain. "Citing Staff Shortage, Alabama Starts Paying Student Teachers To Lead Classrooms." AL.com. Nov. 28, 2022. Web.
${ }^{48}$ Hannah Kanik. "Exactly What I Needed': Los Gatos Teachers Move Into Affordable Units." The Mercury News. March 1, 2023. Web.
${ }^{49}$ Emma Hurt. "Why Schools Across America Are Building Teacher Housing." Axios. Aug. 12, 2023. Web.
${ }^{50}$ Gabe Cohen. "Arizona Breaks Ground On Tiny Homes For Teachers Amid Worsening Educator Shortage." CNN.com. May 2. 2023.
${ }^{51}$ Ibid.
${ }^{52}$ Katherine Gregg. "McKee Signs Legislation To Let Retirees Work As Substitute Teachers The Whole Year Without Pension Limits." The Providence Journal. March 21, 2023. Web.
${ }^{53}$ Ibid.
${ }^{54}$ Lexi Lonas. "Facing Mounting Challenges, Schools Embrace The 4-Day Week." TheHill.com. Sept. 3, 2023.
${ }^{55}$ Ibid.
${ }^{56}$ Madelynn Coldiron. "Webster County District Flips To New Page On Its Calendar." Kentucky School Advocate. n.d. Web.
${ }^{57}$ William Farley. "No Student Quit In Past Four Years, Jenkins Board Told." The Mountain Eagle. June 25, 2008. Web.
${ }^{58}$ Emily Morton. "As Four-Day School Weeks Gain Popularity, States Look To Evidence" Ed Note. June 30, 2023. Web.
${ }^{59}$ Cheyenne McNeill. "These Rural NC School Districts Are Tackling The Teacher Shortage In An Innovative Way." EdNC.org. March 13, 2023.
${ }^{60}$ Ibid.
${ }^{61}$ School District Of Philadelphia. "Parent Flat Rate Program." n.d. Web.
${ }^{62}$ Ibid.
${ }^{63}$ Melissa Alonso. "Facing A Bus Driver Shortage, This Delaware School Will Pay Parents To Take Their Kids To School." CNN.com. Aug. 19, 2021.
${ }^{64}$ Rachel Smith and Krista Johnson. "JCPS Magnet Students Could See Bus Changes Next Year; Stipends, Makeup Dates Approved." Courier Journal. Sept. 26, 2023. Web.
${ }^{65}$ Ibid.
${ }^{66}$ New Teacher Center. Results. 2017. Web; TELL Kentucky: Teaching, Empowering, Leading and Learning. Result Details. 2017. Web.


[^0]:    ${ }^{\text {a }}$ A1 schools are those under the administrative control of a principal or head teacher and eligible to establish a school-based decision-making council. An A1 school is not a program operated by, or as part of, another school. ${ }^{\mathrm{b}}$ OEA conducted a teacher survey of approximately 800 teachers and received a response rate of approximately 33 percent. Because the response rate was low and the sample small, results are discussed only in Appendix C.

[^1]:    ${ }^{\text {c }}$ Option 6 allows a person with a bachelor's degree or graduate degree to teach while enrolled in a postbaccalaureate program to earn a full professional teaching certificate.

[^2]:    ${ }^{\mathrm{d}}$ Wage data analyzed included only individuals working in all four quarters in 2022.

[^3]:    ${ }^{\mathrm{e}}$ Of superintendents who responded to the survey, the percentage reporting geographic location as a barrier to retaining classified staff was 18 percentage points greater in rural districts than in metropolitan districts.
    ${ }^{\mathrm{f}}$ Candidates can also complete at least 2 years of study at an institute of higher education in lieu of an associate's degree.

[^4]:    ${ }^{\text {a }}$ Qualified is defined as a teacher who holds appropriate certification.

[^5]:    ${ }^{\mathrm{b}}$ For each response, percentages are calculated based on the total answers for that particular question, excluding "not applicable" responses.

[^6]:    ${ }^{c}$ Each question on the Impact Survey offered five answers ranging from positive to negative, with a neutral response. For the following analysis, the two positive answers were combined and are referred to as positive.

[^7]:    ${ }^{d}$ Responses included, but were not limited to, continuing to teach at the current school, continuing to teach in the district but not at the current school, and leaving education entirely.
    ${ }^{\mathrm{e}}$ Responses included, but were not limited to, time during the work day, managing student conduct, and school leadership.
    ${ }^{\mathrm{f}}$ Senate Bill 77 (2000) amended KRS 161.028(1)(i) and (j) to require EPSB to report data and submit reports to the IJCE, LRC, and the governor. House Bill 152 (2004) amended KRS 161.028(1)(i) to require EPSB to periodically report data to the IJCE.

