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This study examines the phenomenon of external teacher contracting in Washington State schools. Using administrative data, we analyze shifting patterns of employment among external contract teachers. External contract teachers now represent a significant portion of the workforce in a few districts, but a very small portion statewide. These districts have formed robust online programs that may account for changing contracting practices. External contract teachers are more often female, less experienced, and less likely to hold master's degrees than their peers. Results highlight the emerging call for flexibility in teacher labor markets and have implications for workforce diversity and stability.

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A Longitudinal Study of External Contract Teacher Employment in Washington State School Districts

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School staffing challenges, including overall teacher shortages, misalignment of supply and demand, and high rates of teacher turnover, have challenged school districts for decades (Edwards et al., 2024; Malatras et al., 2017; Sutcher et al., 2019). In response to these ongoing staffing challenges, some districts are seeking new strategies to find, recruit, and retain teachers for their classrooms (Redding, 2022; Shanahan, 2024). These strategies include wide ranging efforts including promoting teacher retention through pay-to-stay initiatives, appealing to larger numbers of local teachers through Grow-Your-Own programs, and expanding the traditionally geographically-constrained teacher labor market through the outsourcing of recruitment and staffing to external contracting groups (A. Garcia, 2022; Lieberman, 2022; Redding, 2022).

Complicating these efforts is the more local nature of the teacher labor market when compared with other professions. Teacher labor markets tend to be far more geographically constrained; this reflects the preferences of teachers, but also the regional and local restrictions that govern teacher training and licensure (Boyd et al., 2005; Crowson & Goldring, 2009; Engel & Cannata, 2015). The public teacher workforce has also been historically highly regulated by state legislation and, in many states, union-negotiated collective bargaining agreements dictate contracting practices – work hours, teacher duties, and pay scales (Brunner et al., 2020; Strunk et al., 2022). These systems are in place to create accountability and help ensure that students are taught by qualified teachers and that teachers are treated fairly and equitably. However, they may also constrain the teacher labor market and create issues around the recruitment of new teachers to an already challenged workforce.

In recent years, staffing challenges have been further complicated by the ongoing evolution of labor market norms and workforce priorities in general, outside of teaching. For instance, the career expectations of millennial and Gen-Z workers tend to emphasize skill development over employer loyalty, work-life balance, and flexible work arrangements (Acheampong, 2021; Ng et al., 2010). These changing priorities in the workforce were heightened alongside the Covid-19 pandemic (J. Kelly, 2021). In response, districts may seek to employ teachers outside the bounds of the traditional contracting system in order to fill gaps, respond to unforeseen changes in classroom needs, and react to everchanging increasing and contracting student enrollments (Lieberman, 2022; Shanahan, 2024).

External contracting of teachers is part of the broader teacher labor market trends of hybrid, flexible, and remote work options (Amestoy, 2023; Clem, 2023; Lieberman, 2022), and are sometimes accompanied by corresponding shifts in instructional practice, including hybrid or remote teaching models (Gulosino & Miron, 2017). Teachers working on external contracts may be employed within the bounds of collective bargaining agreements or outside of these agreements (Camphuijsen & Stolp, 2022; Pollock, 2007; Stacey et al., 2022). These external contracts differ from standard teacher contracts in their employer of record, meaning they are employed by a third-party entity and then contracted by their employer to a school or district. State regulations may dictate the flexibility of district power to employ these contract types and how they operate with relation to other teacher employment. Within these bounds, external contracting arrangements can vary significantly. External contract teachers may be contracted by a staffing agency to work in a public school district, employed on an external contract through an education services company to teach in an online school setting, or hired on a temporary, external contract to fill gaps for in-person schooling in a hard-to-staff area or one where a long-

term substitute may not be suitable, such as special education or advanced math courses. Contract length may be non-permanent, hired for a fixed duration or for yearly renewal; mode of instruction may be in person, online with students learning at home, or online with students learning in a classroom led by a teacher's aide, but with the teacher working virtually.

Understanding the phenomenon of non-traditional and external contracting practices in public education could be significant for both the public sector workforce and for students enrolled in public education. External contracting practices may open avenues for new populations of teachers to enter the workforce and help close gaps in teacher staffing; they may also complicate relationships with existing teachers and unions, create a separate and unintegrated track of teachers, and disrupt school operations. The trends of external contract use, the characteristics of teachers in these positions, and their career plans is not well understood. We know very little about the incidence of external contract use for teachers, there is limited research on external contract teachers, particularly in the United States (Camphuijsen & Stolp, 2022; Duthilleul, 2005). This study aims to address these knowledge gaps surrounding external teacher contracting, with the goal of informing policymakers' decisions and shaping future research agendas in this area.

In this paper, we examine the phenomenon of external contract teachers as an alternative to traditional staffing arrangements. We use Washington State public school districts as a case study to explore external contracting in a highly regulated, and strong union setting. We define external contract teachers as teachers who are listed as having a contract through an external contractor that is not an institute of higher education and who would have been reported as a certificated classroom teacher otherwise based on duties¹. Our analysis first examines the

¹ Our definition is in accordance with the reporting in the Washington State S-275 data set and the definition of a contractor teacher (T. J. Kelly et al., 2022). Further discussed in the measures section.

distribution of external contract teachers statewide from 2003 to 2022. Then, we identify and study specific districts that engage in external contracting. Specifically, we address the following research questions:

1. What is the distribution of external contract teachers in Washington State, and how has this changed over time?
2. Within districts that employ external contract teachers, what are the patterns of external contract and traditional contract teacher employment across years? What are the characteristics of districts that employ contract teachers?
3. What is the relationship between contract status, teacher demographic characteristics, experience, and pay in external contracting districts?

To address these questions, we first analyze statewide patterns of external contract teacher employment for RQ 1. Given the local nature of teacher labor markets, we then subset our sample to include only teachers in districts that employ external contract teachers for RQ 2 and RQ 3. This approach allows us to investigate both statewide trends and within-district variations in the employment of external contract teachers compared to traditional contract teachers. By exploring these questions within the context of Washington State, we aim to provide insights into the evolving landscape of teacher employment in a state with highly centralized regulations of the teacher labor market and strong union presence. This study begins to address the gap in our understanding of external teacher contracting, informing policymakers and setting the stage for future research into this phenomenon.

