Michigan Department of Education R372AR230009

Project Title: Bridging the Data Divide: Empowering Education through Cloud-Driven, Standards-Based Data Warehousing

Project Description: The Center for Educational Performance and Information (CEPI) has a rich history of making data available to drive policy decisions and serve Michigan students, educators, researchers, policymakers, and the public. However, our ability to meet the growing demand for education data and information is hampered by several challenges. Outdated infrastructure and lack of standardization contribute to a highly manual nature for several of our processes. This in turn leads to significant delays in delivering data tools for analysis and reporting. As a result, we are unable to meet known data needs, such as the need for data to understand and address our state's current teacher shortage or the need to adequately represent Indigenous learners and educators in our data systems. Further, the maintenance and upkeep of our legacy systems is becoming increasingly difficult and costly. IES/SLDS grant funds are needed to bring our architecture, warehousing, and reporting to next-generation, CEDS status. This project will undertake crucial updates and enhancements to the Michigan SLDS (MSLDS) to ensure that the entire pipeline is modernized and best equipped to serve our education stakeholders.

Expected Outcomes:

- 1. Design and develop reports leveraging new technologies to publish more valuable data tools for a wide range of stakeholders.
- 2. Implement an Azure system that yields a next generation SLDS.
- 3. Create a CEDS data warehouse (CEDS-DW) structure and transfer protocols to integrate novel categories of data from new sources.
- 4. Develop a training curriculum for next generation SLDS data users.

Upon completion of these outcomes, the MSLDS will generate advanced reporting, produce improved data displays, and include additional data. These improvements will allow stakeholders to access richer data, in a timelier fashion, for decision making and educational planning. Additionally, the proposed upgrades will yield significant savings in terms of both staff time and money that will enhance the sustainability of MSLDS.

Through this grant, CEPI plans to maintain and even extend its commitment to the national SLDS community. All four of the project's proposed outcomes will result in tangible, durable products that CEPI will share to the CEDS Open-Source Community (CEDS-OSC). CEPI is committed to participate in the CEDS-OSC because we recognize that as more states successfully adopt the CEDS model we will find additional partners that share our vision of a future where education information management systems enable timely, robust exchange of data and information to support stakeholders.