SLDS DATA UP PROJECT STARTUP REPORT

Submitted to Large Project Oversight on 8/17/2016

GENERAL INFORMATION

Project Name: SLDS Data UP
Agency Name: ITD
Project Sponsor: Lisa Feldner
Project Manager: Jennifer Kunz

PROJECT DESCRIPTION

The ND Data Utilization Project (Data UP) builds on and supplements (not supplants) the progress made with the Statewide Longitudinal Data System (SLDS) thus far. It moves stakeholders from data access to data utilization. The Data UP works to improve data literacy and use for current and pre-service teachers, improve use of student-level longitudinal data to increase college readiness and completion, and promote strategies designed to support data-driven strategies to better meet workforce demand and improve workforce supply and demand policy development.

The grant for Data UP was awarded in September 2015. The project will span four years to September 30, 2019 with a total grant award of $6,475,690. An initiation phase was completed in April 2016 with the approval of the project charter. Various planning and proof of concept (POC) activities occurred March through July 2016, including the formation of various workgroups and resources acquired. The Project Plan was approved on July 19, 2016 and the Execution Phase start date was 8/1/2016.

BUSINESS NEEDS AND PROBLEMS

The specific primary business needs to be met by this project are as follows:

1. In-service and pre-service teachers effectively utilize SLDS data toward improving PK-12 student achievement
2. Use longitudinal data to improve postsecondary education retention rates
3. Use longitudinal data to increase postsecondary achievement rates
4. Build supply/demand data marts for use by institutional researchers and labor organizations to better address workforce demands.

PROJECT BASELINES

Baseline Start Date	Baseline End Date	Baseline Budget
8/1/2016	9/30/2019	$6,475,690

OBJECTIVES

Business Objective	Measurement Description
Business Need/Problem 1: In-service and pre-service teachers effectively utilize SLDS data toward improving PK-12 student achievement	
1.1 Improve on-demand user supports and high quality digital training system	Measurement 1.1.1: Create digital SLDS Reports User Guide

	Measurement 1.1.2: Create training videos for accessing DLDS and DLDS reports Measurement 1.1.3: Expand resources to include standards based assessments (new NDSA Smarter Balance) Measurement 1.1.4: Expand portal to include interactive integrated data produced by teachers (grouping by skill cohort, professional development, interventions applied, etc.) Measurement 1.1.5: Develop a Training data warehouse and training portal site with real case studies Measurement 1.1.6: Expand on the PK12 warehouse to include multiple instructional staff roles assigned to a classroom and implement teacher of record assignments linked to PEP-20W and ESPB (teacher licensing) which will expand the Staff domain in the SLDS and link the teacher through JSND, K12 and PEP-20W
1.2 Formalize data utilization plan	Measurement 1.2.1: Analyze and interpret needs assessment data Measurement 1.2.2: Outline process for addressing gaps in data use Measurement 1.2.3: Formalize training plan based on A+ Inquiry Framework Measurement 1.2.4: Develop course modules for pre-service teacher certification Measurement 1.2.5: Develop governance on SLDS training certification
1.3 Implement data utilization training plan	Measurement 1.3.1: Conduct training for in-service teachers using the A+ Inquiry Framework Measurement 1.3.2: Conduct train the trainer for teacher educators across the state Measurement 1.3.3: Offer college course modules for pre-service teachers
1.4 Assess effectiveness of data utilization training	Measurement 1.4.1: Implement follow-up system on pre-service teachers, yearly reports Measurement 1.4.2: Implement follow-up on in-service teachers Measurement 1.4.3: Produce data use reports on all teachers in the SLDS available to school administrators
Business Need/Problem 2: Use longitudinal data to improve postsecondary education retention rates	
2.1 Provide NDUS with risk factor Data	Measurement 2.1.1: Research longitudinal student data with a high focus on students who stop out Measurement 2.1.2: Define risk factor formula customized for each type of college Measurement 2.1.3: Send risk factor data marts to NDUS and establish data exchanges
2.2 Utilize longitudinal data to identify retention rate factors for ND postsecondary student	Measurement 2.2.1: Align data definitions to support data transmissions between the SLDS and PAR and student retention systems that support PAR Measurement 2.2.2: Analyze student high school course taking patterns and grades in relation to postsecondary retention customized by type of college entered Measurement 2.2.3: Evaluate effect of course taking patterns and grades on postsecondary student retention Measurement 2.2.4: Provide predictive analytics regarding course taking patterns and college retention

