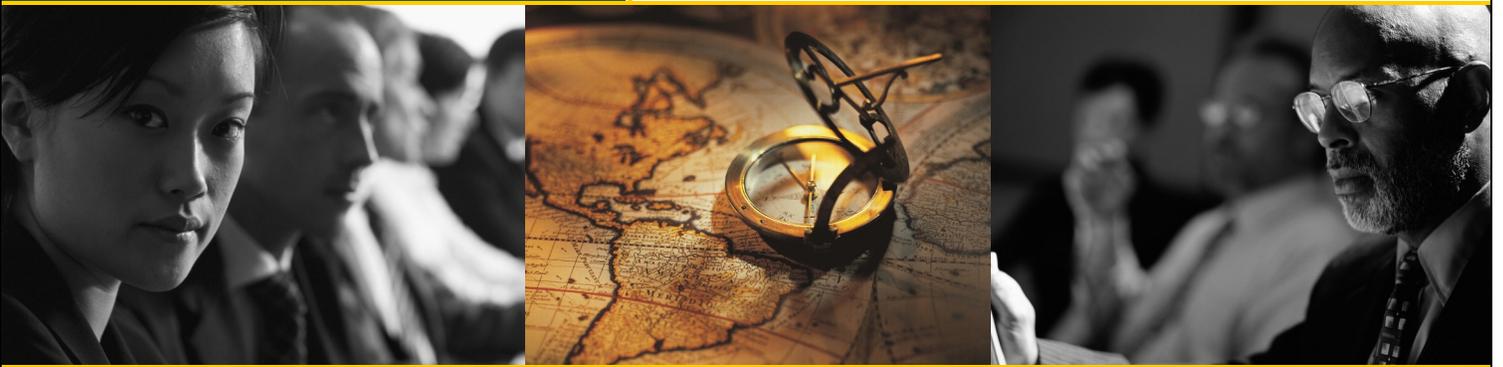# External Evaluation of the K-20 Data Project at the Montana Office of Public Instruction

FINAL
YEARLY WRAP-UP REPORT
EXECUTIVE SUMMARY

Evergreen Solutions, LLC

July 23, 2014

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EXECUTIVE SUMMARY

The OPI's K-20 Data Project is a three-year, $3.9 million grant project to link the OPI's K-12 data warehouse (GEMS) and the Montana University System (MUS) postsecondary data warehouse, ultimately expanding the OPI's college readiness domain housed in its statewide longitudinal data system (SLDS). Specifically, the K-20 Data Project addresses weaknesses in access and linkages to longitudinal student transcript data to inform stakeholders regarding quality and performance of K-12 curricula with respect to college readiness. The Montana OPI was awarded grant funding through the USDOE FY2012 SLDS grant program in May 2012 to complete this project. The K-20 Data Project started on July 1, 2012 and will be completed on June 30, 2015.

The K-20 Data Project supports the following three key goals:

- Goal #1: Establish data linkages between K-12 and postsecondary partners by creating an electronic student transcript repository for K-12 education.

- Goal #2: Create an Interagency K-20 Data Governance Council.

- Goal #3: Implement business intelligence and web reporting tools for users of K-20 data.

In September 2013, Evergreen Solutions was selected by the Montana Office of Public Instruction (OPI) to serve as the continuous improvement and data-use evaluator for the OPI's K-20 Data Project. Year 1 of the evaluation was from early September 2013 through June 30, 2014, and Year 2 of the evaluation is from July 1, 2014 through June 30, 2015.

The four main objectives of the Continuous Improvement and Data-Use Evaluator include:

- collecting input from stakeholders and end-users on which types of reports and analysis tools best answer their information needs, not only in regards to the college readiness domain but also for all GEMS domains;

- assessing the effectiveness of the training modules and training tools for the entire K-20 Data Project;

- assessing the ease of use of the (GEMS) system for end-users; and

- developing a tool to measure whether end-users find GEMS data useful; need additional data in the GEMS system; and utilize and apply the data and reports effectively in regards to their information needs and goals.

The scope of work for the evaluation requires bi-monthly status reports and a Yearly Wrap-up Report during Year 1 of the evaluation. This Yearly Wrap-up Report represents the final deliverable for Year 1 of the evaluation, and is a culmination of information and data from Evergreen's bi-monthly progress reports and evaluation activities.

