Data Governance System for K-12 Data

Policies and Procedures
Data Governance System for K-12 Data

Policies and Procedures

Prepared by
K-12 Data Governance Group

Randy I. Dorn
Superintendent of Public Instruction

Ken Kanikeberg
Chief of Staff

Gil Mendoza
Deputy Superintendent

Robin Munson
Assistant Superintendent
Assessment and Student Information

Peter Tamayo
Chief Information Officer
Information Technology Services

Tim Stensager
Special Assistant for
Performance Management and
Data Governance

November 2015
Table of Contents

Document Version Tracking ................................................................. 1

Foreword: Why create a Data Governance System? ................................. 3

1. Introduction .................................................................................. 5
   1.1 Membership and Duties .............................................................. 5
   1.2 Design Objectives and Intended Audience .................................... 5
   1.3 Document Overview and Organization ........................................ 6
   1.4 Context of K-12 and P-20W Data Collection .................................. 7

2. Prioritizing Data Collection and Reporting: A Key Role of the Data Governance Group .................................................. 8
   2.1 Prioritizing Education Policy and Research Questions ................. 8
   2.2 Determining New Reporting Needs ............................................ 8
   2.3 Eliminating Redundant or Unnecessary Reporting ....................... 8
   2.4 Considering New Data Elements .............................................. 9
   2.5 Protocol for New, Revised, or Elimination of Long Term Data Collections .................................................. 13

3. Ensuring Data Quality: A Key Purpose of a Data Governance System ........ 14
   3.1 Data Quality Guidelines ............................................................ 15
   3.2 OSPI/AESD: Data Quality Initiative ........................................... 16
   3.3 OSPI Data Quality Team (DQT) ................................................ 16

4. Managing Change Systematically: The Process to Achieve Data Quality .... 17
   4.1 OSPI Data Management Committee ......................................... 17
   4.2 Technical Infrastructure ............................................................. 20
   4.3 Data Definitions (Metadata) ...................................................... 21
   4.4 Identifying and Resolving Data Issues ....................................... 23
   4.5 Schedules and Deadlines ........................................................... 23
   4.6 Data Quality Review and Validation .......................................... 24
   4.7 Data Privacy and Security Issues .............................................. 26

5. Including Data Stakeholders: A Critical Component of Success .......... 28

6. Resources for Further Information .................................................. 31

Appendix A: Data Governance and the Legislature ................................. 32

Foundational guidelines, principles and standards prepared for this document were derived, in part, from:
## Document Version Tracking

<table>
<thead>
<tr>
<th>Version</th>
<th>Authors</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Robin Munson, Allen Miedema &amp; Gregg Lobdell – Sub-committee of the Data Governance Group and original drafters.</td>
<td>December 16, 2009</td>
<td>Adopted unanimously with 2 amendments included in this version by the K-12 Data Governance Group.</td>
</tr>
<tr>
<td>1.1</td>
<td>Bill Huennekens</td>
<td>November 2010</td>
<td>Data Governance Committee changed to Data Governance Group throughout the document to be consistent with ESSB 2261 Sec. 203(1) Clarifying edits made to the Protocol for considering new or revised data collections. Protocol for significant changes to existing data definitions including: data dictionaries, business rules and data granularity</td>
</tr>
<tr>
<td>1.2</td>
<td>Bill Huennekens</td>
<td>January 2011</td>
<td>Clarification to long term collections made. Scope of the Data Management Committee added to. Question added for consideration of new data elements. Correction of Flagged Data added to the General Principals for Data Review and Validation section Updated Data Management Committee Membership</td>
</tr>
<tr>
<td>Version</td>
<td>Author(s)</td>
<td>Date</td>
<td>Details</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td>2.0</td>
<td>Bill Huennekens</td>
<td>March 15, 2011</td>
<td>Adopted in the Data Governance Group with minor typographical edits</td>
</tr>
<tr>
<td>3.0</td>
<td>Tim Stensager and a subcommittee of the K-12 Data Governance Group</td>
<td>November 2015</td>
<td>Updated for current governance status and practice</td>
</tr>
</tbody>
</table>
Foreword: Why create a Data Governance System?

The essential notion behind establishing a data governance system is that decisions are only as good as the data on which they are based. As OPSI transforms data into information to facilitate wise decision making, users and managers of K-12 data need a clear understanding of data definitions, data ownership and authority, accountability, security, and reporting needs and requirements, as well as the processes and timelines around each.

To address these conditions and assist in the design and implementation of a K-12 education data improvement system, the 2009 Washington State Legislature created the K-12 Data Governance Group in RCW 28A.300.507. Among the reasons for establishing a data governance system were:

- In the past, OSPI’s data systems focused on meeting compliance requirements. Being able to use data for policy development and research was not an explicit purpose.
- Individual programs within OSPI (e.g., Apportionment, Assessment, Bilingual and Migrant Education, Child Nutrition, Special Education) largely constructed their own data rules, data sets, processes and procedures that served their specific needs. These groups worked in “silos,” with little coordination across groups to maximize data congruency and minimize the data reporting burden on districts.
- Some of the results of these silos were inconsistent data rules, lack of clear data ownership, conflicting, unclear or non-existent business processes around data collection, management and reporting, questionable data quality, frustrated data consumers, lack of accountability for data, spotty communication between agencies as well as between OSPI and districts, and turf issues within the groups that manage similar data sets.
- Available resources at the state, district, and local levels were not sufficient to develop and maintain robust data collection/reporting systems or to hire the staff necessary to collect, report, and analyze additional data.

As Washington has addressed these issues and continues to develop and use its K-12 longitudinal data system for decision making, it is imperative to stay focused on efforts make data more transparent and of highest quality possible. A well-designed data governance system is essential to that effort.

An effective data governance strategy clearly defines the roles, responsibilities, authority and associated activities of individuals and groups that come in contact with K-12 data. Data governance objectives include establishing:

- Clear, high-level executive sponsorship of data governance. Accountability for successful data management should be integrated throughout all levels of the agency.
- Unambiguous policies and processes authorizing the collection, management, and dissemination of the data.
- Protocols that respect a distinction between the ability to collect and/or provide data and the authority to collect and/or provide data.
- Clear ownership and stewardship of each data element being collected. This requires:
  - Establishing data owners who are accountable for the creation, definition, privacy,
security, and integrity of data assets. Data ownership needs to be understood, respected and communicated to the larger user community. Note that these owners reside within business groups, not Information Technology (IT). IT establishes support systems to aid in the management and use of data; they don’t own the data or determine the way data will be used.

- Establishing data stewards within each program or business group to have day-to-day responsibility for program data collection and use. Data Steward isn’t a job title or a new position; it is one of the responsibilities of a person’s existing position. It is essential that these stewards be respected, influential, and subject-matter experts within the organization.

- Data access protocols that legitimize the need for access to data sets but protect confidentiality and security data. Data access protocols must articulate needed authorization of data use.

- Decision-making processes as well as timelines for making modifications to data definitions, collections, delivery, etc. Changes to these must be feasible, predictable, and well communicated to the user community.