[^8]:    ${ }^{\mathrm{g}}$ According to the Department of Homeland Security, the number of new-arrival immigrants to the United States rose from 227,206 in 2021 to 464,143 in 2022. ${ }^{\mathrm{h}}$ This report analyzed positions in academic subjects that were posted between May and August in both 2018 and 2022. This practices allows for districts to remove any postings that were filled after the school year began. The unfilled

[^9]:    positions used in this analysis should represent the true unfilled positions for school year 2023.

[^10]:    ${ }^{\text {a }}$ Teacher turnover refers to the percentage of teachers from the previous year who did not return to teach at the same location in the current year.

[^11]:    ${ }^{\mathrm{b}}$ For example, the percentage of teachers who left the teaching profession for at least 1 year decreased by years of experience, with the highest percentage in the first year ( 15.4 percent), followed by the second year of experience (12.1 percent), the third year of teaching ( 11.4 percent), the fifth year of teaching ( 11.0 percent), the fourth and sixth years of teaching ( 9.9 percent), and the sixth and eighth years of teaching ( 9.8 percent).

[^12]:    ${ }^{\mathrm{c}}$ This analysis does not include teachers who were eligible to retire.
    ${ }^{\mathrm{d}}$ New teachers are considered to have 1 to 4 years of experience, and retired teachers are considered to have at least 25 years of experience.

[^13]:    ${ }^{\mathrm{e}}$ Additional exceptions were school counselors ( 52.7 percent), physical education ( 45.9 percent), and library and media specialists ( 38.3 percent).

[^14]:    ${ }^{f}$ These subjects and the percentage of principals reporting generally enough or an abundance of satisfactory applicants were chemistry ( 0.0 percent), physics ( 2.5 percent), biology ( 3.9 percent), earth science ( 5.0 percent), math ( 5.2 percent), information technology ( 6.2 percent), middle school science ( 6.8 percent), world languages ( 7.1 percent), and middle school math (8.3 percent)
    ${ }^{g}$ The exception is world languages, with 44.0 percent of principals reporting no available applicants.

[^15]:    ${ }^{\text {h }}$ Positions posted between May and August 2018 and May and August 2022 in academic subjects were used in this analysis. This allows districts time to remove any postings that were filled after the school year began. The open positions used in this analysis may more closely represent the true number of open teaching positions for school year 2023.

[^16]:    ${ }^{\text {i }}$ Certificate data provided by KDE was incomplete for years prior to SY 2020. KDE was also unable to provide Local Educator Assignment Data for multiple years, and certificates may or may not be held by a teacher currently teaching. Therefore, the information in this chapter represents only certificates with issue dates and expiration dates that include July 1 to June 30 of a given school year. For example, SY 2023 includes July 1, 2022, to June 30, 2023.

[^17]:    ${ }^{\mathrm{j}}$ Because KDE was unable to provide Local Educator Assignment Data for multiple years, OEA was unable to distinguish between teachers who received a professional certificate through the traditional route and those who did so through an alternative route.

[^18]:    ${ }^{\mathrm{k}}$ As of September 2023, no certificates were issued through Option 9.

[^19]:    ${ }^{1}$ Analysis includes only A1 schools. Out-of-field data provided by KDE was incomplete and was not provided in a usable format.

[^20]:    ${ }^{m}$ According to the Department of Homeland Security, there were 464,143 new-arrival immigrants to the United States in 2022, compared to 227,206 in 2021.

[^21]:    Teachers at schools with lower turnover rates were more likely to positively view the teaching profession, their working environment, student behaviors, and support from their school administration.

[^22]:    ${ }^{\text {n }}$ Quartile 1 included schools with the lowest teacher turnover; quartile 4 included schools with the highest teacher turnover. This analysis includes all principals and all teachers at schools in the quartiles.
    ${ }^{\circ}$ Districts do not normally track this data. The responses are estimates.

[^23]:    Principals reported hiring teachers with alternative or emergency certificates, advertising, hiring retired teachers, and recruiting from college fairs and the community.

[^24]:    ${ }^{\mathrm{p}}$ Wage data analyzed included only individuals working in all four quarters in 2022.
    ${ }^{\mathrm{q}}$ Similar results were found for teacher retention.

[^25]:    ${ }^{\mathrm{r}}$ This analysis includes all principals, assistant principals, other education professionals, and teachers.

[^26]:    ${ }^{\text {a }}$ There were $1,156.27$ fewer bus driver full-time equivalents in 2023 than in 2019.