2.3 Utilize data to develop interventions and strategies that support retention at NDUS	Measurement 2.3.1: Risk factor and retention factor findings are shared with PAR and campus advisors Measurement 2.3.2: Retention interventions and strategies are developed and articulated Measurement 2.3.3: Assess effectiveness of interventions and strategies to support retention at NDUS Measurement 2.3.4: Results are made available to NDUS and policy makers Measurement 2.3.5: Results are made available to prospective higher education students toward matching their experience with institutions in which they are more likely to succeed.
Business Need/Problem 3: Use longitudinal data to increase postsecondary achievement rates	
3.1 Develop crosswalk of degree programs at NDUS colleges	Measurement 3.1.1: Utilize common course numbering where available to crosswalk degrees across NDUS (an existing project within NDUS to be completed in the next two years) Measurement 3.1.2: Identify stackable certificates and degrees that exist
3.2 Expand pilot of reverse transfer process	Measurement 3.2.1: Collaborate with Texas to determine lessons learned toward comparing student credit attainment to credential attainment across the higher education system (results to WEAC) Measurement 3.2.2: Identify two community colleges and two regional universities or research universities to participate in pilot Measurement 3.2.3: Develop reports that include credit hour summary for students to see what certificates and associate degrees they are getting close to meeting Measurement 3.2.4: Within a community college work with course data to determine if students are close to receiving a degree or certificate and provide this insight to the college and student Measurement 3.2.5: Provide insight to the transferring colleges of the number of students that could receive credentials if courses were offered Measurement 3.2.6: Develop policy and process recommendations for Reverse Transfer Agreements
3.3 Increase completion rates of postsecondary drop out and stop out students	Measurement 3.3.1: Identify students at risk of drop out or stop out Measurement 3.3.2: Identify dropout and stop-out students that have completed significant credit hours Measurement 3.3.3: Analyze credit attainment toward varying certificates and degrees utilizing crosswalk Measurement 3.3.4: Define and implement a student contact and re-engagement plan who have completed 75% or more toward a specific certificate or degree to advise them of certificate or degree completion options
Business Need/Problem 4: Build supply/demand data marts for use by institutional researchers and labor organizations to better address workforce demands	
4.1 Develop CIP to SOC crosswalk	Measurement 4.1.1: Work with JSND to target high demand SOCs as priority area to begin SOC analysis

	Measurement 4.1.2: Identify CIPs within the high demand SOCs
	Measurement 4.1.3: Collaborate with MN to complete CIP to SOC crosswalk and make available as domain data in the SLDS
4.2 Identify postsecondary students working toward certificates and degrees in high demand occupations	Measurement 4.2.1: Identify JSND data sets needed in the SLDS and model them based on SOC
	Measurement 4.2.2: SLDS Workgroup assists in identifying high demand CIP codes
	Measurement 4.2.3: Develop data marts from NDUS SLDS data sources that produce workforce pipeline data
	Measurement 4.2.4: Promote CIPs that are not meeting demand
4.3 Build Supply/Demand data marts for use by institutional researchers and labor agencies	Measurement 4.3.1: Bring in the required LMI data into the SLDS
	Measurement 4.3.2: Develop student education enrollment data marts
	Measurement 4.3.2: Develop workforce enrollment data marts
	Measurement 4.3.2: Produce supply/demand reports requested by stakeholders and make publicly available
4.4 More effectively and efficiently utilize NDUS as a workforce supply source	Measurement 4.4.1: Track completers to see if they are filling the high demand jobs
	Measurement 4.4.2: Feedback reports to NDUS on all graduate placement in ND industries by college, SOC, CIP, degree and program
4.5 Utilize data to improve consumer information and research	Measurement 4.5.1: Develop reports available to businesses, economic development, legislators and the public on ND supply/demand as it relates to our education pipeline
	Measurement 4.5.2: Make de-identified research data sets available for other research
	Measurement 4.5.3: Collect data and measure outcomes of short term workforce development programs for program administers to measure return on investment

COST BENEFIT ANALYSIS

The ND SLDS has become a demanded data source across sectors and ND is currently meeting the needs and uses for SLDS with partnering statewide agencies. ND has completed seven of the ten State Actions that support a culture of effective data use, including 1) linked data systems, 2) stable, sustained support, 3) governance structures, 4) state data repositories, 6) production of progress reports using individual student data to improve student performance, 7) creation of reports using longitudinal statistics to guide system wide improvement efforts, and 8) development of a P-20/workforce research agenda. This progress has positioned the state well for this project, but there are three of the ten State Actions not currently fully met that are addressed by this project: improve data literacy for current and pre-service teachers, improve use of student-level data to increase college retention and completion, and promote data-driven strategies to better meet workforce demands in the state.

KEY CONSTRAINTS AND/OR RISKS

Risks of Performing the Project:

- Risk: Current operating and maintenance cost will increase as SLDS continues to grow.

- o Impact: Upon completion of the project, general maintenance and operating costs will increase as the SLDS system expands to accommodate additional features and data sets. However this type of growth is expected in a longitudinal data 'system'
  - o Response: Track operating costs and provide as much notice as possible of complications as they arise
- Risk: With recent budget cuts will the state still be able to supply in kind cost
  - o Impact: In-kind costs are primarily SLDS staff, equipment and licensing. Staff time will be affected at the completion of this project as maintenance is transited to the SLDS operating costs. Equipment and Licensing may increase moderately, however, this type of grow is expected in a longitudinal data system.
  - o Response: Track budget closely and provide as much notice as possible of complications as they arise

Risks of Not Performing the Project:

- Risk: Decision makers would not have the data needed to make informed-decisions.
  - o Impact: Educators and SLDS users will not be trained in data utilization and would not use the information to make informed-decisions and improve the outcomes of student education as effectively. The lack of quality information on student post-secondary retention and degree obtainment would continue to be anecdotal and not enriched with data and research that can change the way student interventions are approached. ND economic and workforce development administrators would continue lacking needed information on fill high-demand jobs in ND.
  - o Response: Process would continue as it is today
- Risk: Training Site would not be created
  - o Impact: An objective of this project is to create an SLDS training site which is needed regardless of this project. Today there is no way to train individuals except on identifiable student data which limits the training engagement to PowerPoint slides
  - o Response: Process would continue as it is today