Ultimately, the objective of data governance is to develop a “culture of data quality” that integrates data use into the everyday aspects of the organization, ensures that proper data use and management are an integral part of the organization’s mission and success and, additionally, invests the necessary time and resources into making these efforts successful.
1. Introduction

1.1 Membership and Duties

The 2009 legislation established the members of the K-12 Data Governance Group to include representatives of the:

- Education and Research Data Center (ERDC)
- Office of Superintendent of Public Instruction (OSPI)
- Legislative Evaluation and Accountability Program (LEAP) Committee
- Professional Educator Standards Board (PESB)
- State Board of Education (SBE)
- School district staff, including IT staff
- Additional entities with expertise in education may be included.

The facilitation and coordination of the group is the responsibility of the OSPI Director of Data Governance.

The duties of the K-12 Data Governance Group are to:

- Identify critical research and policy questions
- Identify reports and other information in addition to pre-defined needs
- Create a comprehensive requirements document detailing information and technical capacity school districts and the state need to meet the legislature’s expectations
- Conduct a gap analysis that analyzes the current status of the system as compared to the legislature’s intent
- Focus on financial and cost data necessary to support K-12 financial models and funding formulas
- Define the operating rules and governance structure for K-12 data collections including:
  - Defining and maintaining standards for privacy and confidentiality
  - Setting data collection priorities
  - Defining and updating a standard data dictionary
  - Ensuring data compliance with the data dictionary
  - Ensuring data accuracy
  - Establishing minimum standards for school student, financial, and teacher data systems.


1.2 Design Objectives and Intended Audience

ESHB 2261 established a vision for a comprehensive K-12 data education data improvement system that includes financial, student, and educator data. According to the legislation, the
objectives of the data system are to:

- monitor student progress;
- have information on the quality of the educator workforce;
- monitor and analyze the costs of programs;
- provide for financial integrity and accountability; and
- have the capability to link across these various data components by student, by class, by teacher, by school, by district, and statewide.

The intended audiences for reports from the data system include teachers, parents, superintendents, school boards, legislature, OSPI, and the public. These design objectives and the intended audiences frame the “context” for the system.

1.3 Document Overview and Organization

Data collected, stored, processed and disseminated by OSPI are agency resources that must be managed from an enterprise perspective. Data governance establishes the data management policies and priorities for all agency data. The data governance system described in this manual tackles the issues of K-12 data governance through four major actions:

- **Prioritizing Data Collection and Reporting: A Key Role of the Data Governance Group**
  Prioritizing what data to collect is a key role of the K-12 Data Governance Group. Section 2 of this manual will describe the data governance group’s role in helping to prioritize the research and policy questions that OSPI’s data collection and reporting need to address and in filtering the myriad of ideas that people have for data OSPI should collect.

- **Ensuring Data Quality: A Key Purpose of a Data Governance System**
  The purpose of Washington’s data governance system is to improve the quality and efficiency of the data collected, analyzed and reported by OSPI. Education reform is an ongoing process in the state and across the country. Education reform requires accurate, reliable, useful, high-quality education data. Section 3 of the manual will describe issues related to data quality, and the data governance system’s strategies for addressing them.

- **Managing Change Systematically: The Process to Achieve Data Quality**
  The process to achieve quality data and quality reporting of Washington’s education data is a coordinated partnership of the K-12 Data Governance Group and the Data Management Committee. Section 4 of the manual will frame the mechanisms by which changes to OSPI’s data collection and reporting requirements will be determined and communicated. The data management components include technical infrastructures, defining data elements, schedules and timelines, identifying and resolving issues and privacy and data security.

- **Including Data Stakeholders: A Critical Component of Success**
  There are many stakeholders interested in the education data collected and reported by OSPI. Section 5 of this manual describes various stakeholders and how the data
governance process will ensure their voices are heard.

1.4 Context of K-12 and P-20W Data Collection

This manual and OSPI’s K-12 Data Governance Group focus on the K-12 data collected and longitudinally maintained and reported by OSPI. This focus is within the context of Washington’s P-20W (pre-school to post-secondary and workforce) longitudinal data system maintained by the ERDC. The legislature established the state’s P-20W data system in RCW 43.41.400, directing the Office of Financial Management (OFM) to develop the ERDC. The legislature directed all state education agencies to share data with the ERDC. With OSPI, the Department of Early Learning, the public four-year higher education institutions, the Higher Education Coordinating Board, Workforce Training and Education Coordinating Board, State Board for Community and Technical Colleges, Employment Security Department, Professional Educator Standards Board, and State Board of Education, ERDC will assemble data to link individual students’ information from pre-school through higher education and the workforce. One focus of the ERDC’s research analysis will be on the transitions between the various levels of education, for example ‘What facilitates a smooth transition from pre-school to kindergarten?’ or ‘What course taking patterns best prepare students for success in post-secondary or the workforce?’

By virtue of the legislature designating the ERDC an authorized representative of OSPI, OSPI is able to share all K-12 identifiable individual records with ERDC in compliance with the Family Education Right to Privacy Act (FERPA). As part of OSPI, ERDC is subject to FERPA constraints and cannot re-disclose confidential information. Like OSPI does for K-12 data, ERDC develops de-identified research data sets for sharing their data with other state agencies and “outside” researchers. ERDC data sets include data from pre-school through college and the workforce.

The ERDC is a collaborative effort between the various education agencies, OFM, and the Legislative Evaluation and Accountability Program (LEAP). All partners in this effort will collaborate to identify the important P-20W research questions that cross or integrate these sectors, though each partner also conducts its own research and policy analyses.

While OSPI’s data system focus is on K-12 data, it has significant interest in the issues related to early childhood and to post-high school outcomes. The K-12 Data Governance Group will almost certainly be including the “P”, “20”, and “W” in their prioritized research and policy questions.
2. Prioritizing Data Collection and Reporting: A Key Role of the Data Governance Group

Four key responsibilities of the K-12 Data Governance Group are to prioritize education policy and research questions, advise and provide vision as new reporting needs and ideas are determined, eliminate redundant reporting requirements, and evaluate the benefits and costs of adding or modifying data elements to what is collected from schools and/or districts. These efforts are key to the success of a cohesive, coordinated data system that is functional, feasible and informative. Without these priorities, the state’s data collection activities will be fragmented, uncoordinated, duplicative and overwhelming to both districts and the state.

2.1 Prioritizing Education Policy and Research Questions

With the vast array of data contained in the K-12 and P-20W longitudinal data systems, the list of possible education policy questions and research questions that a successful system could address is nearly endless. One of the major responsibilities of the K-12 Data Governance Group (specific legislative mandates notwithstanding) is to continually prioritize the questions that should be addressed with currently available data, as well as to identify other questions that may require additional data. Primary focus is to ensure data is available to analyze the performance indicators of OSPI goals for student success, http://k12.wa.us/AboutUs/default.aspx. With the inclusive membership of the group, prioritization is made with broad representation of many agencies and departments within the longitudinal data system.

At least biennially (every other year), in the summer/fall, the group should review and, if necessary, update the prioritized list of education policy questions and research questions (Appendix B, page 3-5), http://k12.wa.us/K12DataGovernance/pubdocs/K-12EducationDataGovernanceReport-Appendix.pdf.