Background

Teacher contracting in public schools in the United States is heavily standardized by the actions of state legislation and district regulations; depending on the state, this is shaped by intricate negotiations with teacher's union and the subsequent collective bargaining agreements (CBAs) (Giersch, 2014; Strunk & Grissom, 2010). In some places and depending on the power

of the teachers' union, CBAs can dictate many parts of teachers' contracts and employment – including working conditions, pay, and tenure. Since CBAs are developed between districts and unions on behalf of teachers (Strunk & Grissom, 2010), this can mean that teachers do not have the authorization to negotiate on their own behalf or to alter the terms of their employment outside of the CBA strictures.

Isomorphic pressures have ensured a high level of standardization in certain teacher characteristics across jurisdictions and into non-unionized settings like charter schools (National Center for Education Statistics, 2023). However, the expansion of alternative public schooling options under the mantle of 'school choice' has popularized alternative models for teacher contracting even in strong union states (Giersch, 2014; Jabbar et al., 2019). For example, in most cases, charter school teaching staff are not unionized and are employed on individually negotiated and agreed upon, fixed-term contracts for a year or more (Cox & Goldring, In Press). These teachers do not have the same employment security or protections as traditionally employed teachers who can obtain tenure (Stitzlein & Smith, 2016).

Recent reports show that as traditional public schools and districts struggle to meet their staffing needs, they may also turn to alternative staffing arrangements, even at the expense of relationships with local unions or existing teachers (Clem, 2023; Lieberman, 2022). External contract teachers are more likely to be employed on an as-needed basis by districts facing teaching challenges or experiencing staffing uncertainty (Kingdon et al., 2013; McGrath-Champ et al., 2023).

External Contracts and Flexible Employment

Kalleberg and colleagues (2003) examine contracting arrangements along two dimensions: the extent to which the employee's contract is held external to the employee's work

organization, such as is the case for an employee hired and managed by a staffing agency, and the level of flexibility the arrangement entails, including work hours, responsibilities and schedules. They argue that alternative contracting that externalizes work often provides cost savings, and more flexibility.

External contracts are one element of the long-standing – and controversial – incorporation of market logics into public sector employment practices (Jensen & Stonecash, 2005). In a sector where employee contracts tend to be highly standardized and subject to extensive regulation and bureaucratic processes, external contracts operate outside these systems and may thereby allow employers to bypass this red tape. Proponents argue that the use of alternative contracting in the public sector can lower government expenditures and provide flexibility for fluctuating labor needs (Purcell & Purcell, 1998). However, this flexibility may come at the cost of sustaining a dependable and high-quality labor pool in future and even introduce new inefficiencies to hiring and employment (Jensen & Stonecash, 2005; Potrafke, 2019; Purcell & Purcell, 1998).

Research in this area is more often focused on the public sector outside of education and much of the existing literature has focused on other national contexts outside the United States (Conley, 2002; Hudson, 2000; Jensen & Stonecash, 2005; Purcell & Purcell, 1998). Yet, the findings show that there are observable impacts – be they positive, such as increasing employment flexibility or negative, reducting wages and job security – on employees when public enterprises choose to employ workers on a non-permanent basis through alternative contracts or through outsourcing (Latner & Saks, 2022). External contracting may meet employee preferences for short-term, flexible work arrangements rather than career-long commitments this lack of standardization may also remove workplace protections available to

traditional contract employees and threaten the professional status of the positions these employees replace (Purcell & Purcell, 1998).

External Contracting in Education

External contracting of classroom teachers is especially relevant as school systems face growing uncertainties in the labor market. Teacher shortages and declining enrollment in traditional teacher preparation programs, alongside local demographic changes and fluctuating student enrollment, are creating a higher demand for staffing solutions that can bridge temporary gaps in workforce and respond to changing demands (E. Garcia & Weiss, 2019; King & James, 2022; Van Overschelde & Wiggins, 2020). In addition to these trends in traditional public schools, the continued expansion of charter schools, private school voucher schemes, and online education as alternatives to traditional public schools add complexity to a once-standardized market (Butler et al., 2013; Gulosino & Miron, 2017; Hunter & St. Pierre, 2016).

With more school choices and enrollment flexibility, student enrollment can be difficult to predict, and the need for teachers can vary from one year to the next, particularly in rural or other hard-to-staff areas (Cox & Goldring, In Press; Goldhaber et al., 2020; Sutcher et al., 2019). (Arthur & Rousseau, 2001; Grimshaw et al., 2003). The use of external contracting allows companies to remain flexible in staffing practices during uncertainty or fluctuation (Hudson, 2000; Kalleberg, 2003). This includes flexibility in numbers of employees, depending on the changing demands of organization. For example, a staffing agency may employ teachers on an at-will basis, thereby reducing the potential for surplus teachers should student enrollment fall, or they may provide limited benefits and retirement options that reduce employment costs. Emerging evidence indicates that teachers who take up contract teaching are motivated by the potential for greater autonomy and flexibility (van Belzen, 2019), two areas that research suggests are related to teacher dissatisfaction, burnout, and turnover (Li & Yao, 2022).

The Study Context

The State of Washington provides an important context to explore external contract teachers. Changes to teacher labor policy and fluctuations in the public school market are particularly relevant to a study of external contracts for teachers. In recent years, some states, including Washington, have passed legislation to limit union power and curtail the binding effects of collective bargaining agreements at least for some elements of the contract (Strunk et al., 2022). Overall, there are almost 70,000 teachers employed in public schools in the state across 295 traditional public school districts. These districts range in size from fewer than 10 to more than 55,000 students (*About School Districts*, n.d.). School districts in the state have employed small numbers of teachers on external contracts since at least the early 1990s. Since the start of our study period in 2002, we found that at least 100 external contract teachers have been employed in the state each year.

Washington state has a strong teacher's union and state education codes with detailed guidelines around teacher employment (Strunk et al., 2022). The Washington Administrative Code (WAC) sets clear standards for teacher employment, including the use of external contractor agreements. The code states that districts have the liberty to contract with external providers for instruction subject to compliance with state regulation and local collective bargaining agreements (WAC 392-121-188. Instruction Provided under Contract, 2023). The regulation of contracted instructional services also includes special provisions for online instruction, online providers that are approved by the superintendent of public instruction are not required to undergo board review before being contracted by a district as would be required for other contractors (WAC 392-121-188. Instruction Provided under Contract, 2023).

The McCleary Ruling and Changes in Washington State Teacher Employment

In 2012, a ruling on the case McCleary vs. the State of Washington found that the state of Washington had failed to provide adequate funding for education in accordance with the state constitution. The result was a slow but dramatic change in school funding structures and allocations for teacher pay; the new funding structure took effect in the 2018-19 school year (Bartlett, 2018; Sun et al., In Press). Average teacher pay in Washington rose more than \$15,000 from \$55,693 in SY2017-18 to \$72,965 in SY2018-19 (McFarland et al., 2019). The McCleary ruling and subsequent legislative changes caused significant upheaval in the teacher labor market with statewide contract negotiations, strikes, and funding changes that impacted the contracting patterns of districts and subsequently reduced teacher turnover – this may in turn have impacted practices of external contracting in some districts (Sun et al., 2025).