Evaluation Work Plan and Methodology

Based on an understanding of the project scope provided in the RFP as a guideline, Evergreen prepared a work plan to complete the required evaluation objectives. Evergreen's evaluation work plan subdivides project work, including deliverables, into smaller and thus more manageable components. The evaluation work plan is driven by deliverables, and represents a hierarchical decomposition of the work to be executed by the Evaluation Team to accomplish the project objectives and create the required deliverables.

Evergreen's work plan for the multi-year evaluation of OPI's K-20 Data Project consists of the following three phases and six work tasks:

- Phase I – Project Initiation (Task 1)
- Phase II – Conduct Evaluation (Tasks 2-5)
- Phase III - Monitoring and Reporting (Task 6)

Evergreen outlined the following six tasks to assess success of the OPI's K-20 Data Project:

- **Task 1:** Initiate Project
- **Task 2:** Collect Initial Input from Stakeholders and Track Implementation
- **Task 3:** Evaluate Training Activities
- **Task 4:** Evaluate Functionality and Ease of Use
- **Task 5:** Evaluate Utility of System Data and Reports
- **Task 6:** Prepare Evaluation Reports

Evaluation Tasks 1, 2, and 6 were scheduled for completion in Year 1 of the evaluation. Evaluation Tasks 3, 4, and 5 are scheduled for Year 2 of the evaluation. The evaluation work plan contains a number of defined measurements, processes, tools, approaches, monitoring procedures, and reporting requirements that the Evaluation Team is using to assess continuous improvement of OPI's K-20 Data Project.

The following evaluation tools and methods were used in Year 1 of the evaluation to manage the evaluation project and collect initial feedback from stakeholders:

- *Project Management –* Based on Evergreen's accepted evaluation proposal, a statement of work, comprehensive evaluation work plan, and work breakdown structure were prepared for the evaluation. This information was shared with the OPI for approval and is now used to track evaluation activities and monitor completion. Evergreen's detailed work plan for the evaluation contains 46 unique tasks and milestones, and mirrors closely OPI's timeline for the K-20 Data Project.

- *Evaluation Kick-Off Meeting –* A preliminary evaluation meeting was conducted by phone on October 11, 2013, and aimed at planning and scheduling the initial on-site meeting. Evergreen conducted the first evaluation on-site visit during the week of November 11, 2013. Specifically, Evergreen met with the K-20 Data Project Leadership Team to kick-off the evaluation on November 13, 2014. This meeting focused on reviewing and revising the evaluation plan, discussing a more detailed timeline for

evaluation activities, finalizing evaluation reporting formats, and preparing for stakeholder interviews.

- *Stakeholder Interviews* **–** Evergreen interviewed key stakeholders during the week of November 11, 2013. Specifically, on November 13 and 14, Evergreen interviewed 17 stakeholders. The intent of the stakeholder interviews was to garner feedback on baseline perceptions regarding the K-20 Data Project. Stakeholders interviewed during the on-site visit included OPI staff, MUS staff, and school district leaders.

- *Focus Group* **–**Evergreen conducted a focus group at the 2014 Assessment and Data Conference in Helena, Montana on January 17, 2014. There were a total of ten focus group participants, as well as several OPI staff members in attendance. Focus group attendees included representatives from Fort Belknap Tribal Programs, Sunburst Schools, Sidney Public Schools, Sun River Valley Schools, Missoula Public Schools, and the Montana GEAR UP Program**.** Results were summarized and shared with the OPI.

- *Survey* **–** During the month of December 2013, Evergreen drafted the Year 1 GEMS Annual Evaluation Survey. The final survey included 48 multi-type questions, and focused on establishing a baseline regarding perceptions of stakeholders on GEMS, including which features would be most useful in the future, or those that are currently most useful to respondents. The survey included sections on each of the core components being evaluated by Evergreen, and was designed to collect feedback from all types of stakeholders; a total of 19 different survey groups were targeted. **Note that no statistical tests were performed to determine if there existed differences in survey responses for each question.**

  A pilot version of the survey was conducted in January 2014, and the full survey was administered on February 25, 2014. By the close date of March 21, the survey had yielded 67 completions, for a total completion rate of 13.5 percent. In addition, the survey yielded 205 views and 162 partial completions.

- *Observations* **–**Evergreen identified a number of opportunities to observe K-20 Data Project activities and worked with OPI to ensure that evaluators could attend these events. These observations included project meetings, OPI presentations, and USDOE monitoring calls.

  The four observations completed in Year 1 of the evaluation included the following:

    – OPI K-20 Data Project Conference Presentation (January 16, 2014);
    – OPI High School Follow-up Report Conference Presentation (January 16, 2014);
    – OPI Data Governance Council Meeting Call (April 15, 2014);
    – USDOE Monitoring Call (May 13, 2014); and
    – OPI Data Governance Council Meeting Call (May 20, 2014).

