Common Substitute Teacher Application Platform

Statutory and/or Budget Language

\$150,000 of the general fund—state appropriation for fiscal year 2024 is provided solely for the office of the superintendent of public instruction to plan for the development and implementation of a common substitute teacher application platform.

Purpose

Washington State Engrossed Substitute Senate Bill (ESSB) 5187 Section 501(1)(k) requires the Office of Superintendent of Public Instruction (OSPI) to "plan for the development and implementation of a common substitute teacher application platform." The bill intends to provide a solution to reduce redundant job applications for substitute teachers and other educators, as well as provide a streamlined recruiting system for districts to attract and recruit substitute teachers and other educators effectively.

Description of Services Provided

ESSB 5187 requires OSPI to plan for the development and implementation of a Common Substitute Teacher Application Platform that provides the capability for potential applicants to view recruitments, create a common application, and apply for educator positions throughout the state. To meet the intent of the bill, Local Education Agencies (LEAs) and applicants' support needs, and incorporate existing LEAs' recruitment systems, OSPI completed the following six activities to better understand current local recruitment systems and operations, additional functionalities and capabilities that OSPI needs to reinforce existing systems to better serve existing and future substitute teachers and educators with an effective recruitment and job search process:

- 1) Build a streamlined substitute teacher hiring and compensation data collection system to better understand LEAs' hiring and compensation of substitute teachers and build data reporting and storage capacity.
- 2) Engage stakeholders and better understand their support needs and barriers in attracting, recruiting, and retaining substitute teachers, educators, and other staff in the K–12 system.
- 3) Define functional and technical requirements for a Common Substitute Teacher Application Platform to expand to a statewide Workforce Recruitment and Absence Management (WRAM) system.
 - Functional requirements are the specific capabilities and features that a technological solution must have to meet the needs of the agency. The



requirements define what the system must do, and the expected outcomes it must produce. The functional requirements relate to business processes and operations, such as user experience, workflow management, and reporting. They are critical to ensuring that the technology solution fully meets the business needs and can perform the tasks efficiently and effectively. The functional requirements are provided as a Minimum Viable Product. These user stories reflect the minimum requirements necessary to meet the intent of the legislative request or agency operational requirements.

 Technical requirements are the characteristics that a technological solution must possess. These requirements relate to performance, security, reliability, usability, and scalability. They define how the system performs, rather than what it does.
 Technical specifications are critical to ensuring that the technology solution can perform its required tasks efficiently, effectively, and reliably and meet the needs of the agency over the long term.

The requirements are split into Mandatory and Enhanced functionality. ESSB 5187 requires OSPI to determine the plan to implement a recruitment solution for substitute teachers only. However, the scope of funding in Fiscal Year 2025 will extend to include recruitment functionality for all education-related jobs, such as classified staff and certificated staff, including substitute teachers.

Key mandatory functionalities are:

- Provide a single Application Platform for substitute teachers to apply for statewide job vacancies across all LEAs for short-term and long-term durations (e.g., one day, the entire school year, etc.).
- Provide a centralized recruiting system for LEAs to attract and recruit substitute teachers effectively.
- Provide and maintain real-time active substitute teacher pools to meet LEAs' substitute teacher needs.
- Provide statewide data to support recruitment efforts.
- Interface with existing LEA recruitment systems and staff pools to share data (e.g., job applications, job posts, substitutes opting into staff pools).

Key enhanced functionalities are:

- Expanded recruitment functionality to include all education-related job types.
- Expanded staff pools for other education-related job types.
- Expanded functional and technical requirements to provide similar functionality for future programs (i.e., matching education career-minded individuals to educationrelated organizations). For example, these programs may include teacher residencies, apprenticeships and teaching internships.
- 4) Build a context diagram, an interface diagram, and process maps to effectively introduce and navigate users and developers to the system and plan and develop the process of a Common Substitute Teacher Application Platform.

- The context diagram shows how each user can access a Common Substitute Teacher Application Platform and how the platform interfaces with LEAs' recruitment systems.
- The interface diagram illustrates how the platform integrates with three systems: the LEAs' recruitment systems, a modern authentication security system, and OSPI managed data systems. The authentication system must be capable of managing numerous user identities, which will be one of the main drivers of ongoing cost. OSPI manages the Education Data System (EDS) which hosts several web applications. OSPI is researching and planning how to incorporate an improved login system to enhance identity and data protection.
- The platform interfaces with LEAs' recruitment systems to transport opening positions and applicant information between LEA and the platform. The platform interfaces with five different databases that OSPI operates to collect and manage data. This interface can increase efficiency in building applications and opening positions as well as maintain consistency and compatibility among the key systems: authentication login system LEAs Recruitment systems, and OSPI data systems.
- The process maps show ten consecutive processes interacting among Job seekers, LEAs, Substitute staff, Teachers, and the platform. These ten consecutive processes are listed below:

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Process 1.0: Job seeker - Create an Account
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Process 2.0: Job seeker - Create a Profile

Process 3.0: Job seeker - Search for Open Positions

Process 4.0: Job seeker - Apply for Job

Process 5.0: Job seeker - View Applications

Process 6.0: LEA - Create LEA Account

Process 7.0: LEA - User Management

Process 8.0: LEA - Manage Job Posting

Process 9.0: LEA - Process Application

Process 10.0: LEA - Staff Pool

5) Develop a Request for Information (RFI) to solicit information from vendors that have or can develop, configure, and deploy a software solution to create a Common Substitute Teacher Application Platform, which can be readily accessed by Washington state substitute teachers searching for vacancies, and districts recruiting substitute teachers. The RFI solicits information regarding existing vendors' solutions, costs, and timelines that directly support OSPI in envisioning the platform and its extension to a statewide WRAM system accessed by all educators, educator candidates, and classified staff. The RFI has been posted at the OSPI's website (Closed Procurement of Fiscal Year 2024 in the Competitive Procurements site), Washington's Electronic Business Solution (WEBS), the statewide procurement notification system, and the Office of Minority and Women's Business Enterprises (OMWBE)'s website to generate interest from small, minority-, women-, and veteran-owned businesses. OSPI is interested in employing Commercial,

Off-the-Shelf (COTS) systems instead of custom application development projects for the following reasons:

- Cost-effectiveness
- Time efficiency
- Reliability and stability
- Scalability
- Vendor support and maintenance
- Regulatory compliance
- Access to advanced features and technologies
- Reduced risk
- 6) Facilitate solution demonstrations to further understand existing vendors' solutions, see how they align with their platform's defined requirements, functionalities, and capabilities, and seek their capacity to incorporate additional functionalities and expand to a statewide WRAM system.

Criteria for Receiving Services and/or Grants

This state appropriation allows us to plan for the development and implementation of a Common Substitute Teacher Application Platform. It does not include grants to distribute to any entity.

Beneficiaries in the 2023-24 School Year

Number of School DistrictsN/ANumber of SchoolsN/ANumber of StudentsN/ANumber of EducatorsN/AOtherN/A

Are Federal or Other Funds Contingent on State Funding? No.

State Funding History

Fiscal Year	Amount Funded	Actual Expenditures
2024	\$150,000	\$135,339

Number of Beneficiaries Per Fiscal Year (e.g. School Districts, Schools, Students, Educators, Other)

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Fiscal Year	Number of Beneficiaries
2024	None

Programmatic Changes Since Inception (If Any)

None.

Program Evaluation or Evaluation of Major Findings

Through these initiatives, six significant findings emerged to guide OSPI to the following steps:

- 1) Developing and implementing the streamlined Substitute Teacher Hiring and Compensation Data Collection [Substitute Teachers Data (ospi.k12.wa.us)], the result shows that 15,956 substitute teachers worked for LEAs during the 2021-22 school year. Out of those, 7,769 (48.7%) substitute teachers were hired for short-term absences, 4978 (31.2%) substitute teachers were hired due to teacher shortages, and 952 (6.0%) substitute teachers were hired for long-term absences. 29 (0.2%) of substitute teachers were hired to cover classroom teachers' Professional Development time. To reduce the burden of data entering for LEAs, the streamlined data collection prepopulates substitute teachers' records that LEAs report to OSPI. However, an excessive number of substitute teachers who have been hired and worked at LEAs are reported through the data collection process. The data collection results indicate that LEAs are experiencing teacher shortages and scrambling to find and hire substitute teachers to keep daily classroom operations. Most LEAs do not have enough substitute teachers who can cover classroom teachers' absences for their professional learning opportunities. Developing a statewide WRAM system in the extended effort of a Common Substitute Teacher Application Platform would support LEAs in increasing the number of substitute teachers who can cover teachers' absences and their professional development opportunities.
- 2) During the stakeholder engagement and listening session, OSPI learned some critical points to obtain LEAs' participation in a statewide WRAM system in the extended effort of a Common Substitute Teacher Application Platform as follows:
 - a) LEAs prefer to use their existing recruitment systems, which can connect to a statewide WRAM system. This approach aims to reduce costs and complexity for LEAs by preventing them from having to learn a new system, enter their recruitment information into two different systems, build interfaces to connect with the statewide WRAM system, or modify their systems to adjust to changes in the statewide WRAM system. However, this approach will increase the ongoing costs at the state level.
 - b) A statewide WRAM system must be able to attract and recruit all substitute teachers, educators, and classified staff in the K–12 system.
 - c) Some LEAs prefer to keep using their local recruitment system and do not need a statewide WRAM system because they successfully recruit K–12 staff, including classroom teachers, substitute teachers, and other staff, in their recruitment system and process.