2.2 Determining New Reporting Needs

Even the very best K-12 longitudinal data system will be of little use if it does not help address the prioritized education policy and research questions, as well as classroom, school and district needs for information held by the state. To address these questions, user-friendly reports, data dashboards, and other tools are needed. The K-12 Data Governance Group has a critical responsibility to identify user needs and consider new formats and ways of presenting information. The group will seek input from stakeholders, including classroom teachers and support staff, school and district administrators, educational service districts (ESDs), parents, legislators, and researchers. The group will also seek examples of best practice for reporting data from other states and other “industries.” The group will make recommendations to OSPI for new reports and reporting tools.

2.3 Eliminating Redundant or Unnecessary Reporting

Data are requested of districts in a variety of reports and reporting formats. Sometimes the
data requested in two collections varies only slightly in format or timing or content. Further, accountability policies change and certain data reporting and collections may not be necessary. A key responsibility for the K-12 Data Governance Group is to identify and eliminate redundant reporting requirements. On a continual basis, OSPI staff will be watchful for redundant data collections and report to the Director of Data Governance so that the protocol to eliminate a requirement can be initiated. Every effort will be made to never ask districts to report the same thing to OSPI in two different ways. If OSPI, for instance, collects individual student records for a particular program throughout the year, OSPI should be able to derive the annual summary data for that program without needing the district to also submit a summary report.

2.4 Considering New Data Elements

One of the primary responsibilities of the K-12 Data Governance Group is to assist OSPI in determining the data to be collected and reported. The group provides insight and requests action on data collections to better understand achievement of OSPI goals as measured by the performance indicators. The group must also act upon new data elements that are specified in legislation.

For each additional data element to be collected at the state level, there are implications and costs to the entire system from the classroom to OSPI. Districts are challenged by the scarcity of resources available for data collection and reporting. With accepted prerogative of local control and therefore, significant variability across 295 districts, implementing a new data collection is not a simple task. Providing adequate time to complete work such as sufficiently specifying the new data collection, making modifications to information systems and/or business practices, and clearly communicating the rationale for the new requirement(s) to all stakeholders are all critical to the success of implementing a new or modified data collection. Furthermore, it is imperative that the broad range of stakeholders (described in Section 5) are involved in the analysis of the pros and cons of the proposed data collection modification.

Several key issues should be examined by the K-12 Data Governance Group when considering additional data collections. These include:

a. At what level (federal, state, district, school, or classroom) is it appropriate to have a new data element?
b. How will the data element influence practice, policy, or research?
c. Is collecting this data element the most efficient way to influence practice policy, or research?
d. Can the data element be clearly and commonly defined?
e. Is the data already collected/maintained by most districts or is similar data that might meet the need commonly collected?
f. Will the data have a high degree of quality if collected?
g. What is the cost (time, money, resources) associated with this new collection from the classroom to the Office of Superintendent of Public Instruction?
h. Does the expected cost/benefit of this new collection justify putting it in place?
i. Is there an existing data element or combination of data elements that can answer the same question that the proposed new data element is meant to address?
a. At what level is it appropriate to maintain a new data element?
Not all data produced, collected, or maintained in a classroom should be reported to OSPI. Just as the U.S. Department of Education only needs a subset of the data OSPI collects from districts, so too should OSPI only need a subset of what districts collect from schools and schools from classrooms. Below is a colorful mockup illustrating how some key data elements generated in a classroom get reported at each level, ultimately influencing practice, federal education policy, and research, while other elements don’t need to be reported to the next higher level.

<table>
<thead>
<tr>
<th>Federal</th>
<th>Enrollment Counts, Money spent on major programs, Percent meeting standard on tests by demographic subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Enrollment dates, Demographics, Courses taken, Apportionment Allocations and Expenditures, Program participation, Semester grades, Statewide test scores, Teacher Qualifications</td>
</tr>
<tr>
<td>District</td>
<td>Enrollment dates, Demographics, Courses taken, Program participation schedule, Semester grades, District’s formative assessment, Statewide test scores, Teacher qualifications, Apportionment Allocations and Expenditures, Bus Pickup Schedule, Field trip authorization</td>
</tr>
<tr>
<td>School</td>
<td>Daily Attendance, Enrollment dates, Demographics, Courses taken, Program participation schedule, Classroom-based assessments, Semester grades, District’s formative assessment, Statewide test scores, Locker combinations, Bus Pickup Schedule, Field trip authorization</td>
</tr>
<tr>
<td>Classroom</td>
<td>Daily Attendance, Enrollment dates, Demographics, Courses taken, Program participation schedule and services, Daily assignments, Classroom-based assessments, Semester grades, District’s formative assessment, Statewide test scores, Locker combinations, Bus Pickup Schedule, Mom’s availability for volunteering, Field trip authorization, Favorite after-school activity</td>
</tr>
</tbody>
</table>

b. How will the data element influence practice, policy, or research?
The need to collect a data element is dependent on the influence that data element can have on practice, policy, or research. This determination interplays with the question above regarding the appropriate level for maintaining the data element, but also is subject to the extent to which the actual data outcomes will lead to a change of or continuation of practice or policy. For instance, collecting course schedule information for high school students can describe course-taking patterns, and when compared to graduation status and post-high school outcomes can influence both policy decisions on graduation requirements and counseling practices in schools.

c. Is collecting this data element the most efficient way to influence practice, policy, or research?
Some data elements need to be regularly collected at an individual student or teacher level to address the prioritized education policy and research questions, and/or to assist with classroom, school or district practice, but collecting others may not have efficacy. Sometimes a one-time survey or poll or data collection sampling is all that is needed to influence practice,
d. Can the data element be clearly and commonly defined?
The first key to ensuring data quality is to have a precise and clear definition of each data element. A clear definition is critical from beginning to end: those collecting and submitting the data must have a common and exact understanding of what is being requested; those analyzing the data need to share the same definition so they know how the data can be analyzed and reported, particularly as they are combined with other data; those utilizing the data (various audiences) must also share the same definitions so they can appropriately interpret the data.

Common Education Data Standards (CEDS) are intended to streamline the exchange, comparison, and understanding of data within and across P-20W institutions and sectors. The CEDS project is a national collaborative effort to develop voluntary, common data standards for a key set of education data elements, https://ceds.ed.gov/whatIsCEDS.aspx.

In the spring of 2012, Washington’s education agencies at the state level committed to uploading their data dictionaries and mapping their data elements to CEDS, http://www.k12.wa.us/k12datagovernance/MeetingsArchive/2012Sept/CEDSAgencyProtocol.pdf.

When undertaking project work with data systems, any work that redefines or combines data elements shall attempt to align with CEDS data elements as closely as practicable. In exploring the collection of any new data elements, every practicable effort shall be made to ensure that the definition of new elements aligns with CEDS.

e. Is the data already collected/maintained by most districts or is similar data that can meet the need commonly collected?
The wide variability in size and resources in Washington’s 295 school districts must be considered when determining if school districts can provide the data desired. Not only do districts need and use a variety of information systems, but more important, they also have a variety of district-specific information needs. Therefore, a data element that may be commonly collected and stored by every district with more than 10,000 students may not be collected by most smaller districts.

f. Will the data have a high degree of quality if collected?
There is little point in going through the time and expense of collecting a new data element if that data cannot be used reliably for the purpose intended. Some of the questions to be considered here are: is the data available for the student, family or other source to provide when asked; is the source of the data likely to provide the information willingly, accurately and timely enough so the work with the data can be performed; do resources exist for the collection of the data at the level of quality required; and once collected, can the quality of the data be maintained at an acceptable level with the resources available?

