

Data Pipeline Readiness Assessment

This assessment tool is intended to help Local Educational Agencies (LEA) determine their level of proficiency in processes and procedures within their organization that relate to successful adoption of the Data Pipeline. The tool has been created by the support team at the Data Services Unit of the Colorado Department of Education, who is responsible for supporting LEAs in the process of data submission and are charged with delivering the Data Pipeline related training.

The assessment tool identifies four topics that are relevant to adoption and successful use of the Data Pipeline:

- Administration Process
- Data Extraction, Processing, Submission processes
- Error handling, processing, corrections, and submission
- Transition Planning

The tool further identifies the Essential Indicators of proficiency relative to each topic where an organization's ability to overcome challenges for making a successful transition may be evaluated. For each Essential Indicator the tool measures the level of proficiency of the organization in terms of its characteristic Operational Measures.

For each Operational Measure four levels of proficiency are included in the assessment tool:

- Initial: Unable to meet any of the goals
- Partially Proficient: Meets a portion of the goals, but needs support and training to meet all of the goals.
- Proficient: Meets the goals with little or no support
- Advanced: Meets the goals and extends them. For example automating processes to reduce cost and/or making recommendations to CDE for improvement opportunities.

The goal for all districts is that upon each completion of this self assessment, over the course of the next year or two, the organization moves closer and closer to proficient/advanced for each indicator. An LEA will have to determine their overall proficiency level on each element using the Readiness Assessment Summary.

The two additional attributes of each Essential Indicator, namely Priority and Cost/Opportunity are also included in the assessment tool. The purpose of these indicators is to recognize the availability of various resources and the cost-benefit trade offs that are integral to the administrative decisions made by the organization. Ultimately, we expect that most organizations will strive for a proficient standing in most operational measures and will achieve an Advanced standing in certain areas. **It is important to note that in order to meet this goal the organization must first assemble and convene a team of stakeholders to accurately and adequately review this self assessment in its entirety on an ongoing basis, until the Data Pipeline goal is met.**

Element 1.1: Administration / Process

1.1 Essential Indicator:

The organization has the ability to analyze upcoming changes in policy, tools and technologies and to make appropriate adjustments to information management practices in an orderly and timely manner.

Operational Measures: Select the level of measure for each of the following statements		Initial	Partially Proficient	Proficient	Advanced
1.1.a.	Detailed understanding of the file contents and submission requirements.				
1.1.b.	Understand existing processes in order to make changes necessary for cleansing of data.				
1.1.c.	Reports accurate and timely data in advance of deadlines				
1.1.d.	Notifying CDE of issues and improvements related to upcoming changes and collections.				
1.1.e.	Established working relationship with applicable vendors, dependent data providers, and other organizations.				
1.1.f.	Changes to processes are documented.				

Priority:

Select the level of priority that best reflects where this element is in your list of priorities:

- ☐ Low Priority
- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
- ☐ Can be done with current resources and budget
- ☐ Requires changes to current resources and budget

Element 1.2: Administration / Process

1.2 Essential Indicator:

The organization has in place formal and repeatable quality measures and methods for evaluating operational efficiencies.

Operational Measures: <i>Select the level of measure for each of the following statements</i>		Initial	Partially Proficient	Proficient	Advanced
1.2.a.	Organization has developed processes, which do not allow invalid data.				
1.2.b.	Organization provides training or documentation to assure quality data.				
1.2.c.	Evaluates performance; making adjustments when and where needed.				
1.2.d.	Sets and communicates internal deadlines and duties for the organization.				

Priority:

Select the level of priority that best reflects where this element is in your list of priorities:

- ☐ Low Priority
- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
- ☐ Can be done with current resources and budget
- ☐ Requires changes to current resources and budget

Element 1.3: Administration / Process

1.3 Essential Indicator:

The organization has adopted a unified and/or well understood procedures for assignment of roles and responsibilities relative to various aspects of information gathering and reporting.

Operational Measures: Select the level of measure for each of the following statements		Initial	Partially Proficient	Proficient	Advanced
1.3.a.	Staff is assigned specific formal roles and responsibilities within the Pipeline.				
1.3.b.	Effective communication and collaboration among data providers on processes and improvements.				
1.3.c.	Workloads are appropriately managed ensuring adequate time and resources for accurate and valid reporting.				