- d) OSPI or a vendor must provide immediate technical support for all users since job seeking and application submissions occur on weekends and outside of operational hours.
- e) LEAs need support in recruiting and hiring multilingual substitute teachers to cover multilingual educators' absences and provide them with professional learning opportunities to prevent their burnout and constant overwhelming workload.
- 3) Some LEAs and higher education institutions favor several features of the statewide recruitment system in the extended effort of a Common Substitute Teacher Application Platform that OSPI suggested, as follows:
 - a) Prepopulate applicants' credentials, work history, and teaching assignments from their past careers.
 - b) Highlight LEAs' assets and resources, including affinity groups, working conditions, the number of mentors and coaches, professional learning opportunities, retention rates, and salary and compensation levels.
 - c) A user-based data analysis tool is used to select LEAs and schools where job seekers prefer to work.
 - d) Automated notification of open positions and K–12 job market information to educator candidates and other job seekers who opted into a statewide WRAM system.
 - e) Automated notification of applicants and job seekers to LEAs based on a list of job seekers who expressed interest or submitted their applications.
 - f) Early engagement of educator candidates into a statewide WRAM system and forecasting upcoming educator candidates by endorsements in the next 3-4 years.
 - g) Proactive engagement in recruitment based on job seekers.
 - h) More accurate and timely availability of substitute teachers for an absent management system.
- 4) Experienced vendors already have systems that meet around 50-60% of the business and technical requirements necessary to develop, configure, and deploy a software solution to create a Common Substitute Teacher Application Platform and its extension to a statewide WRAM system. Experienced vendors continuously evolve their recruitment system solutions to accommodate absence management system (i.e., substitute teacher hiring and on-call system) and a common application platform. However, coordinating with other vendors' systems and their data collection would take considerable effort and time (3–5 years) to convert to a statewide WRAM system.
- 5) To develop a statewide WRAM system that engages various workforce candidates and communities, the system and technical assistance resources must be available in multiple languages, including sign language.

- 6) OSPI needs to install a modern authentication architecture and system to host a statewide WRAM system that interacts with each LEA's recruitment system and serves a larger population.
- 7) During and after developing the plan and business requirements of a statewide recruitment system in the extended effort of a Common Substitute Teacher Application Platform, OSPI needs several IT-related staff, senior data analysts, and program specialists to provide prompt technical assistance to all users including LEAs, Educational Service Districts (ESDs), existing educators, educator candidates, and classified staff in K–12 systems as well as effectively conduct internal processes, data analyses, and report.

Major Challenges Faced by the Program

There are no barriers or challenges that impact the process of developing a plan or program design. However, some findings merged from stakeholders and experienced vendors indicate that it would take a couple of years for all LEAs to participate in a statewide WRAM system by obtaining buy-ins from LEAs and setting up a system and process to interface between a statewide WRAM system and LEAs' existing recruitment system.

Future Opportunities

Based on significant findings, OSPI envisions developing a Common Substitute Teacher Application Platform as the first step towards a statewide WRAM system to support the entire workforce recruitment and absence management in the K–12 system. To further develop functional and technical requirements and capabilities, OSPI must continuously hold stakeholder engagements and listening sessions to obtain stakeholders' interests, support needs, and preferences in a statewide WRAM system.

For the 2025 fiscal year, Engrossed Substitute Senate Bill (ESSB) 5950 Section 501(1)(k) requires OSPI to "conduct a feasibility study on the costs and timeline for developing a database and tool to identify real-time and future educator workforce shortages." The bill intends to develop further functional and technical requirements for building and designing databases and a more meaningful statewide WRAM system that serves both job seekers and LEAs in an entire process of attracting and recruiting a diverse, inclusive, and highly skilled workforce in K–12 systems, including assisting educator candidates and communities to understand better the K–12 workforce market to fulfill LEAs' educator and staff shortage areas effectively.

OSPI's approach to a statewide WRAM system will prioritize features that address our specific educational landscape. This includes a strong focus on a culturally affirming, diverse, inclusive, and highly skilled K–12 systems workforce, streamlined processes for efficient and effective job search and recruitment, and timely and robust data analytics for job seekers and recruiters.

Other Relevant Information

OSPI would like to acknowledge our appreciation for each of the five vendors who completed the extensive work required to submit a multi-page proposal with the comprehensive requirements of the Common Substitute Teacher Application Platform envisioned to expand to a statewide recruitment and absent management system. OSPI recognizes the effort required to complete and submit a proposal of this magnitude and congratulates the following vendors for their proposal submission:

- EdJobList
- Luitporia
- Power School
- Red Rover
- Sal Militello

OSPI would also like to thank the following statewide agencies and organizations who distributed the stakeholder survey and provided feedback during listening sessions within their networks and via established communication channels:

- Dual Language Steering Committee Members
- Statewide Longitudinal Data System State Support Team
- Washington School Personnel Association

Schools/Districts Receiving Assistance

Click here to see a list of all OSPI grant recipients in the 2024 Fiscal Year.

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