Online learning and the rise in contractor teachers post-McCleary

During the study period (2002 to 20xx), Washington created new online learning guidelines in response to a growing interest among public school families (Hunter & St. Pierre, 2016; Wallace & Nelson, 2024). In 2009, the Washington legislature passed initial legislation requiring all school districts to develop policies around online learning opportunities and to award credits earned through enrollment in online learning programs (Chapter 28a.250 RCW: ONLINE LEARNING, 2009). This law created state policies for monitoring and regulating the burgeoning online education industry that had already formed in the state. In 2024, the Washington Office of Superintendent of Public Instruction (OSPI) published a Report to the Legislature about online learning, sharing that the number of students enrolled in online learning had grown significantly since prior to the pandemic. From 2006 to 2019, the number of students enrolled in online coursework in the state grew from 14,000 to 34,000 – an increase of 20,000

students in 13 years; over the next 4 years of the pandemic from 2019-20 to 2022-23, this number increased by another 20,000 to 54,000 students. (Wallace & Nelson, 2024).

Student enrollment in online education has grown significantly in Washington state over the past 15 years since the initial legislation called for regulation and monitoring in 2009. By 2019, more than 30,000 students were enrolled in at least one online course. Following a slight dip in in SY2021-22, there has been an increase in online student course-takers each year, there are now more than 54,000 students (Wallace & Nelson, 2024). Most of these students are part-time online enrollees taking courses through their home district; however, some 15,000 of them are classified as ‘non-resident’ students, and are enrolled either full or part-time in a district other than their home district for the purpose of taking online course. In 2022, almost 50% of these non-resident students were enrolled in just three districts - Quillayute Valley School District (3,040), Goldendale School District (2,007), and Mary M. Knight School District (1,764) – the three largest employers of external contract teachers in the state (Wallace et al., 2023), which will be discussed more in the following sections.

As districts and schools adapt to evolving schooling environments, they may adjust the nature of teacher employment. There is a growing trend of non-traditional teacher labor with a rise in alternative contract arrangements, and staffing agencies operating in public schools (Lieberman, 2022; Redding & Smith, 2016). We track the changes and trends in contract teacher employment in Washington state, which is closely tied to both recent legislation around alternative schooling options, such as online education, and the evolving teacher labor market.

Methods

Data and Sample

In this paper, we draw from two datasets to study external contract teachers and employment trends. Our primary data source is the Washington State S-275 administrative

dataset from 2002-2023. We combine the S275 with educator workforce data from the Washington State Unemployment Insurance (UI) database to conduct robustness checks on teacher employment and pay.

In the S-275 dataset, the Washington Department of Education compiles information on the universe of educational staff, including educators employed on external contracts. This dataset contains employee demographics, district and school of employment, base pay, and duty codes identifying contract type and job assignment. External contract teachers, identified through their duty codes, are employed external to the district by a contractor or other third-party entity but would otherwise be coded as classroom teachers based on their responsibilities. This does not include educators employed by a university or educators whose primary employer is another school district.

We combine the S-275 dataset with information from the state UI database. The UI database provides detailed information for all workers in the state except self-employed workers or federal employees. We use a subset of the UI database that contains the employment history of any person ever employed in the education sector. From the UI data, we extract information on the sector of employment and employee earnings. We match these data with the educators in the S-275 data set to further inform our designation of contract workers.

Sample restrictions. We restrict our sample to classroom teachers in the state of Washington—traditional contract or external contract—as identified by their duty codes in the S-275 dataset. We use this sample of all teachers in Washington state to answer RQ1 by analyzing employment patterns statewide among external contract teachers to identify patterns of difference between this cohort of teachers and the population of teachers statewide. We then

refine our sample to include only teachers from districts that employ external contract teachers for additional descriptive analysis to answer RQ2 and RQ3.

Measures

Duty Codes

The S-275 dataset provides information about each post an employee holds each year. Each position receives a code based on the characteristics of that assignment; an employee may, therefore, have multiple assigned duty codes each year if they are employed in multiple positions or schools. Classroom teachers may have one of several duty codes depending on their grade level or subject matter (see Appendix A for full details). External contract teachers receive the duty code ‘630’, which differentiates them from traditional contract teachers. The 630 duty code is described as follows: “Employees of a contractor, who, if they had been employees of the district, would have been reported in a basic education or special education program assignment with a duty code 310, 320, 330, or 340.” External contract teachers must spend more than 0.25 FTE with students in the reporting district. The contractor cannot be a school district, college, or university.

Educator Characteristics

We include the following teacher demographic information as provided by the state S-275 administrative dataset: teacher’s age; education level (recoded as an indicator for having less than a master’s degree or having a master’s degree or above); years of experience in teaching.

District

The S-275 dataset reports the district of employment for each teacher role assignment in each year. While most teachers are employed only by one district, some teachers were employed

by more than one district in one year. They were assigned the district of their primary appointment.

Teacher Salary

For our primary analysis, we use earnings reported for the education sector in the unemployment insurance dataset. We take the quarterly earnings reports in all sectors for people employed in Washington as educators and limit our salary measure to the money earned from employment in the education sector. To best approximate school year earnings, we aggregate quarters 3 and 4 from *year* with quarters 1 and 2 from *year+1*. We leverage this data to best gauge the overall earnings for a single educator across districts and schools, as is more common for external contract teachers.

Teacher salary is also reported by school districts in the S-275 dataset. Districts report both the start of year base salary and end of year total salary for every employee. The end of year total salary, which that state reports includes any modifications to the base salary in the form of extra assignments, adjusted work span, or other job changes. We investigate discrepancies between unemployment insurance data, base reported and final reported salary for robustness checks of traditional and external contract teacher pay.

Data Analysis

To answer RQ1, we leverage the full sample of teachers in Washington state over the study period. We track yearly teacher employment numbers for all teachers and for teachers on an external contract to analyze relative changes. We observe the number and distribution of districts who engage in external teacher contracting. We also observe patterns in district level characteristics and map these districts across Washington state and look for changes across time.