Priority:

Select the level of priority that best reflects where this element is in your list of priorities:

- ☐ Low Priority
- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
- ☐ Can be done with current resources and budget
- ☐ Requires changes to current resources and budget

Element 2.1: Data Extraction, Processing, Submission Processes

2.1 Essential Indicator:

Individuals who are responsible for the actual processes of data submission are well versed about the underlying policies, processes, support systems and tools within their organization.

Operational Measures: <i>Select the level of measure for each of the following statements</i>		Initial	Partially Proficient	Proficient	Advanced
2.1.a.	Submits data frequently and understands the nuances of the system.				
2.1.b.	Proactively minimizes errors and understands potential delays in the process.				
2.1.c.	Comprehensive understanding of processes, policies and support systems.				
2.1.d.	Training needs are periodically reviewed and updated within the organization.				
2.1.e.	Provides constructive process improvement feedback to CDE.				
2.1.f.	Collaborates with vendor and applicable parties as needed.				

Priority:

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- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
- ☐ Can be done with current resources and budget
- ☐ Requires changes to current resources and budget

Element 2.2: Data Extraction, Processing, Submission Processes

2.2 Essential Indicator:

Individuals who are responsible for data submission have a broad perspective on schedules, issues, and challenges of their information providers (authoritative source).

Operational Measures: <i>Select the level of measure for each of the following statements</i>		Initial	Partially Proficient	Proficient	Advanced
2.2.a.	Meet deadlines with accurate data appropriately supported.				
2.2.b.	Open line of communication to the various entities: schools, SIS vendors, HR Vendors.				
2.2.c.	Builds contingencies into schedule.				
2.2.d.	Documents solutions to issues.				

Priority:

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- ☐ High Priority

Cost / Opportunity:

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Element 2.3: Data Extraction, Processing, Submission Processes

2.3 Essential Indicator:

Individuals/Teams responsible for data submission are knowledgeable and empowered to improve their information management practices.

Operational Measures: Select the level of measure for each of the following statements		Initial	Partially Proficient	Proficient	Advanced
2.3.a.	Accepts roles and addresses each responsibility for data submissions				
2.3.b.	Management allocates uninterrupted time for the data liaison to do the job				
2.3.c.	Constantly implementing improvements to their existing processes and planning for future changes within the system				
2.3.d.	Submits data early, works with business user and routinely validates the quality of the data throughout the year.				
2.3.e.	Uniformly meets submission deadlines				
2.3.f.	Consistently attends ongoing trainings				
2.3.g.	Navigates CDE website efficiently and can easily find answers to questions.				

Priority:

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- ☐ High Priority

Cost / Opportunity:

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- ☐ Requires changes to current resources and budget

Element 3.1: Error handling, processing, corrections, submission

3.1 Essential Indicator:

Individuals who are responsible for data submission are well trained and up to date on policies and business rules.

Operational Measures: <i>Select the level of measure for each of the following statements</i>		Initial	Partially Proficient	Proficient	Advanced
3.1.a.	Rules, edits, and policies are clearly understood.				
3.1.b.	Information is continuously relayed throughout the year to all appropriate personnel on how the data should be entered, processed, and corrected.				
3.1.c.	Works with vendors as appropriate for alterations in advance.				
3.1.d.	Works with information providers to ensure quality data in the source system.				
3.1.e.	Corrects data throughout process and analyzes edits for applicability.				
3.1.f.	Consistently attends ongoing trainings				
3.1.g.	Navigates CDE website efficiently and can easily find answers to questions.				

Priority:

Select the level of priority that best reflects where this element is in your list of priorities:

- ☐ Low Priority
- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
- ☐ Can be done with current resources and budget
- ☐ Requires changes to current resources and budget

Element 3.2: Error handling, processing, corrections, submission

3.2 Essential Indicator:

Tools and systems that are used for data collection, submission, and review are appropriate and within the scope of expertise and control of individuals who are responsible for data collection and submission.

Operational Measures: <i>Select the level of measure for each of the following statements</i>		Initial	Partially Proficient	Proficient	Advanced
3.2.a.	Clear understanding of information provider's schedules and challenges.				
3.2.b.	Consistently trains individuals within the organization to help alleviate potential issues.				
3.2.c.	Supports information providers and understands their difficulties				
3.2.d.	Understands vendor product and uses it efficiently to produce data pipeline files in a timely manner throughout the year to meet submission deadlines.				
3.2.e.	Has streamlined processes in place to obtain data from outside entities consistently and timely when appropriate.				