Depending on the purpose for collecting the data, the associated quality necessary to use the information will vary from element to element. These thresholds must be considered and
assessed for reasonableness before the energy and expense associated with the collection is undertaken.

g. **What is the cost (time, money, resources) associated with collection of the new data from the classroom to Office of Superintendent of Public Instruction?**

Any new or modified data collection is going to have some associated cost. This might be in terms of actual dollars spent (e.g., new registration forms need to be created to accommodate a new data element). Or, it could be just in terms of staff time (e.g., the new elements associated with the new data collection have to be keyed into the District’s information system). It is more likely that costs of collection are a combination of different types. Understanding the costs all the way from the initial data collections at schools to the offices at OSPI where the associated analysis on the data will be conducted is critical to determining the value of the collection.

h. **Does the expected cost/benefit of this new collection justify putting it in place?**

While it is critical to determine the cost of a new or modified data collection, it is also important to determine the related benefit. Once this has been determined, cost/benefit analysis can be conducted to determine if there is enough value in the collection to justify any associated cost. This is not solely based on a determination of whether a collection is important. One outcome here could be that, while the information collected would be valuable, the cost to the entire system, starting at the point of inception, is more than any benefit that would be gained. Similarly, it could be determined that the cost is not something the State is willing to incur at this point itself or ask others to incur and the collection would be deferred until more resources are available. Or, it could be that that analysis shows that the necessary resources to be expended for the collection are within reason, given the value of the information that collection would yield.

i. **Is there an existing data element or combination of data elements that can answer the same question that the proposed new data element is meant to address?**

It may be the case that an existing data element or combination of data elements can be used to answer the questions the proposed new data element is meant to address. This question should be explored with members of the Data Management Committee and representatives of the districts.

Further, it may be the case that the alteration of an existing definition of an existing data element will enable the question to be answered without the collection of a new data element. If this is a possibility the protocol for changes to existing data definition in section 4.3 should be followed.
2.5 Protocol for New, Revised, or Elimination of Long Term Data Collections

When new data or revised data collections are proposed to be collected, or a data collection is proposed to be eliminated, a protocol shall be followed to evaluate the value and feasibility of doing so.

1. **Request Intake.** Proposer submits a request to the Director of Data Governance. (The proposer could be from a variety of organizations or programs including the legislature or U.S. Department of Education.)

2. **Redundancy Check.** Director of Data Governance shall work with Data Owners to determine if the desired data are already collected or if the data collection proposed for elimination is either no longer needed or can be subsumed by another collection.
   - Where possible and appropriate, the K-12 Data Governance Group should be made aware of these activities.

3. **Feasibility Study.** If it is determined the data is not already collected, Data Owner(s) shall perform and document a feasibility study about the proposed collection. This feasibility study may include gathering input from the Data Management Committee and stakeholders such as districts.
   - Input from stakeholders is recommended to include representative districts to assess the feasibility (2 large, 2 med large, 2 med small, 2 small and 2 tiny).
   - The study should include a cost benefit analysis and address issues related to cost (staff and vendor-related), timing, impact on local business practices, local value of new or revised collection and any impacts from proposed eliminated data collections.
   - For any proposed data collection eliminations, stakeholders should include any current users of reports or data sets dependent on the data collection proposed to be eliminated.

4. **Approval.** The feasibility study is presented to the K-12 Data Governance Group. Upon approval, the Director of Data Governance communicates the disposition of the request and any further required action to all parties.

5. **Implementation.** The Data Owner(s) are tasked with overseeing the implementation of the solution and include the participation of stakeholders from representative districts (2 large, 2 med large, 2 med small, 2 small and 2 tiny).
3. **Ensuring Data Quality: A Key Purpose of a Data Governance System**

In its September 2004 study on “Improvements Needed in Education’s Process for Tracking States’ Implementation of Key Provisions,” the Government Accountability Office (GAO) found that “more than half of the state and school district officials we interviewed reported being hampered by poor and unreliable student data.” (p. 3)


Among the key data quality problems associated with education data reporting are:

- **Poor Communication.** Critical information concerning data collections are inadequately communicated throughout the community of stakeholders. This leads to misunderstandings concerning what is to be collected, how it should be reported, when the collection is needed, what the purpose of the collection is, etc. Taking all of these into consideration, it is easy to see how lack of a good and well-executed communication plan can lead to most, if not all, of the problems mentioned above.

- **Lack of Effective Professional Development.** Recognizing that data users, particularly at the local level, may have very limited experience with data management, it is imperative that effective training be provided to users. Just as students aren’t expected to learn mathematics by simply presenting them with a set of rules and axioms, data users should not be expected to produce quality data as a result of being presented a data manual and collection schedule. Similarly, if data users have not been trained how to analyze and use the data it is not reasonable to expect that they will facilitate the desired change in student outcomes.

- **Non-standardized data definitions.** Various data providers use different definitions for the same elements. When non-comparable data are aggregated, inappropriate and inaccurate results are produced.

- **Unavailability of data.** Data required do not exist or are not readily accessible. In some cases, data providers may take an approach of “just fill something in” to satisfy distant data collectors, thus creating errors.

- **Data entry errors.** Inaccurate data are entered into a data collection instrument. Errors in reporting information can occur at any point in the process – from the student’s assessment answer sheet to the state’s report to the Federal government.

- **System non-interoperability.** Data collected in one system are not electronically transmittable to other systems. Re-entering the same data in multiple systems consumes resources and increases the potential for data entry errors.

- **Inconsistent item response.** Not all data providers report the same data elements.
Idiosyncratic reporting of different types of information from different sources creates gaps and errors in macro-level data aggregation.

- **Inconsistency over time.** The same data element is calculated, defined, and/or reported differently from year to year. Longitudinal inconsistency creates the potential for inaccurate analysis of trends over time.

- **Lack of timeliness.** Data are reported too late. Late reporting can jeopardize the completeness of macro-level reporting and the thoroughness of review. Tight deadlines, for example, can lead to late reporting, poor data quality, and delayed implementation of program improvement efforts. Rushed reporting can often lead to poor data quality, while reporting that is delayed months or even years can often limit data utility.

### 3.1 Data Quality Guidelines

Nothing is more critical to the success of OSPI’s longitudinal data systems than ensuring data quality which is a key role for the K-12 Data Governance Group. The U.S. Office of Management and Budget (OMB) developed a set of Federal Information Quality Guidelines which established a basic definition of data quality that includes three overarching elements: utility, objectivity, and integrity. OMB also directed each Federal agency to develop its own Department-specific standards. The U.S. Department of Education last updated its Information Quality Guidelines in October 2005.