Next, we analyze the subset of districts that report teachers on external teacher contracts in any year to address RQ2. We conduct a district-by-year descriptive analysis. We use this information to compare the trends of teacher pay, experience, and education for teachers employed traditionally and on external contracts. Additionally, we look at a smaller subset of those districts engaging in significant (more than 1% of their workforce in a year) occurrences of external teacher contracting in recent years (since SY2017). Finally, for RQ3, we use the full sample to conduct an analysis of within-district variation in the employment trends of external contract teachers compared with traditional contract teachers. To do this, we model the relationship of teacher contract status with salary. The model is shown below:

$$Y_{idt} = \beta_0 + \beta_1 Contract_{idt} + \beta \mathbf{X}'_i + \theta_d + \gamma_t + \varepsilon_{idt} \quad (1)$$

In equation 1, Y_{idt} is the salary for teacher i employed in district d in school year t .

$Contract_{idt}$ is an indicator showing teacher status as an external contract teacher in a given district and year of employment. In addition to the main $Contract$ variable, we also include vector \mathbf{X}' of teacher characteristics. This vector includes years of experience, gender, and highest degree completed. θ is a district fixed effect, which accounts for time-invariant district level factors; and γ , is a year fixed effect to account for any shocks that are common across district settings in the state, such as the

Results

RQ1: The distribution of external contract teachers in Washington State over time.

The distribution of external contract teachers in Washington State changed considerably from the 2002-2003 school year, SY2002, to the 2021-2022 school year, SY2022. We observe two distinct trend periods of external contracting of teachers within our study years; the first

period begins in SY2022 and extends through SY2011, the second period begins in SY2012 and continues through SY2022 (Figure 1).

[FIGURE 1 HERE]

In the first period – SY2002 to SY2011 – there was significant growth in the numbers of teachers employed on external contracts across the state. In that ten-year period, the number of external contract teachers in the state grew from 131 to 357. At the peak of external teacher contracting in SY2011, 81 districts employed at least one external contract teacher. Across all districts, external contract teachers were a small proportion of the total teacher workforce with no district employing more than 10 external contract teachers in one school year. The districts that did employ external contract teachers were spread widely across the state. This could reflect a likely use of external contracts to fill unanticipated or unplanned staffing needs or temporarily unfilled positions. In SY2012, a second period began with a marked shift in the patterns of external contract teacher employment. The number of external contract teachers dropped from 357 in SY2011 to 265 in SY2012 and, over the subsequent ten school years, until SY2022, the number of external contract teachers varied between 180 and 265 teachers. There were no other periods of significant growth in the employment of contract teachers – after SY2011, we see the external contract teacher staffing practices change in several ways.

During the study period, most districts that engaged in external teacher contracting did so to a limited extent – both in percentage of their total workforce and years of external contracting. SY2011 was the peak of unique external contracting districts (Figure 2) in addition to the peak of external contract teachers in SY2011 (Figure 1). Beginning in SY2012, the distribution and concentration of teachers in the state began to shift. In SY2022, when 238 contract teachers were employed in Washington State, the number of districts was at its lowest at any point in the study

period. This increased concentration of external contract teachers in fewer districts indicates a potential shift in the approach to external teacher contracting statewide. It may be connected to a shift in labor supply or in state guidelines for external contracting. Similarly, for those employers using external teacher contracting, there has been an increase in number of externally contract teachers and an increase in the duration of years. Within the constraints of state regulations, contracting decision – including the use of external teacher contracts – occurs at the district level. In the next analyses we therefore explore the distribution and employment patterns within only those districts engaging in external teacher contracting in a given year.

[FIGURE 2 HERE]

RQ 2: Patterns of external contract and traditional contract teacher employment across years and schools in districts that employed external contract teachers

Given the limited range and concentration of external teacher contracts in no more than 81 districts in a school year, we next conduct the analysis for research question two within external contracting districts. While almost half of districts in the state employed an external contract teacher over the course of the study period, 147 of 295 districts in the state, no more than 81 districts – and most often far fewer – engaged in external contracting in a particular year. District level use of external contract teachers varied considerably by district as does the range of years, but almost all of the districts in this sample employ fewer than five teachers in any year. Only 17 districts employed external contract teachers for over 10 years of the twenty-year study period. Most external teacher contracting happens within a relatively few districts within a school year, particularly during the second study period beginning in SY2012. External contracting districts range from very small, with fewer than 20 teachers per year, to large, over

1000 teachers per year, suggesting that districts with very different employment needs and demands may turn to external teacher contracting at certain times to fill gaps.

While a majority of school districts in Washington state have employed a contract teacher at some point in the study period, this distribution has changed significantly over the course of the past 15 years. External contracting is now a limited enterprise which appears to play a more significant role in fewer districts. In the SY2022, the number of externally contracting districts was at an all-time low while the total number of external contract teachers had not changed significantly. Thirteen school districts reported employing at least one teacher on an external contract, a total of 238 teachers (Figure 3a-c). Most of these teachers, 217 out of 238, were employed by just four school districts across the state.

In response to this trend in external contract use, we examine the characteristics of these four 'high externalizing' districts to look for trends and commonalities. We found that the districts were diverse in terms of size and rurality, shown in figure 4. Geographically, the districts are more closely constrained. While in four different counties, three of the districts, Mary M. Knight, Quillayute Valley School Districts, and South Kitsap, are found on or near the Olympic and Kitsap peninsulas in western Washington. The fourth, Goldendale is slightly further east and south in South-Central Washington state.

Interestingly, three of these school districts, Goldendale, Mary M. Knight, and Quillayute Valley, are the three largest enrollers of non-resident online student learners—students that live in one district but enroll to take online courses in another (Wallace et al., 2023). This comes with the extensive online education programs rolled out by each of the districts over the course of the past ten years. Since not all districts run online programs, students and families are permitted to enroll as non-resident students to take advantage of these programs. This may also make online

programming more feasible for smaller districts and those with falling enrollment. This alignment of online education and external contracting may indicate a higher likelihood of districts to turn to external contracting for online instruction. As districts continue to incorporate more virtual classrooms and online schooling into their programs, these employment practices could have significant implications for local workforces and student populations.

FIGURE 4 HERE

RQ3: Employment patterns of teachers in external contracting districts

To answer research question 3, we focus on comparisons of teachers within districts that employ external contract teachers across our study period. The sample of districts changes each year in response to staffing practices. Table 1 shows the characteristics of external and traditional contract teachers across key years in our data in external contracting districts. In SY2002, at the start of our study period, 131 external contract teachers were spread across 23 districts and more closely resembled the traditional contract teaching population in terms of years of experience and education. Over the course of the study period – and particularly after SY2011 – the two populations begin to diverge and the external contract teachers shift to a higher proportion of female teachers, fewer teachers with a master's degree, and far fewer years of experience (see table 2).