Priority:

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- ☐ High Priority

Cost / Opportunity:

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Element 3.3: Error handling, processing, corrections, submission

3.3 Essential Indicator:

Procedures and policies that are used in data collection are simple, repeatable and within the scope of expertise and control of the individuals who are responsible for data collection and submission.

Operational Measures: Select the level of measure for each of the following statements		Initial	Partially Proficient	Proficient	Advanced
3.3.a.	Processes are in place and uniformly practiced to correct data when validation checks fail.				
3.3.b.	Everyone in the organization, at all levels, understands importance of clean data.				
3.3.c.	Administrators give uninterrupted time for accurate and timely data.				
3.3.d.	Policies ensure changes to the data are made in the source system and validated.				

Priority:

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- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
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- ☐ Requires changes to current resources and budget

Element 4.1: Transition Planning

4.1 Essential Indicator:

Individuals who are responsible for data governance are well connected with their support network, understand the mechanics and interrelationships of the data collection infrastructure and empowered to manage their vendors.

Operational Measures: <i>Select the level of measure for each of the following statements</i>		Initial	Partially Proficient	Proficient	Advanced
4.1.a.	Data governance team exists with active members from all parts of the organization.				
4.1.b.	LEA creates and updates user manuals (documentation) for use at all levels.				
4.1.c.	Actively cross trains in all areas.				
4.1.d.	Data governance team collaborates and communicates throughout the year with other entities (departments, agencies, organizations, and schools) to discuss potential issues and resolutions.				
4.1.e.	LEA works with vendors throughout the year on a proactive basis.				
4.1.f.	Vendor delivers a working system in a timely manner				
4.1.g.	LEA consistently has a contingency plan if vendor is unable to deliver.				

Priority:

Select the level of priority that best reflects where this element is in your list of priorities:

- ☐ Low Priority
- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
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Element 4.2: Transition Planning

4.2 Essential Indicator:

The organization and individuals who are responsible for data governance have experience in planning and execution of projects that require participation from multiple, external entities.

Operational Measures: <i>Select the level of measure for each of the following statements</i>		Initial	Partially Proficient	Proficient	Advanced
4.2.a.	Transition plan is documented for successful conversion from current ADE System to Data Pipeline.				
4.2.b.	Data governance team uses consistent processes to approve and communicate changes throughout the organization.				
4.2.c.	Communication is efficient, understood and executed internally and externally across all levels (BOCES, AU, LEAs, etc.)				
4.2.d.	Projects involving multiple entities are completed in a timely manner.				

Priority:

Select the level of priority that best reflects where this element is in your list of priorities:

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- ☐ Medium Priority
- ☐ High Priority

Cost / Opportunity:

- ☐ Relatively easy to address
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- ☐ Requires changes to current resources and budget

Readiness Assessment Summary

This page represents your district's overall progression towards proficient/advanced on each element.

Administration/Process	Initial	Partially Proficient	Proficient	Advanced
Element 1.1 - Understands changes associated with file layouts and submission processes, communicates effectively to applicable vendors, documenting efficiencies and process improvements.				
Element 1.2 - Trainings and internal deadlines implemented to ensure accurate and timely data.				
Element 1.3 - Administration has identified the Local Access Manager and implemented guidelines for the assignment of roles to ensure adequate resources are allocated.				

Data Extraction and Submission Processes	Initial	Partially Proficient	Proficient	Advanced
Element 2.1 - Proactively understands the need to submit data frequently and collaborate with stakeholders to minimize errors and delays.				
Element 2.2 - Data submitters initiate processes to communicate with various authoritative sources to ensure reporting deadlines are met with accuracy.				
Element 2.3 - Individuals and teams responsible for data submissions understand where information and resources are located pertaining to Data Pipeline.				

Error Handling and Corrections	Initial	Partially Proficient	Proficient	Advanced
Element 3.1 - Data submitters understand how to interpret the edits and involve the appropriate authoritative source as needed.				
Element 3.2 - Trains individuals within the organization, supports information providers and understands vendor products to meet deadlines.				
Element 3.3 - Processes are in place to ensure clean data is submitted in a timely manner and best practices are upheld to guarantee changes are made to the source system when validations occur.				

Transition Planning	Initial	Partially Proficient	Proficient	Advanced
Element 4.1 - Data Governance team exists and is active within your organization, implementing process improvements where necessary.				
Element 4.2 – Transition plan is documented and widely communicated by the Data Governance team.				