The U.S. Department of Education’s Information Quality Guidelines indicate data quality requires:

- Using clearly defined, broadly understood data definitions;
- Using clearly documented, well thought-out methodologies for data collection;
- Using reliable data sources;
- Processing data in a manner to ensure that data are “cleaned” and edited;
- Properly documenting and storing data collections and results;
- Producing data that can be reproduced or replicated;
- Conducting data collections and releasing data reports in a timely manner; and
- Establishing procedures to correct any identified errors.

The remainder of this manual describes the organizational structure and key principles OSPI will follow to meet the requirements stated above. The structure includes an OSPI coordinated
service agreement focused on data quality with the Associated Educational Service Districts (AESD) and an operating framework implemented by the OSPI Data Quality Team (DQT). It is the responsibility of the K-12 Data Governance Group to provide guidance and support while monitoring these activities.

3.2 OSPI/AESD: Data Quality Initiative

The purpose of the coordinated service agreement between OSPI and the AESD is to improve data quality by building capacity among district staff to make data-informed decisions and to bring value to OSPI Performance Indicator analytics data by improving data accuracy, completeness, timeliness and relevance appropriate for a specific use(s).

The OSPI/AESD Data Quality objectives are to:

- Develop a collaborative partnership between OSPI and the ESDs to encourage effective data practices throughout the education system.
- Enact an integrated model of data coaching that identifies strategies to increase data use at the classroom, school, and school district level.
- Explore system needs and challenges for data generation, collection, and display to improve data quality.

3.3 OSPI Data Quality Team (DQT)

The OSPI DQT is responsible for improving data quality in support of data-informed professional learning strategies. The DQT will develop and implement a coordinated operating framework that identifies data improvement opportunities, priorities, roles, strategies, and timeframes, so data quality improvements occur in the areas of most impact for OSPI goals and with the most efficiency and effectiveness. Through these data improvements, the goal is to increase the trust in the data system for decision making.

Membership:

- Executive Sponsors: Assistant Superintendent of Assessment and Student Information, Chief Information Officer
- Program Sponsors: Directors of Data Governance, Student Information, and IT Application Development
- Core Team: Data Governance Program Manager (lead), IT Enterprise Architect, IT Application Development Supervisor, IT Data Quality Developer, Student Information Coordinator, Student Information Data Analyst, IT Customer Support Supervisor, IT EdFacts Process Administrator
- Collaborative Partners: K-12 Data Governance Group, OSPI Data Management Committee, AESD Data Quality Network, CEDARS Stakeholders, Student Information System Vendors, ERDC
4. Managing Change Systematically: The Process to Achieve Data Quality

The process to achieve quality data and quality reporting of Washington’s education data is a coordinated effort and responsibility of various groups. Together the goal is to establish what the National Forum on Education Statistics calls “a culture of high quality data.” That culture should pervade all levels of the data organization – from schools to districts to OSPI.

K-12 Data Governance Group (See Sections 1 and 2)
   OSPI/AESD Data Quality Initiative (See Section 3.1)
   OSPI Data Quality Team (See Section 3.2)
   OSPI Data Management Committee
      Data Owners
      Data Stewards
      Information Technology
      Data Governance
      ERDC
   OSPI Data Leadership Team

4.1 OSPI Data Management Committee

The main responsibility for managing OSPI’s data collection and reporting is the OSPI Data Management Committee. This group is comprised of the data owners and data stewards from all programs within the agency, the Chief Information Officer, and other representatives from Information Technology, Data Governance, and the ERDC. The facilitation and coordination of the Data Management Committee is the responsibility of the OSPI Director of Data Governance.

Responsibilities and Scope

- Establish standard processes, policies, training and associated communication plans for coordinated data collection, management, dissemination, and use;
- Serve as a source of knowledge and advocacy for data management and initiatives;
- Approve all new OSPI long term data collections from districts;
- Develop a data collection calendar;
- Approve all new data applications;
- Identify, track, and resolve critical data issues;
- Communicate critical data issues that cannot be solved internally to individuals that can influence change;
- Review and advise on proposed one-time data collections;
- Ensure data stewards stay current with federal reporting requirements and communicate impacts to appropriate parties.

Leadership

As mentioned, the activities of the Data Management Committee are guided by the Director of Data Governance. This position, new to OSPI in 2009, intentionally is not an IT position but rather has broader policy-based experience and authority. The director is responsible for facilitating the overall data governance system and particularly for coordinating the data-
related work of the various OSPI program areas through the Data Management Committee. The director meets regularly with the OSPI Data Leadership Team (data owners, the Chief Information Officer, and other key representatives of IT and Data Governance) to facilitate discussions around:

- Planning at a strategic level
- Discussing national issues
- Sponsoring staff at national meetings
- Discussing and resolving key issues and risks
- Monitoring progress the committee is making towards its goals

**Goals**

1. Ensure data used for decision-making purposes is high quality so as to encourage the best decisions possible.
2. Reduce the data collection burden on school districts so as to improve consistency in data quality and to reduce costs.
3. Eliminate redundancy in data collection;
4. Improve the agency’s data analysis capabilities so as to ensure consistent, high-quality, and timely information that creates more knowledgeable stakeholders.
5. Improve the agency’s reporting capabilities so as to improve access to state-wide information and knowledge.
6. Increase use of data to make program and policy decisions;
7. Improve data reporting capability and timeliness of reporting.

**Objectives**

a. Identify the owner of every data element;
b. Define all data elements;
c. Document all data processes;
d. Standardize data processes from year to year;
e. Reduce manual manipulation of data;
f. Articulate roles of authority for collecting, accessing and reporting data;
g. Identify the official source of data for all data reporting;
h. Eliminate redundant data collections;
i. Allow districts to review their data before it is externally reported;
j. Communicate all data decisions/changes to districts;
k. Increase the use of student-level data external reporting;
l. Establish data access protocols and procedures.

**Data Owner and Data Steward Roles**

The Data Management Committee is composed of the four data owners (Student, Teacher, Financial, and Directory), data stewards that represent programs and specific topics within these four major data sections, as well as several other representatives from OSPI Information Technology Services, OSPI Data Governance, and the ERDC.

Each of the data owners and data stewards plays a key role on the Data Management Committee. Some data owners and data stewards have established advisory committees that
assist them with their data definitions and processes. Advisory committee input and decisions will be shared with the Data Management Committee.

