

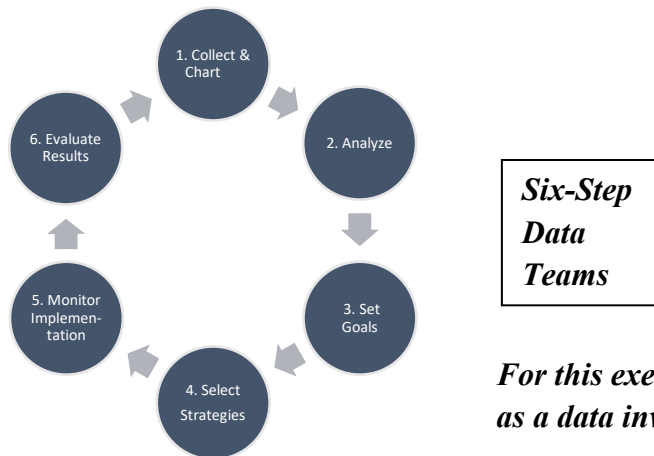
COMPETENCY TASK 1

Data Mining and Analysis

DUE: December 9, 2018

Data is gathered and used on a daily basis in schools and districts. Data provide evidence of effectiveness and provides feedback to the system. This exercise will help develop techniques for identifying, collecting, analyzing, evaluating, and using various types of data to engage staff and make data-based decisions.

McNulty and Besser (2011) outline a six-step process to guide collaborative meetings. Review the steps outlined in Chapter 2 to orient the protocol for teams to follow while reviewing data.



For this exercise, you will complete the following steps as a data investigator:

1. Collect a variety (between 5-7) of qualitative and quantitative datasets used routinely to report, plan and make decisions on a school campus, including data available in written reports/ documents and site, district and state/federal databases.
2. Categorize data samples according to demographic, perception, achievement and operational.
3. Populate a data mining table and synthesize collected data samples according to category (what type), purpose (why), form (quantitative/qualitative), frequency (when/how often), data collectors (who) and processes (how) used to collect and communicate data.
4. Explain the criteria used to determine data sample categories.
5. Analyze and briefly describe findings from data mining, including patterns, gaps, opportunities and/or strengths.
6. Select one example from each data category (demographic, perception, achievement and operational) considered critical to school success. Examine information gained from each of the data samples and for each sample, discuss current effectiveness of the data collection process(es) and use of data to inform and make decisions.
7. Based on your findings, identify two (2) high-leverage actions to improve school-level data collection, analysis, communication/distribution processes and or use of data. Explain and use research to justify proposed improvements or expansions.
8. Identify 1-2 Board policies and/or laws related to collection and use of school data. Briefly discuss how each of the policies/laws guide and influence data-driven decisions at the school level. Submit copies of policies/laws on e-Portfolio.
9. Reflect on and analyze learning from the process you engaged in: data collection, individual and group analysis, determination of how to improve the process of collecting and using data. As you further develop as a practitioner, how would you communicate and distribute your findings? What are your next steps to strengthen your ability to lead others through similar processes?

10. Utilize APA format in your final written discussion and analysis.

Data Mining Table

Sample Title	Category <i>(demo-graphic, achievement, perception, operational)</i>	Purpose	Data Form <i>(quantitative qualitative)</i>	Collection Frequency	Collectors	Consumer (Users)	Processes	
							Collection	Communication & Distribution

Competency Task 2: Data Mining and Analysis Grading Criteria

Candidate demonstrates ability to make informed data-driven decisions on a school campus, including data available in written reports/documents and site, district and state/federal databases.	Points Possible	Points Earned
Data samples are categorized according to demographics, assessments, perceptions and operational. Explanation given for selection of criteria used to determine categories.	5	
Data table contains wide variety of data samples. Data samples have been compared and contrasted according to category, type, purpose, form, frequency, collectors, consumers and processes used to collect and communicate data. Written description of findings includes patterns, gaps, opportunities and/or strengths.	5	
Data samples (5-7) selected for deeper analysis are justified through research to be critical to school success. Samples are assessed to determine degree which data is used to inform and make decisions.	5	
Improvement actions (2) are high-leverage and supported by research. Rationale for changes explained. Actions include discussion about how the data would be collected, analyzed and used to improve the system.	5	
Discussion on Board policies and/or laws (1-2) explains how each of the policies/laws guide and influence data-driven processes, uses and decisions at the school level. Information uploaded in e-Portfolio.	2	
Personal reflection on the data mining process, communication method and next steps to strengthen the ability to lead others through it.	6	
Response applies APA format and includes title page, correct formatting, References page and Appendix.	2	
Total Points	30	