For the first period, from SY2002 to SY2011, external contract teachers had on average just under 11 years of experience compared to 14 for their traditionally contract peers. This difference of less than three years was significant but steady over the observation period. The difference in years of experience between the two groups grew considerably in the second period of our study from SY2011 to SY2021. This reflected a change in the years of experience of the external contract teachers rather than the traditional contract teacher cohort – which held

relatively steady. By SY2021, external contract teachers had much less teaching experience, five years on average.

FIGURE 5 HERE

Tables 2 and 3 show the results of the analysis that examines the relationship between contract teaching and pay (see equation 1). Table 3 presents the relationship of pay to contract status. In addition to contract status, in all models we include year fixed effects as well as teacher experience and degree status covariates since these are closely associated with teacher pay and turnover. Pay was significantly associated with teacher employment on an external contract in all models, indicating that in all circumstances we explored, teachers on external contracts earned less than their peers. In table 3 model 2, we also include district fixed effects to limit analysis to within district variation on teacher pay. In the full model, controlling for teacher experience and degree level, with both year and district fixed effects, contract type still significantly associated with district pay and results in a \$5,000 a year pay penalty.

TABLE 2 HERE

Discussion

This paper begins to explore the evolving nature of teacher contracting practices in changing teacher labor markets in the context of Washington state. Washington is a state with highly centralized regulations of the teacher labor market and a strong union with collective bargaining. During the study period, changes in workforce priorities with regard to flexibility and career trajectory, the fast-track of virtual schooling expansion due to community expectations following the in-person school closures of Covid-19, and state legislation amidst the turmoil following the McCleary case disrupted the established patterns of teacher contracting and district structure. In particular, we observed the rise of a majority external contract teacher workforce in

certain districts through the introduction of online education. This change following the increase in teacher pay levels in 2018 is relevant as more states make decisions about the provision of online education and develop guidelines and regulations about contract agreements and union oversight for alternative employment in the online environment.

External contract teachers make up a very small percentage of the total teacher workforce in Washington state and given the strength of both the union and the state code regulating teacher employment, this perhaps is not surprising. Over the past ten years, while the population of external contract teachers has changed and district participation has shifted, the overall number of teachers has not, leaving external contract teachers at less than 1% of the total state workforce. However, for a small subset of districts, the employment of external contract teachers is significant. In these districts, external contract teachers both represent a large proportion of the employed teachers and are also indicative of shifting local employment and school enrollment patterns. The study adds to a growing concern that state school finance formulas are poor fit for some districts, such as those in rural settings, where unique circumstances complicate the applications of standard funding formulas (Farrie & Kim, 2024; Gutierrez & Terrones, 2023; Knight, 2017).

Teachers employed on external contracts differ from their peers in several key areas, most noticeably years of experience, pay, and gender. These differences in the workforce could have implications for the composition of the teaching workforce. The benefit of drawing new teachers into subjects and classrooms that are otherwise difficult to fill, or in bringing new groups to the teaching profession, could be a real benefit of district partnerships with external contractors like staffing agencies. As discussed earlier, teacher shortages do not impact all student populations

equally and often the highest need students are the most impacted by understaffing and high turnover.

However, the differences between external contract and traditional contract teachers could also be cause for concern. If these practices create a tiered system of employment with differentially paid and protected classes of teachers, we may actually see employees turn away from the teaching profession. Following the enactment of the HB 2242 in 2017 in response to the McCleary ruling, there was a significant increase in teacher pay across the state (seen in Table 2). However, this pay increase does not appear to have extended to external contract teachers. The average pay of this group of teachers remained at levels similar to the pre-McCleary pay scales observed statewide. This may be because these teachers are not employees of the district and may not subject to the state pay agreements for classroom teachers. Lower pay and fewer community ties could have serious implications for teacher turnover – which would in turn continue to drive up the gaps in experience between external contract and traditional contract teachers. This reality compounded with the high numbers of external contract teachers teaching online in virtual schools may indicate the formation of a ‘secondary pool’ of online teachers and possibly lead to a tiered system of teacher recruiting and staffing.

Limitations

The S-275 dataset we use for this project has extensive information on teacher assignment, demographics, and experience. However, it does not offer insights into the motivations of districts or teachers, for example, if the impetus for entering an external contract position over a traditional contract stem from a lack of available traditional positions, or from a desire for a more flexible work arrangement. An extended mixed methods study featuring either surveys of or interviews with district central office employees and teachers could draw more

nuance about both the supply and demand say motivations of the district-level rise in external contract teaching, which we are unable to do at this stage.

Contribution and Next Steps

Workforce priorities have shifted over the past two decades. The desire for flexible employment have reduced employee ties to a single profession or workplace in many sectors. The COVID-19 pandemic served as a catalyst for both cementing these new priorities and for discussions around the restructuring of the workplace, especially around work-life balance and remote work options. These trends are alongside the rise in online, virtual schooling options for students and families. If current or future teachers are interested in more flexible work options, external contracts may serve these interests. In contrast, available work in online education, or in the face of lower student enrollments, may require teachers to accept external contracts for lower pay, reduced job security, and fewer benefits. Staffing agencies or other external contractors can respond to changing needs and circumstances in ways that single school districts may not be able to do.

We explore the phenomenon of external contract teachers as an alternative employment arrangement in Washington State, a state with a high level of union control and influence and tightly regulated teacher employment standards. Further study of this phenomenon within the Washington context could be especially important if districts hire external contract teachers as part of a concerted effort to respond to fluctuating student enrollment trends, such as an increase in online programs following in-person student enrollment loss, increased voucher and educational scholarship options, or even permanent teacher layoffs due to budget concerns after the McCleary ruling (“Spokane Schools Blames McCleary Laws for Deficit, Layoffs,” 2019). Learning more about teacher hiring practices and contract variation – and specifically external

teacher contracting – within this state context offers an important point of departure for a study of teacher contracting practices nationwide. In other states, particularly those with less influential union rules and collective bargaining limitations, study of the use of external or other alternative teacher contracts will be important to inform the development of employment schemes, particularly in response to the shifting needs of teacher shortages and fluctuating student enrollment, and the changing landscape of school choice.