**Data Owner Responsibilities**
- Facilitate the collaboration across the data stewards
- Ensure data collection and reporting are properly authorized
- Serve on the Data Management Committee and represent the Committee on the Data Governance Group
- Be the first point of contact related to the various program areas for data issues
- Collaborate with the data stewards to resolve or inform on data issues

**Data Steward Responsibilities**
- Promote and model appropriate uses of data to inform program and policy decision making;
- Regularly evaluate data quality and enforce data quality standards;
- Identify and resolve data quality issues (integrity, timeliness, accuracy, completeness);
- Determine and use the definitive source for each data element;
- Verify that data elements are recorded and kept current in the data dictionary;
- Identify opportunities to share and re-use data;
- Identify and recommend solutions for data discrepancies and issues, escalating data issues to the Data Management Committee where appropriate;
- Champion data projects to stay within scope and meet deadlines;
- Monitor federal and state legislation that will affect OSPI data and inform appropriate staff of the impact for the agency;
- Identify new data that need to be collected, including the purpose, source, definitions, and business rules;
- Coordinate communications with districts regarding changes to data collection, calculation, and reporting;
- Maintain awareness of and compliance with FERPA and other laws protecting privacy;
- Provide data (in compliance with data confidentiality policy) to internal and external requesters and for official agency reports;
- EDEN/EdFacts responsibilities:
  - Inform EdFacts Process Administrator of annual submission plan for all applicable files;
  - Keep current on file specifications;
  - Develop plan to begin submitting files that cannot be submitted currently;
  - Create files in compliance with file specification;
  - Submit files to EdFacts Process Administrator by deadline in submission plan;
  - Document data source, elements, and any calculations or transformations performed to create EDEN file;
- Attend Data Management Committee meetings;
- Support increased data use and data-informed decision making.
4.2 Technical Infrastructure

Adequate technical infrastructures are required within districts and within OSPI to ensure smooth collection, transmission, storage and reporting of education data. The following general principles for technical infrastructure are adopted by the K-12 Data Governance Group.

General Principles for Technical Infrastructure

- **Automation:** All data collection and reporting systems should be automated, and should include automated system backups. Having an adequate technical infrastructure in place is one key element in producing quality data. At a minimum, data collection, processing, and reporting should be automated and transmittable in an electronic format. Even in small districts and schools, pen- and-paper systems for managing data will be overwhelmed by the emphasis that accountability systems place on accurate, comprehensive, and timely data reporting.

- **Interoperability:** Districts should use hardware and software that are interoperable, or compatible, with systems within their district and with OSPI systems. Minimal “translation” or re-entry of data should be required for state reporting as data are transmitted from districts to the state. OSPI is responsible for creating opportunities for districts to interoperate with OSPI systems.

- **Connectivity:** All schools and districts should be electronically connected through a network or a common web portal through which all data collection and reporting occurs.

- **Capacity:** Infrastructure established to link interoperable data systems – whether web portals or networks – should have sufficient capacity to accommodate, at a minimum, collection and reporting of all required data elements by all users at specific times. Infrastructure should also have sufficient capacity to include redundant (backup) data storage.

- **Utility:** The data systems should be structured around the needs of its users.
  - Processes for gaining access, entering data, generating reports, and transmitting information should be transparent and cause the least possible burden to users.

- **Reliability:** Before they are deemed ready for operation, all data systems should be fully tested. System performance should be monitored on a continuing basis and an IT contingency plan should be in place to ensure the continuity of the system in the case of unforeseen disruptions (such as natural disasters).

Technical Focus: Building Infrastructure

Technical specifications that should be built into our infrastructure to produce quality data include:
• Descriptions for data elements, record format, and data structure design
• Actual collection instruments and data sources to be used
• Time period for collection and reporting deadlines
• Data conversion and processing
• Storage requirements
• Preferred formats for output reports
• Data security and confidentiality checks
• Controls on the accuracy and completeness of each input, process and output (audit trails, control totals, status flags, and system interrupt/restart procedures)
• Method for evaluating how well the system is performing, including percentage of forms verified and accuracy rates for coding and key entry

(Adapted from National Center for Education Statistics Cooperative Education Data Collection and Reporting Standards Project Task Force, Standards for Education Data Collection and Reporting, 4-4, 4-5, 4-22.)

4.3 Data Definitions (Metadata)

A fundamental piece of any data quality infrastructure is a standardized set of precise data definitions that all providers use. A consistent mechanism to capture and share metadata, or data about data, will greatly improve communication, standardization, use, and reuse of data. The following general principles for data definitions are adopted by the K-12 Data Governance Group in conjunction with the Common Education Data Standards described in Section 2.4d of this manual.

Data Dictionaries. A “data dictionary,” which unambiguously identifies all data elements and describes their content, coding options, and format, is essential to establishing consistent collection and reporting. Adhering to a standard data dictionary improves data quality by fostering interoperability of different reporting systems and promoting the use of comparable data across the entire state. Staff who understand the definitions of the data they are collecting, entering, and reporting will be less likely to commit errors. Data dictionaries can be useful even where systems remain un-integrated and un-connected to a wider network. They should be the foundation for staff training and a resource for staff to use during the data quality review process.

Business Rules. A collection and reporting system that is linked directly to a data dictionary can greatly improve data quality as it funnels – or, in some cases, forces – data into a pre-defined configuration. This integration is achieved through the creation of systematic “business rules” that define acceptable values, character formats, and options for handling missing or unavailable data. In the absence of an integrated statewide network, another option is a web portal-based collection system, in which the central portal enforces data dictionary business rules as data are entered.

Data Definitions. In some cases, the U.S. Department of Education (through the National Center for Education Statistics), the U.S. Office of Management and Budget, or the No Child Left Behind Act maintains a definition of a required data element. Where Federal definitions do not exist, a standard definition should be used for all districts and schools in the state. For example, the U.S. Department of Education allows flexibility among
states on the definition and parameters of a “full academic year.” Once states define data elements such as these, it is important that the definition be centrally documented and adopted uniformly across all data systems in all districts. This information should be maintained such that it is readily available to staff in schools and districts. Hardware and software should be configured around standard definitions, and the accountability guide should provide a clear description of how data collection, entry, and reporting processes work.

**Data Granularity.** To the maximum extent possible, all data elements should be collected and stored in their most “granular” form. In other words, each component of a calculated data element should be collected separately and stored separately in the database. For instance, when collecting graduation rate data, it is better to store a total number of students graduating and a total number of students eligible to graduate than to store only a computed percentage. To ensure that data reported by all districts and schools are comparable, percentages, ratios and other computed data should not be computed until final calculations are made at the state level.

**General Principles for Data Definitions**

- **Unique Identifiers:** To the maximum extent possible, unique statewide identifiers will be attached to every student and teacher record.

- **Indivisibility:** Every data element will be defined and collected in as “granular” a format as possible. For example, the data dictionary will record events such as a student absence and student enrollment day and indicate how they can be used to compute an attendance rate rather than defining attendance rate with a collection of elements.

- **Comprehensiveness:** Data dictionaries will include all relevant information for each data element, including its definition, unique code, dates of collection, technical validation rules (e.g., “three-digit number” or “ten non-numerical characters, all caps”), and practical business rules (e.g., students in the State Transitional Bilingual program should not have English as their primary language).

- **Accessibility:** The data dictionary will be posted online and be easily available.

- **Permanence:** Codes or definitions from the data dictionary will be permanently maintained. Codes or definitions that change or go out of date will be de-activated so that staff will not use them inadvertently, but will be maintained so that historical comparisons and longitudinal analysis can occur.

- **Validity:** Business rules will not be the final arbiter of valid data. Data should be checked by a staff member who will know if an anomaly captured by a business rule is, in fact, an error. For instance, business rules may identify counts that are out of range based on previous years’ data, but are, in fact, accurate because a significant change has occurred in the reporting unit.
4.4 Identifying and Resolving Data Issues

Data issues come to OPSI’s attention from a variety of sources including calls and emails from districts and the public, error messages on federal data submissions, inquiries from researchers or other data analysts. Technical data issues are likely to come to the attention of IT Customer Support first. Content issues are handled by the respective data owners and data stewards. Both technical and content issues of larger significance are to be brought to the attention of the Data Leadership Team for discussion and resolution. Issues that involve data quality should also be discussed within the Data Quality Team. If the Data Management Committee or DQT is unable to find a resolution, or needs more input on the topic, the issue will be shared with the Data Governance Group. If it needs further escalation, the issue will then be brought to the OSPI Superintendent’s Cabinet.

