

Pennsylvania Department of Education
R372A200017

Project Title: Strengthening PIMS Infrastructure to Expand Data Use Capacity

Project Description: Prior SLDS grants have helped PDE grow the Pennsylvania Information Management System (PIMS) into the core of its SLDS. During the FY2015 grant period, PDE built its Data Mart (which includes data from PIMS and other sources) to support several education initiatives. PDE also established a Research Agenda that promotes the use of PIMS data sets to answer priority questions aligned to PDE's strategic mission and vision.

Together, the Data Mart and Research Agenda have led to a rapid increase in research data requests since 2017, and it is becoming clear that PIMS will need a more robust internal data architecture to keep pace with anticipated future requests for research and other data. PDE believes that 1) automating processes, 2) improving infrastructure, and 3) linking PIMS to other data sources where appropriate, are the logical next steps for improving and sustaining SLDS data use for the long term. PDE proposes three grant outcomes to accelerate the use of educational data to explore trends, student outcomes, and programs effectiveness, while simultaneously reducing administrative burden to PDE.

1) Automate Data-Request Workflow. PDE will develop a public-facing web application through which submitted data requests will enter an automated workflow system that DQO staff can use review/vet requests, manage communications, and monitor the status of data requests. This workflow will make the formal proposal and IRB process more efficient for both third-party researchers and PDE staff; will ensure that non-research data requests are fulfilled appropriately and in a timely manner; and will allow PDE to shorten response times and increase accuracy of data-request responses.

2) Create a Research Data Repository. PDE will create new linkages within PIMS that pre-join some data and permit faster custom joins when needed. This will allow DQO staff to fulfill internal and external data requests much more quickly and accurately.

3) Advance Interagency Interoperability & Data Linking. PDE will work to increase the long-term usefulness of its data by exploring a common interagency identifier and other interagency data linkages to help answer research questions beyond PDE's immediate sphere and advance research goals statewide.

Making these improvements over the next four years will help Pennsylvania's SLDS become an even more powerful and useful tool for stakeholders to make informed decisions regarding Pennsylvania's education policies and practices.