Table 1. Traditional and Contract Teacher Differences in the State of Washington

	Contract Teachers - 2003	Traditional Teachers- 2003	Contract Teachers - 2011	Traditional Teachers- 2011	Contract Teachers - 2022	Traditional Teachers- 2022
% with Masters degree or higher	46.2%	58.6%	58.6%	68.1%	64.9%	73.7%
Years of experience	9.5	13.6	11.2	13.9	5.1	13
UI wage reported	66707.2	75498.9	68871.3	77932.3	54814.3	85557.8
Base salary	62119.4	69402.8	53844.7	67247.2	42577.7	79496.1
Final reported salary	23581.4	78035.3	44490.5	81371.8	29910.3	91240.5
Observations	130	52261	343	53754	234	63720

Note: all salary figures have been adjusted for inflation using the Consumer Price Index (CPI) to reflect values in constant 2022 dollars to allow for accurate year-over-year comparisons.

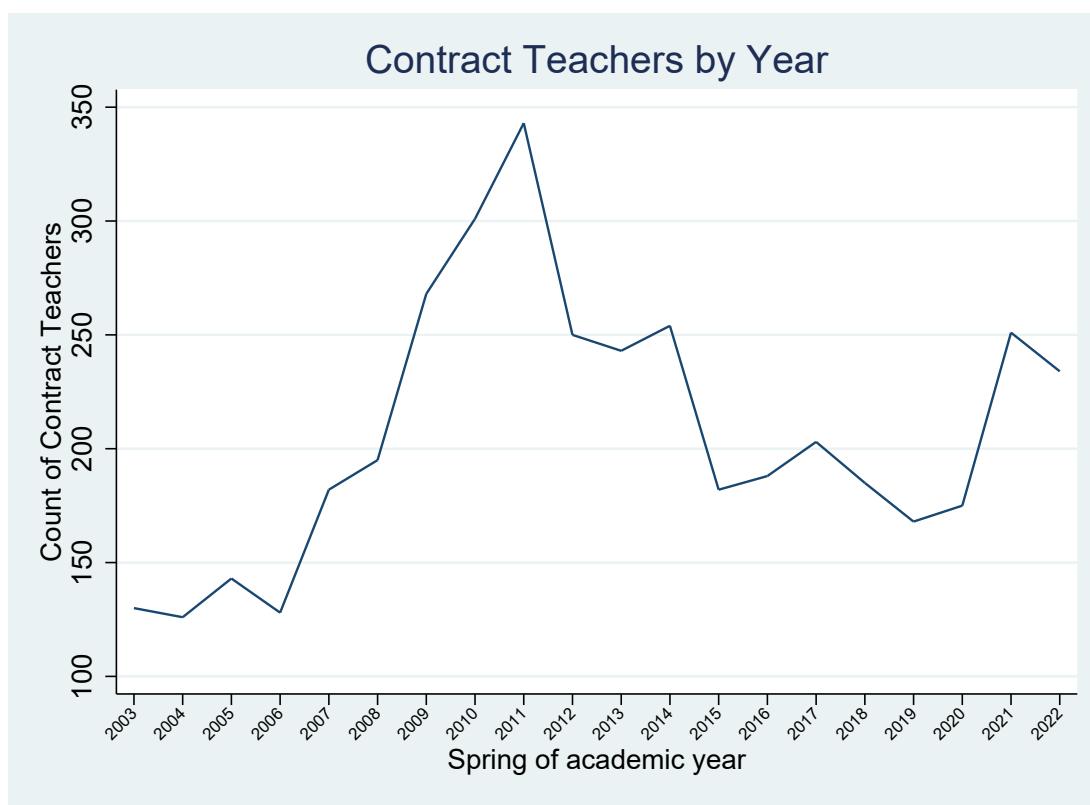
Table 2. Regression Showing Impact of External Teacher Contracting on Salary

	Teacher Salary	Teacher Salary
External Contract Status	-9553.8*** (276.0)	-4623.9*** (1373.1)
Masters degree	12039.5*** (33.51)	12126.9*** (197.3)

Experience	1388.7***	1417.9***
	(1.652)	(19.02)
Year FE	Yes	Yes
District FE	No	Yes

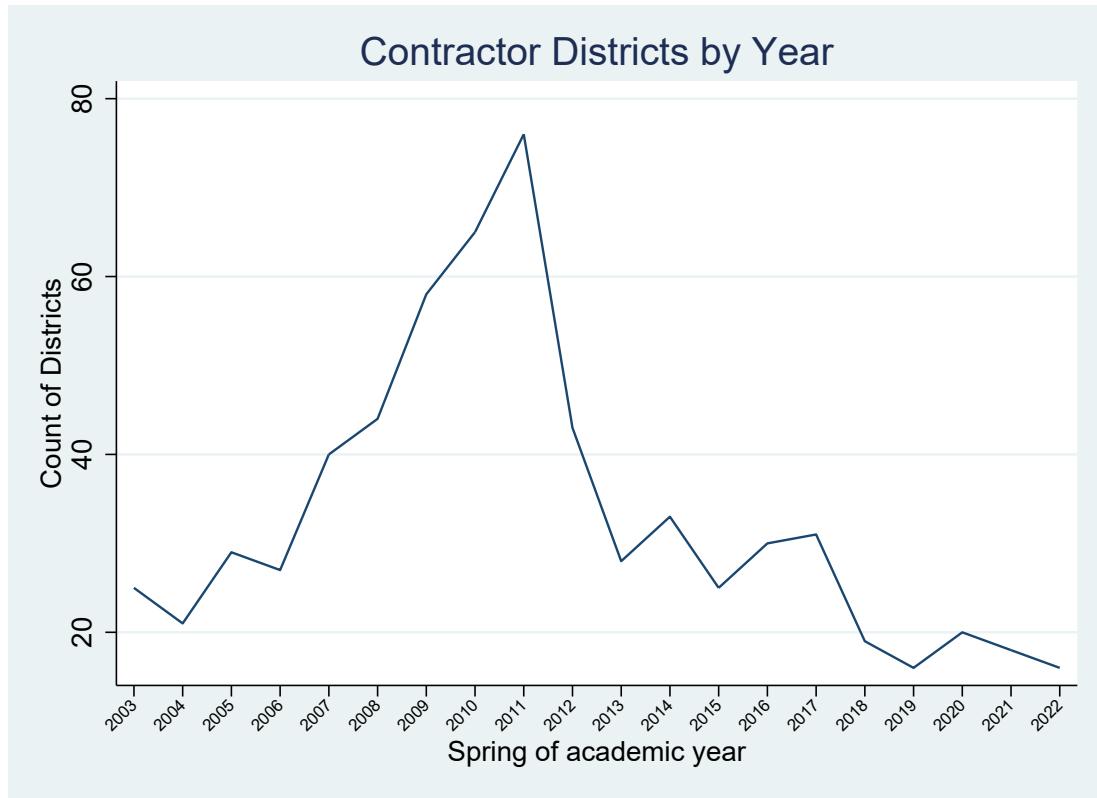
Note: all salary figures have been adjusted for inflation using the Consumer Price Index (CPI) to reflect values in constant 2022 dollars to allow for accurate year-over-year comparisons.