4.5 Schedules and Deadlines

Producing quality data takes time. Good data systems require clearly established, firmly enforced collection, validation, and reporting schedules to ensure good data quality. Hurried or ad hoc collection and reporting, done on the spur of the moment in response to an unexpected request, greatly increases the potential for virtually all of the data quality problems described above. The following general principles for schedules and deadlines are adopted by the K-12 Data Governance Group.

A Continuous, Inclusive Process. The state’s data quality schedule should include a continuous management process that updates all elements of the data system on an ongoing basis. In addition to collection, validation, and reporting processes, procedures should include updates to the data dictionary, technical system performance tests, staff training, and data quality reviews. All schedules should take into account both policy and technical considerations. Neither IT staff nor policy staff should dictate deadlines alone. Both should be involved in ensuring that timelines are workable and meet Federal and state requirements.

Statewide Deadlines. The guidelines that follow provide information on implementing a statewide data reporting schedule that will meet Federal timelines and still maintain safeguards for data quality. It is critical that these efforts be directed from the state level, because OSPI is ultimately responsible for ensuring that Federal reporting timelines are met. A key overarching principle is to prepare ahead. While it is true that the turnaround time for assessment results may be tight because of testing schedules, most other data required for NCLB Report Cards should be available earlier in the year. Teacher quality data, subgroup demographics, past years’ accountability information, graduation rates, and attendance rates, for example, should not need to wait until the last moment for collection and validation. The NCLB timelines are transparent in the statute, and states – in consultation with data providers at the school and LEA levels – should build their data reporting schedules with those timelines in mind.

General Principles for Schedules and Deadlines

- Standardization. Standard statewide reporting deadlines should be established and
published. District- and school-level deadlines should be set at the local level to meet the state schedule.

- **Feasibility.** Schedules and deadlines should take into account the technical capabilities of all data providers. While technical issues should not dictate timelines for reporting, local systems must be physically capable of meeting collection and validation schedules set at the state level. An additional aspect of feasibility to be accounted for is the seasonal workloads and schedules at the school and district level.

- **Follow-up Capability.** State-, LEA-, and school-level schedules should build in substantial time for following up with data providers on data anomalies, missing items, and other data quality issues. Reporting to the next level should not occur until all anomalies have been resolved.

- **Transparency.** All schedules and deadlines should be set in consultation with key personnel responsible for providing data and validating data quality, including schools and districts. Final timelines should be disseminated well in advance of deadlines and periodic reminders should be relayed to key data staff.

- **Firmness.** State deadlines should be firm and include consequences for non-compliance. Specific procedures should be established for permitting and processing late data reporting. Similarly, deadlines, policies and processes for establishing new or modified data collections must be strictly observed.

### 4.6 Data Quality Review and Validation

The data quality process does not end with a successful data collection. Having an ongoing set of management controls over data gathering is important and a set of business rules and validation checks for reporting can help ensure that the final report does not reproduce and transmit errors that occurred during the original collection. Wherever possible, ongoing data quality checks should be automated and performed on a regular schedule.

The following general principles for data review and validation are adopted by the K-12 Data Governance Group.

**General Principles for Data Review and Validation**

- **Regularity.** Monitoring during data collection should occur on a regular basis according to a pre-determined schedule. Wherever possible, control processes should be automated to

---

**Data Quality Validation Flags**

- **Non-correspondence.** Some members of the population for which data are collected are not in the corresponding database, or some members represented in the database have no (or incomplete) corresponding data.

- **Invalid value.** The value entered is not possible, given the data element's definition. For example, “-1” as an assessment score or “?R” as a teacher’s length of service.

- **Invalid code.** The code entered does not exist in the data dictionary.

- **Out-of-range.** The value entered, while theoretically possible, is outside the expected range of responses (for example, a dropout rate of 100% or a teacher salary of $1 million). Out-of-range errors should rely on analysis of historical trends and should generate system flags rather than outright error messages.
ensure adherence to the schedule.

- **Consistency.** Validation checks should be performed automatically each time data are entered into the system. The data dictionary should define business rules that will consistently identify entries as out of range, missing, incorrectly formatted, or having invalid codes.

- **Interoperability.** Validation rules should be consistent across various databases and systems sharing information. Each time data are transmitted from one system to another (e.g., from the school to the LEA or from the LEA to the state), data should be re-checked.

- **Reliability.** Ongoing monitoring should include periodic review of a sample of data for accuracy and completeness. Wherever possible, reliability reviews should use independent verification processes rather than the regular quality check system (e.g., manual comparisons with other databases).

- **Accuracy.** Data checks should include confirmation that calculations are sound. Rules for rounding should be clear and consistently observed and, until final aggregation at the state level, data should be reported as raw numbers rather than pre-calculated percentages.

- **Correction of Flagged Data.** It is the responsibility of the sending entity or agency to correct flagged data that is forwarded or downloaded to another entity or agency.

- **Feedback Capability.** Ongoing monitoring should include the capability to record and respond to data providers’ and requestors’ concerns about the collection and reporting system.

- **Flexibility.** Data collection systems should be able to be updated or changed as data quality issues emerge. Dynamic data dictionaries should allow validation rules to be changed as provider and requestor needs evolve, and as data definitions change.

- **Transparency.** Information on all ongoing data quality monitoring procedures should be collected as a staff resource and archived as a continuing reference. Handbooks on management controls should include descriptions of valid data elements from the data dictionary and processes for correcting errors.

- **Documentation.** Data collection systems should include a user-friendly capability to document data quality problems in real time. Users should be able to document intentional deviations from the regular collection processes and business rules immediately, including known instances of non-responses. All data entry should include coding that identifies the person responsible for the data.
4.7 Data Privacy and Security Issues

An important responsibility of data owners is to protect the privacy of individual students. The following comments on and general principles for data security and privacy are adopted by the K-12 Data Governance Group. More information can be found on the OSPI Student Privacy and Data Sharing webpage, [http://k12.wa.us/DataAdmin/DataSharing/default.aspx](http://k12.wa.us/DataAdmin/DataSharing/default.aspx).

The identification of individual students is restricted under FERPA and other laws protecting privacy. FERPA guidelines provide for reporting only aggregated or de-identified information to ensure that even disaggregated data used to report achievement results for subgroups cannot be traced back to an identifiable individual. Therefore, it is important to establish a data collection, entry, and reporting system that protect individual students’ privacy to the maximum extent possible.

Furthermore, maintaining a secure data system requires a combination of technical and human safeguards. On the technical side, it is critical that all hardware, software, and network infrastructure be firewall-secure from unauthorized external access and password-protected to control internal access. Periodic system tests should be run to ensure that technical security protocols remain effective. On the human side, it is important that the data owners develop specific policies on who will have access to what data and how that access will be controlled. Staff training for all school-, district-, and state-level personnel, including ethical and legal responsibilities for maintaining security is essential.

