

## 2019-21 Biennial Budget Decision Package

**Agency:** 350 – Supt of Public Instruction

**DP code/title:** Creating Efficiencies through Single Sign-On

**Budget period:** 19-21 Regular Session

**Budget level:** PL

**Agency RecSum text:**

School districts report that one of their biggest technology challenges is providing easy and secure access to multiple applications for students and educators. The Superintendent is requesting \$2,400,000 per biennium to fund Single Sign-On (SSO), a technological solution whose basic function is to enable users to login just once in order to gain entry into several applications. This request will create an SSO architecture for K–12 schools and districts, improving teaching and learning opportunities in an equitable way.

**Fiscal detail: To be completed by budget staff**

Operating Expenditures	FY 2020	FY 2021	FY 2022	FY 2023
Fund 001-1	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000
Total Expenditures	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000
Biennial Totals	\$2,400,000		\$2,400,000	
Staffing	FY 2020	FY 2021	FY 2022	FY 2023
FTEs	0.0	0.0	0.0	0.0
Average Annual	0.0		0.0	
Object of Expenditure	FY 2020	FY 2021	FY 2022	FY 2023
Obj. C	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000

## Package description

K–12 education in Washington is highly decentralized, with over 1.1 million students served by 295 school districts, 11 charter schools, and 8 tribal compact schools, making up more than 2,300 school buildings. The level of technical support in each school varies, and is inadequate in many school districts. One of the major challenges reported by schools is providing easy and secure access to multiple applications for students and educators. This request would provide the funding necessary to create a Single Sign-On (SSO) architecture for K–12 schools, enabling educators and students to login just once in order to gain entry into several applications. This proposal will support improved teaching and learning opportunities in an equitable way, regardless of the size or technological support of each school.

### **What is the problem, opportunity or priority you are addressing with the request?**

Over the past four years, the number of instructional devices available to students has grown dramatically, and many school districts are actively moving toward a one-to-one environment to support student learning. However, the level of technical support in schools has not kept pace with technological developments, leading to a number of challenges in making effective use of the available technology.

One key challenge reported by a number of schools is the ability to provide easy and secure access to multiple applications for students and educators. Single Sign-On (SSO) tools allow users to sign-on (authenticate) just once, and then that sign-on is shared securely with other applications throughout that session. Although some school districts have been able to purchase SSO tools, many have limited or no tools available to manage student and educator accounts. Providing a systematic statewide approach will provide an equitable cost-effective solution for all school districts not currently using SSO tools, while also saving money for districts who are already paying for SSO tools.

This is the first time this request has been proposed.

### **What is your proposed solution?**

Aligned architecture allows interoperability and information sharing between autonomous and decentralized organizations (such as schools and school districts) and information technology systems and applications. In Washington state government, the Department of Enterprise Services (DES) uses this architecture to provide many benefits and cost savings to state agencies, including Single Sign-On (SSO) through Active Directory Federation Services.

SSO technologies authenticate users to multiple applications (either on or off premise) over the life of a single session. This means a user only signs on (authenticates) once and then that sign-on is shared securely with other applications. One key benefit to this system for students is ease of access to networked resources already available at no cost, such as Microsoft Imagine Academy and Minecraft Education, which are utilized in many schools to help provide students with job readiness and employability skills in high-demand fields like science, technology, engineering, and math.

This solution will be phased in over several years and will be made available to every K–12 school in Washington, with the potential to benefit over 1.1 million students and 100,000 educators and staff.

## **What are you purchasing and how does it solve the problem?**

### **Technical solution:**

- Single Sign-On (SSO) tools allow users to streamline authentication to numerous applications, which provides time and cost savings. For example, a new user employed in Human Resources (HR) can be added to the “HR” group for their institution and the SSO service will modify their login menu to add any integrated applications that are configured for access by the HR team.
- Users’ accounts will be automatically connected to any third-party integrated application that supports the Azure protocol. There are currently over 3,000 such applications, including those from Google and most major Learning Management Systems (LMS).

### **Student and educator benefits:**

- The SSO system will be delivered such that student and staff identities and access to systems and services at the district level will be maintained separately from student and staff identities and access to state systems and services.
- Alignment using SSO will ensure every student and staff member will only need one identity to access both local school district and state systems and services.
- This solution will enable mobile, transfer, and graduating students who move from one school to another to continue to receive services with little or no disruption.

## **What alternatives did you explore and why was this option chosen?**

Not funding this proposal will continue inequity in access to Single Sign-On (SSO) tools across our schools, accompanied by inefficient use of instructional tools and devices.

We did explore the approaches other states are using for SSO support, and found nothing already in place that could be mirrored in Washington. Delaware has released a Request for Proposals (RFP) for a statewide SSO system, and we will look to learn from their experience.

### **Assumptions and calculations**

#### **Expansion or alteration of a current program or service**

This is a new request and will not expand or alter a current program or service.

#### **Detailed assumptions and calculations**

##### **Year 1:**

- \$521,000 for consulting services
- Establish centralized directory
- Configure synchronization services
- Create single sign-on blueprints
- \$596,000 for SSO licenses (for 70 districts)

- \$83,000 for contracted technical support staff
- \$1,200,000 total in FY 2020

#### **Years 2–3:**

- \$377,000 for consulting services
- Support roll-out of synchronization service for new districts
- Support expansion of single sign-on for established districts  
\$740,000 for SSO licenses (for 100 new districts)
- \$83,000 for contracted technical support staff
- \$2,400,000 total in FY 2021–22 (\$1,200,000 per year)

#### **Year 4:**

- \$377,000 for consulting services
- Support roll-out of synchronization service for new districts
- Support expansion of single sign-on for established districts and parent access in all districts  
\$740,000 for SSO licenses (for 25 new districts, parent access for all 295 districts)
- \$83,000 for contracted technical support staff  
\$1,200,000 total in FY 2023

#### **Workforce assumptions**

Not applicable.

#### **Strategic and performance outcomes**

##### **Strategic framework**

This request supports the Results Washington K–12 goals related to student success by providing greater efficiency for students, educators, and parents and guardians as they utilize various technological systems to enhance learning and business operations.

##### **Performance outcomes**

This request will provide greater efficiency for students and educators as our school districts continue to leverage technology to enhance learning and perform business operations. This efficiency will also result in cost savings for school districts.

#### **Other collateral connections**

##### **Intergovernmental**

Most school districts will likely support this request since one of their largest self-reported challenges is their ability to provide easy and secure access to multiple applications for students and educators.

##### **Stakeholder response**

Most parents and guardians will likely support this request, as it will address a major challenge for them as well. This request will provide ease of access to data about their student's progress from various school systems.

**Legal or administrative mandates**

Not applicable.

**Changes from current law**

Not applicable.

**State workforce impacts**

Not applicable.

**State facilities impacts**

Not applicable.

**Puget Sound recovery**

Not applicable to OSPI.

**Other supporting materials**

Not applicable.

**Information technology (IT)**

**Information Technology**

Does this DP include funding for any IT-related costs, including hardware, software (including cloud-based services), contracts or IT staff?

☒ No

☐ Yes

Please download the [IT-addendum](#) and follow the directions on the bottom of the addendum to meet requirements for OCIO review. After completing the IT addendum, please upload the document to continue.