Figure 1. Contract Teachers in Washington State by Year



Note: Contract teachers as indicated by duty code 63, Washington State S-275 2002-2023.

Figure 2. Districts Employing External Contract Teachers

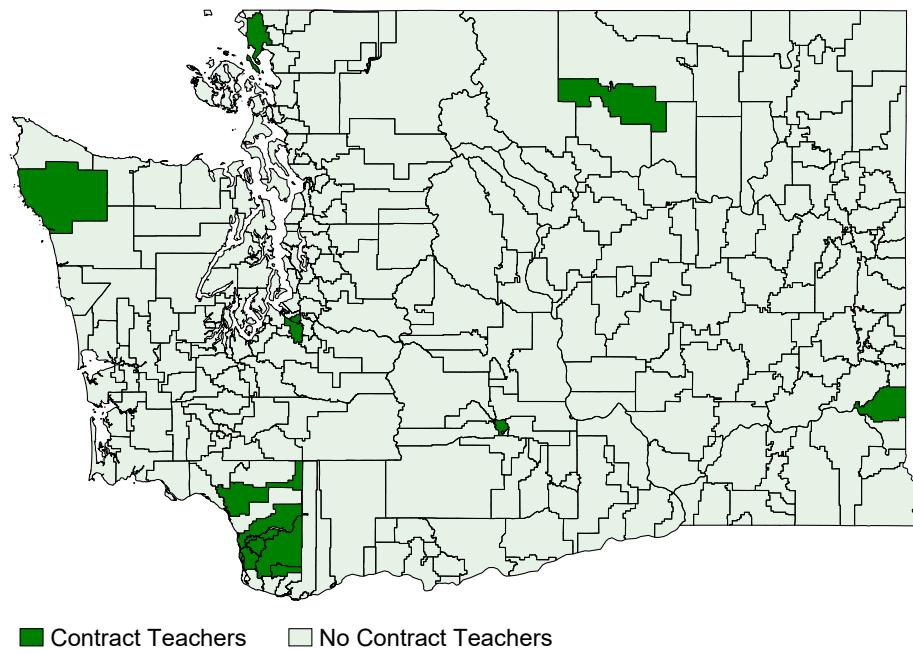


Note: Districts reporting use of contract teachers as indicated by duty code 63, Washington State S-275 2002-2023.

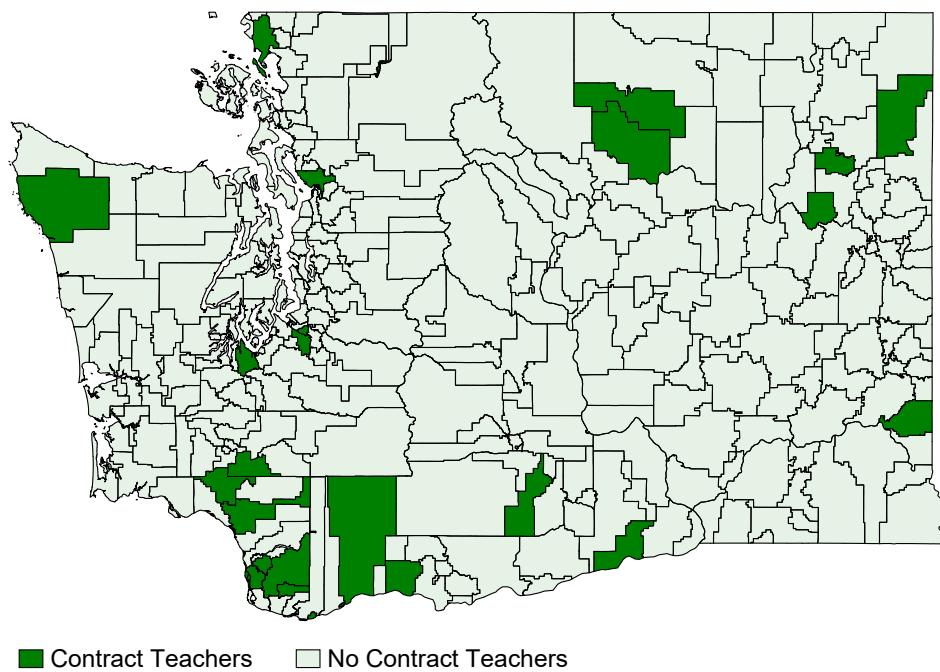
Figure 3a-c. Districts Engaged in External Contract Teaching

3a. Contracting districts in 2002-2003

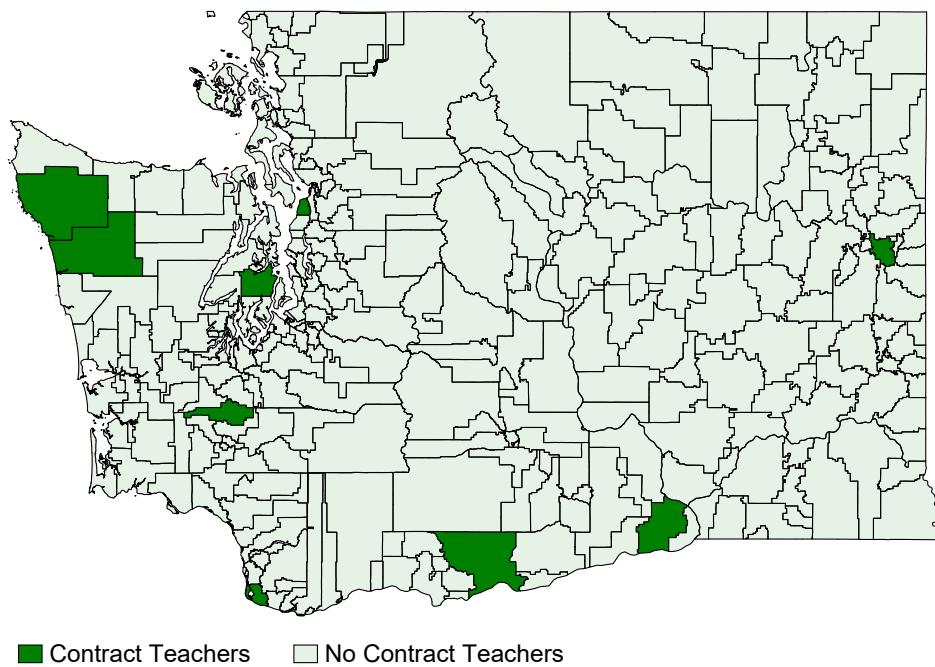
Contract Teachers in Washington State 2002-2003