- *Documents and Data Review* **–**Evergreen included in its Year 1 bi-monthly progress reports a list of all documents and data requested to date (referred to as the "Data Request

List"), as well as new requests for documents or data from the OPI. All documents and data requested served a purpose in the Year 1 evaluation, and acted as artifacts and evidence to support evaluation findings and project outcomes. To date, there are 30 items on the data request list these which are collected and stored on the evaluation SharePoint site. As the evaluation progresses into Year 2, additional items will be added.

These evaluation methods and activities provide the evidence, artifacts, and support for evaluation findings listed throughout this Yearly Wrap-up Report.

Evaluation Findings, Recommendations, and Commendations

This section summarizes the major findings from **Chapter 3** of this Yearly Wrap-up Report, which are supported by outcomes from the evaluation survey, focus group, and interviews. In addition, this section provides the commendations and recommendations made by Evergreen during Year 1 of the evaluation in the bi-monthly progress reports submitted over time to the OPI.

Major evaluation findings by area (types of use, ease of use, communications, and training resources) follow:

Types of Use

- Using GEMS, stakeholders most frequently access general school, district, or institution information (24.6 percent); student achievement data (22.6 percent); and NCLB report card data (12.9 percent).

- Survey respondents reported that the date types accessed less frequently through GEMS include program and course offering data (5.7 percent); school climate data (5.7 percent); and student services data (5.2 percent).

- GEMS users most often view dashboards and reports available through GEMS (21.8 percent); use GEMS data to compare their organization to other school districts/institutions (18.0 percent); and access multiple types of data through GEMS (15.4 percent). GEMS users use the system less often to make decisions regarding policy (4.3 percent); make decisions regarding curriculum and instruction (7.7 percent); or create reports for leadership (7.7 percent).

- Evaluators found that the GEMS resources most important to users are as follows (1 = more important; 8 = less important):

  1. Parameter Based Reports
  2. Quick Facts Documents
  3. Classroom-level data
  4. District Side-by-Side Comparisons
  5. District Profiles

6. School Profiles
7. School Side-by-Side Comparisons
8. Data Analysis Dashboards

- The GEMS dashboards reportedly used most often include the:

    – Student Achievement Dashboard;
    – School Budget Dashboard;
    – Dropout Dashboard;
    – Graduation Dashboard;
    – Per Pupil Expenditures Dashboard; and
    – Per Pupil Revenues Dashboard.

- The GEMS dashboards reportedly used less often include the:

    – Adult and Basic Education Educational Goals Dashboard;
    – Child Nutrition Summer Program Dashboard; and
    – Adult and Basic Education Educational Gains Dashboard.

- The GEMS parameter based reports reportedly used most often include the:

    – Adequate Yearly Progress (AYP) Graduation Rate Trends Report;
    – Adequate Yearly Progress (AYP) Improvement Status Report;
    – Adequate Yearly Progress (AYP) Trends Report; and
    – MontCAS (CRT) Proficiency Trends report.

- The GEMS parameter based reports reportedly used less often include the:

    – Revenue Trends Recap Report;
    – Count of School Districts by Equity Status;
    – Expenditure Trends Recap Report;
    – Revenue by Enrollment Category Report; and
    – State and Federal Grant Funding Comparison by School System Report.

- Based on evaluation findings, dashboards and reports related to student achievement are used more heavily than those related to school finance.

- Frequency of GEMS use among participants ranges from monthly, bi-annually, to annually. More frequently users access the data in GEMS annually.

- Evaluators found that districts use GEMS data to confirm suspicions through data on issues they are speculative about.

Ease of Use

- Overall, 38.2 percent of stakeholders indicated that the GEMS website is easy to use, and 27.9 percent indicated it is not easy to use. Further, 40.0 percent of respondents stated that they can find what they need when they visit the GEMS website, compared to 21.6 percent that said they cannot.

- A higher percentage of respondents (38.8 percent) feel that GEMS menus and descriptions are clear and understandable than those who do not (19.4 percent).

- Survey respondents noted the ease of use of GEMS dashboards high, with 41.8 percent indicating that GEMS dashboards are easy to use and 19.4 percent disagreeing.