[^27]:    ${ }^{\mathrm{b}}$ Of the superintendents who responded, 88 percent reported that insufficient salary compared to private industry was a barrier to recruiting classified staff and 86 percent reported that it was a barrier to retaining classified staff.

[^28]:    ${ }^{\mathrm{c}}$ Of the superintendents responding to the survey, the portion reporting geographic location as a barrier to retaining classified staff was 18 percentage points greater in rural districts than in metropolitan districts.
    ${ }^{\mathrm{d}}$ These employees did not all work in the transportation sector once they left district employment.

[^29]:    ${ }^{\mathrm{e}}$ The superintendent survey indicated that some districts paid additional stipends to exceptional child paraeducators, custodians, cafeteria workers, and bus drivers.
    ${ }^{f}$ These longevity bonuses were incorporated into the salary schedules.

[^30]:    ${ }^{\mathrm{g}}$ Since 1990, SEEK has been the mechanism through which Kentucky has
    funded its public schools.

[^31]:    ${ }^{\text {h }}$ Due to the COVID-19 pandemic, districts were allowed to choose whether they wanted to use their 2019 or 2020 adjusted average daily attendance in calculating SEEK for school years 2021 to 2023.

[^32]:    ${ }^{\text {a }}$ The program is also for students of construction, law enforcement, nursing, and fire and forestry.

[^33]:    ${ }^{\mathrm{b}}$ Any Kentucky school teacher who is serving as a cooperating teacher or supervising a student teacher for an in-state accredited college or university is eligible for compensation from the commonwealth and may have tuition waived (up to 6 hours of credit hours) at one of the state's eight public universities.

[^34]:    ${ }^{c}$ Colleges and universities can be either for-profit or nonprofit institutions.

[^35]:    ${ }^{\text {d }}$ Among Kentucky's neighboring states, Teachers of Tomorrow operates only in Indiana.
    ${ }^{\mathrm{e}}$ A switch to -1 SEM is approximately 5 points lower on Praxis II exams.
    ${ }^{\mathrm{f}}$ Students who have lower cut scores for their teacher assessments must also have a 3.0 in their coursework and student teaching experiences.
    ${ }^{g}$ If teacher candidates in Alabama do not meet the GPA requirement, they can still get up to three 1-year temporary teaching certificates. To be professionally certified, they must pass the Praxis or show 100 hours of professional learning.

[^36]:    ${ }^{\mathrm{h}}$ Several factors influence eligibility for reimbursements, including whether the child is a Philadelphia resident, the distance from the school to the residence, the student's grade level, whether the Pennsylvania Department of Transportation considers the route hazardous, whether the student qualifies for exceptional child services, and whether the school receives district-provided busing service. Students who participate in school choice programs are generally ineligible for the transportation reimbursement program.

[^37]:    ${ }^{\mathrm{a}} \mathrm{CDL}=$ commercial driver's license.

[^38]:    ${ }^{\mathrm{b}}$ ESSER = Elementary and Secondary School Emergency Relief fund.
    ${ }^{\mathrm{c}}$ SBDM $=$ school-based decision-making council.
    ${ }^{\text {d }}$ SEEK $=$ Support Education Excellence in Kentucky.

[^39]:    ${ }^{\mathrm{e}} \mathrm{AADA}=$ adjusted average daily attendance.

[^40]:    ${ }^{\mathrm{f}} \mathrm{CSI}=$ comprehensive support and improvement.

[^41]:    ${ }^{\mathrm{g}}$ IEP $=$ individualized education program.

[^42]:    ${ }^{\text {h }}$ KTIP $=$ Kentucky Teacher Internship Program.

[^43]:    ${ }^{\mathrm{i}} \mathrm{THC}=$ tetrahydrocannabinol.

[^44]:    ${ }^{\text {a }}$ Wage data analyzed included only individuals working in all four quarters in 2022.

[^45]:    ${ }^{\text {a }}$ CIITS $=$ Continuous Instructional Improvement Technology System; EDS = Educator Development Suite.

[^46]:    Note: Passing scores appear in parentheses. GACE = Georgia Assessments for the Certification of Educators; LEA = local education agency; UNL = University of Nebraska-Lincoln.
    *Passing score not specified.
    **Unclear if other assessments are also accepted.
    ***North Dakota has instituted a composite score of 466 based on the CORE Reading, Mathematics, and Writing tests providing the candidate has met the minimum passing score currently in place for two of the three tests. $\dagger$ The paraprofessional compiles a portfolio of artifacts and evidence to demonstrate knowledge and proficiency in the Wisconsin Paraprofessional Standards. Using the Paraprofessional Portfolio Documentation form, the paraprofessional outlines the included documentation aligned to each competency for each standard. The form