**3b. Contracting districts in 2010-2011**

Contract Teachers in Washington State 2010-2011

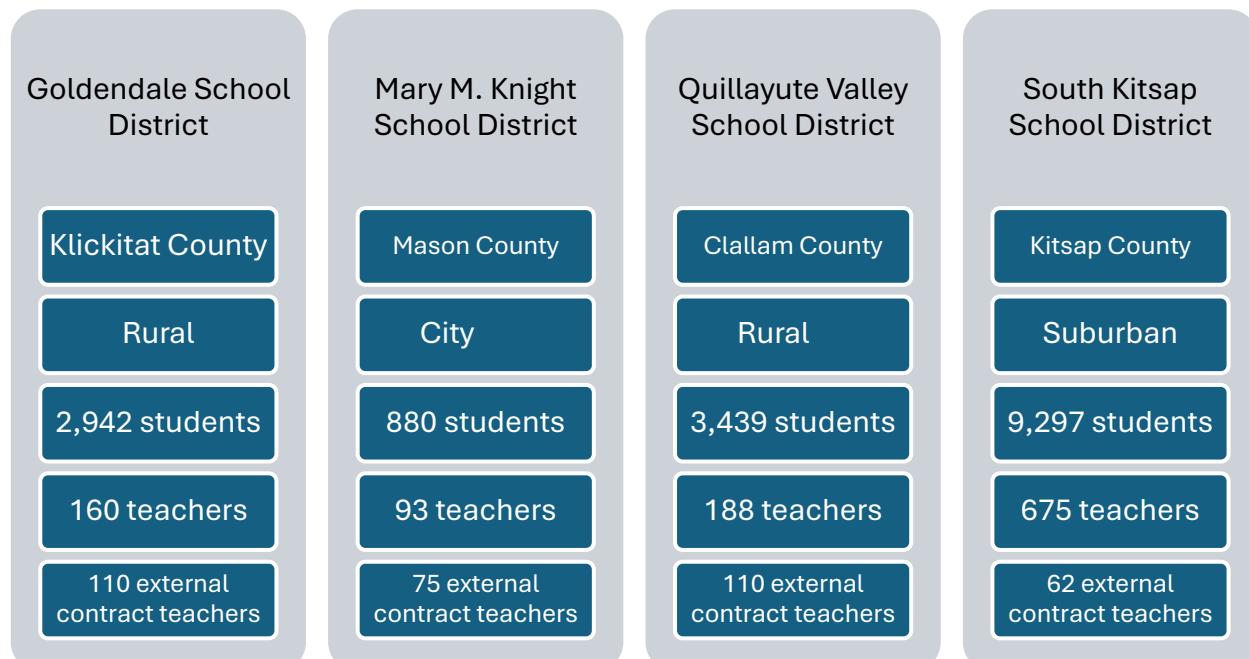
**3c. Contracting districts in 2021-2022**

Contract Teachers in Washington State 2021-2022



Note: Districts reporting use of contract teachers as indicated by duty code 63, Washington State S-275 2002-2003, 2010-2011, 2021-2022.

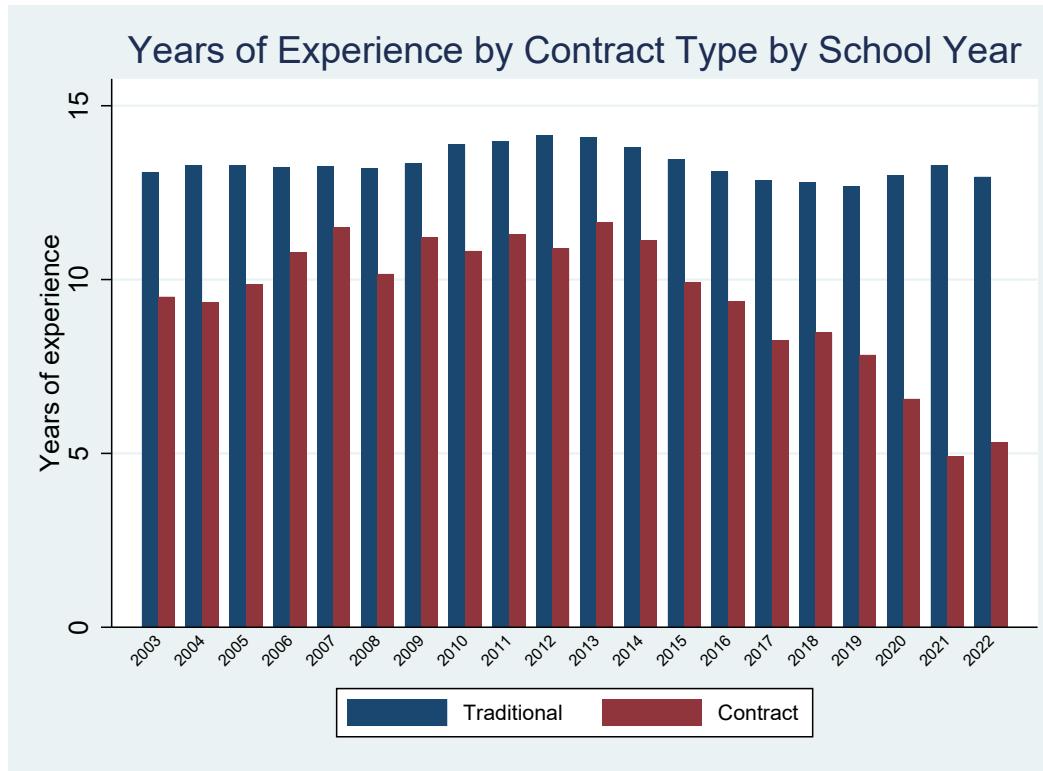
Figure 4. Major District Employers of External Contract Teachers in 2021-2022



Note: County, rurality, and student enrollment from U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Local Education Agency (School District) Universe Survey", 2023-24.

Teacher data from S-275 data set. Total teachers and external contract teachers represent the number of unique individuals employed on these contract types within the 2021-2022 school year. Does not indicate full time equivalency.

Figure 5. Years of Experience for External and Traditionally Contract Teachers



Note: Teacher year of experience by contract type as reported in Washington S-275 2002-2023

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