Single-Agency Data Governance: Roles and Responsibilities in Practice

To be effective and sustainable, data governance roles and responsibilities must fit the context, culture, and capacity of the agency. The following examples illustrate how three states are implementing single-agency data governance roles and responsibilities.

California Department of Education

Although some had advocated for a data governance program for ten years, the California Department of Education got serious about data governance after the retail giant Target was attacked in 2013, compromising 110 million customers' personal and financial data.

The DOE used the Target data breach as a catalyst to establish data governance. Various managers of student data had begun regular meetings. They engaged executive leaders, developed a project charter, and became the Data Management Committee. The executive team is responsible for approving revisions to the charter, and the Data Management Committee meets quarterly with the executive team.

Once the structure of Educational Data Governance (EDGo) was implemented, the Data Management Committee, in addition to its other duties, was tasked with demonstrating the value of data governance to staff members in all relevant program areas and offices. The Data Management Committee also

- establishes working groups to complete data-related projects;
- assigns staff to collect, use, monitor, maintain, and secure data;
- establishes standard processes, policies, training, and associated communication plans for coordinated data collection, management, dissemination, and use;
- considers new data elements (including determining the appropriate level, data collection, how the data element influences practice, policy or research, etc.);
- advocates/advises on data management issues/initiatives;
- maintains and enforces a department wide data collection and reporting calendar;
- approves all new data-related projects, contracts, and efforts;
- identifies tracks, and resolves critical data issues such as data access requirements and authoritative data sources for accountability measures and reporting;
- escalates critical data issues that cannot be resolved at the DMC level to the DGLT;
- reviews and provides guidance on all data collections;
- meets monthly to collaborate and resolve issues, review working groups (current/potential), and formulate recommendations for priorities; and
- develops strategic plans for data systems.

During its first year, the committee held an event modeled after a science fair or small vendor show, setting up various stations where staff members could learn about data governance. Topics included geographic information systems (GIS), a data resource guide, a data privacy table, and information security, each manned by the team members responsible for those aspects of data governance.

Currently, the Data Management Committee meets monthly and hosts quarterly highlight sessions to ensure that staff members are aware of and are well-trained on data governance.

Michigan Department of Education

The Michigan Department of Education (MDE) is working on a data governance policy that will establish a data architect role and a data steward role. The data architect role and the data architect committee were established to design technology architecture to support MDE data asset needs as approved by the Data Governance Board. The collaborative focus of the committee spans the work across the data stewards/subject matter experts and the data governance board. The committee is responsible for maintaining technology product roadmaps (software and hardware) necessary to support current and future requirements. All members of the committee are expected to define data standards and data cleansing processes; make recommendations to the data governance board; generate solutions to meet business needs with pros, cons, and high level cost estimates; and respond to escalated data issues from data stewards/subject matter experts.

MDE is separate from the Michigan Center for Educational Performance and Information (CEPI), an agency responsible for collecting, storing, and reporting on education data in the state, and it is leveraging some lessons from CEPI as it develops a data governance structure of its own.

Data Architect. A data architect builds complex computer data systems. An architect works with a team that looks at the data needs of the department and the data that are available, and creates a blueprint for providing MDE and its stakeholders with accurate, secure, and sustainable data systems. Data architects have information technology (IT) skills and may have highly technical knowledge of SQL databases.

Data Steward/Subject Matter Expert. A data steward is a person with bona fide expert knowledge about a set of data, data systems, or administrative rules related to a specific job or function. Data stewards might be policy experts, data analysts, researchers, compliance experts, or those involved with grant funding.

Minnesota Department of Education

Based on guidance from its policy review committee, the Minnesota Department of Education (MDE) has included "all staff" as the base of its data governance structure. Specifically, all MDE staff are required to know that the data governance policy exists, understand the data governance structure, and know how it affects their work.

The data stewards are responsible for communicating with their divisions about data governance issues and must seek review before returning to a data stewards' meeting with a recommendation for solution of the issue. Staff members work with data stewards in their divisions to communicate data use, collection needs, and change requirements.

Because these changes are fairly recent, some data stewards previously have not been charged with such work, and staff members were not accustomed to being responsible for data governance. Minnesota's data governance policy includes language that clearly delineates data governance responsibilities and outlines consequences the organization might face for non-compliance.

MDE's data steward committee has met several times, and the structure is working well. Job descriptions will be updated to include responsibilities for data governance, and the process implemented through the data governance policy for communication between staff members and data stewards ensures that all agency staff members are engaged with data governance.

Additional Resources

California Department of Education Educational Data Governance
https://www.cde.ca.gov/ds/ed/

Michigan Department of Education
https://www.michigan.gov/mde/

Minnesota Department of Education Data Center
https://education.mn.gov/mde/data/