Communications

- Evergreen found that overall awareness of resources available through GEMS is lacking; however, given the relative newness of the GEMS system, this should be expected, and over time, as awareness of GEMS is promoted, the number of stakeholders using GEMS data to meet their needs should improve. Evaluation results that demonstrate this include:

  - 45.3 percent of stakeholders indicated that they are not aware of the improvements and additions made to the GEMS system since its implementation;

  - 45.4 percent of respondents stated that they do not hear about new and exciting GEMS activity; and

  - only 28.1 percent of respondents indicated that they are satisfied with communications regarding GEMS, compared to 29.7 percent that indicated they are not satisfied with communications regarding GEMS.

- Evaluators found that the majority of users have not needed to contact OPI for GEMS support, and for those that have, the results are generally positive.

- The most efficient and effective way to solicit user requirements from user groups include during training and professional development; through district data clerk surveys; through a general orientation process in which OPI speaks to deans of education; and through general surveys.

- Email communication is one of the main forms of communication for sending and receiving information on the K-20 Data Project. District-level interviewees shared that they would like to see more on-site presentations by OPI regarding the K-20 Data Project, while higher education interviewees mentioned that they need a better understanding of what the whole project is to accomplish and what K-12 stakeholders are doing to contribute.

- Perhaps the main concern regarding the project was release of GEMS data to the general public. Proactive communication on the part of OPI was noted as an area where if increased, could have a dramatic positive impact across all stakeholders.

Training Resources

- Overall, 37.9 percent of evaluation survey respondents indicated that they have never accessed online GEMS training resources. Of those respondents that have accessed online GEMS trainings, the most frequently accessed types of GEMS online training resources include GEMS FAQs (19.4 percent) and data definitions and explanations (10.7 percent).

- Approximately half of all survey respondents indicated they have attended an in-person GEMS training.

- For the survey statement, "I have many unanswered questions regarding how to use GEMS," 58.2 percent of survey respondents indicated agreement, compared to 12.0 percent that disagreed.

- Many districts (65.2 percent) do not have a designated person responsible for accessing, using, and/or training others on GEMS. Based on evaluation findings, it may be prudent for OPI to pursue the development of a common framework for use of its data that its stakeholders can emulate; perhaps even recognizing individuals who have demonstrated mastery of applying the framework.

- Users new to their jobs are interested in training on how they could use GEMS for making curriculum and instruction decisions.

Major **commendations** resulting from Year 1 of the evaluation include:

- Communications of the K20 Data Governance Council are noted as highly efficient and effective by Council member interviews.

- The proposed research questions developed by OPI provide an excellent vision for what the K-20 Data Project will achieve and provide to stakeholders.

- OPI staff has spent time reviewing and studying K20 data dashboards and reports in other states to glean insight on best practices. This provides excellent information for the development of the OPI's own K-20 module.

- The OPI data governance structure and processes put in place are effective and efficient. Significant thought has gone into the management of data which will allow it to be used much more efficiently both internally and externally.

- OPI presenters observed by Evergreen evaluators at the 2014 Data and Assessment Conference provided excellent information to attendees regarding GEMS use. The exposure will likely contribute to increased interest in GEMS.

Major **recommendations** resulting from Year 1 of the evaluation include:

- Communications on GEMS updates/changes/initiatives are currently limited. The OPI should explore options for additional communication to districts on GEMS activities. One individual interviewed recommended putting GEMS on the "social media circuit," including facebook or twitter, to make periodic announcements.

- Some districts work directly with MUS to get remediation data, which could undermine the utility of GEMS. OPI should work to explore this process, which districts use it, and how GEMS can replace this need through the college and career readiness domain. It should be noted that since the college readiness domain went into production, OPI is now receiving all requests for remediation data, whether received directly or routed to them from the MUS.

- Districts are not required to participate in the submission of transcript data to OPI. There is concern that districts will not use the GEMS college and career readiness domain, and there is a huge reliance on district submitted data for success of this domain. The incentive for districts is that GEMS provides them with a free electronic transcript. OPI should review what tools districts are using (similar to GEMS) to gain a better understanding of district needs.

- Based on feedback from the focus groups, it is recommended that OPI explore adding a new GEMS Use Case for curriculum directors, outlining how this group may use GEMS data to inform decisions about curriculum.

- To promote transparency, Evergreen recommends that once finalized, the GEMS Evaluation Survey results be posted on the OPI website for stakeholders to view.

Overview of the Report

The Yearly Wrap-up Report consists of the following four chapters:

- Chapter 1.0: Introduction
- Chapter 2.0: Methodology and Evaluation Plan
- Chapter 3.0: Evaluation Results
- Chapter 4.0: Evaluation Summary