General Principles for Data Security and Privacy

- **Minimalism.** Records and notes created during the data collection process – whether electronic or paper – should contain only the minimum necessary personally identifiable information.

- **Exclusivity.** Access to data should be strictly limited to personnel with specific responsibility over each data element or a “legitimate educational interest” in viewing it (as defined by state or local policy). Electronic databases should be password and log-in protected and personally identifiable information should be accessible only when necessary for a specific reporting purpose.

- **Awareness.** Staff training should include building an understanding of Federal, state, and local privacy laws and their application to ongoing data collections.

- **Documentation.** Develop a written list of policies and practices related to data security and privacy and ensure that it is disseminated to all personnel involved in data collection, entry, and reporting.

- **Comprehensiveness.** Statewide system-generated identifiers should be created for all individual student records. Using a statewide system will allow tracking students as they move between schools and districts. Social security numbers should not be used as student identifiers.
5. Including Data Stakeholders: A Critical Component of Success

There are many stakeholders interested in the education data collected and reported by OSPI. Stakeholders range from the elementary school office coordinator who enters data into the local student information system about each new student who enrolls, to the program manager in the federal Office of Special Education who needs to determine if all states are appropriately implementing federal programs to students with vision impairments. Stakeholders are described below, starting with the federal government.

Federal-level Stakeholders
To provide student performance data for federal decision and policymaking in K-12 education, states participate in the EdFacts Initiative. The data submitted on approximately 180 data groups at state, district, and school levels to the U.S. Department of Education allows for consolidated program reporting and planning.

Additionally, each state and local education authority (district) that receives Title I, Part A funds must prepare and disseminate an annual report card that meets the requirements of the Elementary and Secondary Education Act. The requirements include reporting assessment, accountability, and teacher quality data. Reporting the information is important to promote state, district and school accountability and provides for meaningful discussions about improving academic achievement as well as acknowledging the gains.


State-level Stakeholders
State-level stakeholders include the state legislature, which mandates a variety of annual or periodic reporting requirements regarding program implementation, participation, costs, and outcomes, as well as individual legislators, and their staff, who often have unique inquiries as they plan for legislative sessions. Also in this category is staff from legislative fiscal and policy committees, and from LEAP, the Legislative Evaluation and Accountability Program.

The ERDC is also a primary stakeholder. As the custodians of the state’s P-20W longitudinal data system, staff from ERDC need extensive access to OSPI data and are critical to the discussions of feasibility, definitions, and data quality.

Other state agencies are also stakeholders for OSPI’s longitudinal data. There are numerous state interests or activities that can be informed, enhanced, or facilitated by K-12 information.
These include the Department of Health (e.g., children’s health care, epidemiology), Children’s Administration (e.g., foster care, homelessness), Economic Services Administration (e.g., TANF – the state’s welfare program), the Student Achievement Council, State Board of Education, State Board for Community and Technical Colleges, Council of Presidents (4-year institutions), Workforce Training Board, Department of Corrections, Professional Educator Standards Board, and others.

OSPI program offices and administration are also key state-level stakeholders. As the Superintendent and his/her Cabinet form policy recommendations or design programs for implementation, they need to have confidence in the data available to influence their decisions.

Finally, academic and government researchers are also state-level stakeholders. Academic and government research can inform practice and policy at all levels.

**Educational Service District (ESD) Stakeholders**

ESDs provide support to school districts and their local schools in a variety of ways including professional learning, financial services, and data management, quality, and use. Access to quality data is important for the ESDs in order to facilitate improvement in student achievement. As liaisons between OSPI and school districts, ESDs provide a unique perspective and voice in the Data Governance Group.

**District- and School-Level Stakeholders**

There are probably no more important stakeholders than district and school personnel. School personnel, such as office secretaries, registrars, counselors and teachers typically are the front-line data collectors and data entry specialists. They are the key to whether the data are accurate and timely. They know the difficulty of collecting information, the constraints of entering data in a timely fashion, and each nuance of the data they have entered.

In addition to school personnel who enter the data, there are also school-level users of the information. Principals and other administrators, as well as counselors and teachers, can provide advice on what data, and in what format, they need to make good decisions. By using the data on a daily basis to make important decisions, school-level users provide the best feedback on whether the data is accurate and timely.

District-level stakeholders include all district administrators and the school board, as information users, and the IT staff for the technical aspects of data collection storage and transmission.

**Family-level stakeholders**

Parents, students, and the general public are also important stakeholders of K-12 longitudinal data. From wanting to have good information for selecting a local school to wondering how their children’s test scores and grades compare with those of students in other parts of the state, parents are keenly interested in K-12 data.
Within the general public, additional stakeholders include researchers and the media. And the general public includes another key audience – voters!

Access to K-12 Data
Most of the stakeholders described above are interested in the data, either in summary reports and tools or in unit-record data sets. OSPI is committed to making information available to anyone who wants it, while ensuring the confidentiality of student level data. Researchers seeking student-level data to conduct studies of our school system may submit a request to OSPI’s student information department. The request form includes a detailed description of the research, planned analyses, and a justification for the requested data. If approved by the data request review panel (which is composed of five members of the K-12 Data Governance Group), the researcher must sign a written agreement with OSPI, including requirements to maintain the security of the data and to take no steps to use the data to identify individual students. OSPI never shares identifiable student-level data with the general public.

6. Resources for Further Information


Council of Chief State School Officers (CCSSO), http://www.ccsso.org/.
  • Education Information Management Advisory Consortium (EIMAC),
    http://www.ccsso.org/Resources/Programs/Education_Information_Management_Ad


Office of Superintendent of Public Instruction, http://k12.wa.us/
  • OSPI Student Privacy and Data Sharing webpage,


### Appendix A: Data Governance and the Legislature

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
<th>Legislation</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>Longitudinal student data system*</td>
<td>RCW 28A.300.500</td>
<td>SLDS</td>
</tr>
<tr>
<td>2007</td>
<td>School data systems--Standards--Reporting format*</td>
<td>RCW 28A.300.505</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Education Data Center*</td>
<td>RCW 43.41.400</td>
<td>ERDC</td>
</tr>
<tr>
<td>2009</td>
<td>K-12 Data Governance Group*</td>
<td>RCW 28A.300.507</td>
<td>Critical research and policy questions&lt;br&gt;Gap Analysis&lt;br&gt;Preliminary Report&lt;br&gt;Final Report&lt;br&gt;Implementation Guidelines&lt;br&gt;Data Quality Campaign</td>
</tr>
<tr>
<td>2009</td>
<td>K-12 Education data improvement system*</td>
<td>RCW 28A.655.210</td>
<td>ESHB 2261</td>
</tr>
<tr>
<td>2013</td>
<td>Discipline Task Force</td>
<td>RCW 28A.600.490</td>
<td>ESSB 5946 Section 301&lt;br&gt;Final Report</td>
</tr>
<tr>
<td>2015</td>
<td>Providing for educational data on students from military families</td>
<td>SSB 5163</td>
<td>Amendment to RCW 28A.300.505</td>
</tr>
</tbody>
</table>